



## Phase 2 Environmental Site Assessment

Infrastructure NSW  
Proposed Walsh Bay Arts Precinct  
Redevelopment

Walsh Bay Wharves  
Dawes Point

6 February 2017

52304/105953 Rev 3

JBS&G Australia Pty Ltd

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## Abbreviations

A list of the common abbreviations used throughout this report is provided below.

AST	Aboveground Storage Tank
bgs	below ground surface
BTEX	Benzene, Toluene, Ethylbenzene and Xylenes
COPC	Chemicals of Potential Concern
DME	Department of Minerals and Energy
DNR	Department of Natural Resources
DQI	Data Quality Indicator
DQO	Data Quality Objective
EPA	Environment Protection Authority
LNAPL	Light Non-Aqueous Phase Liquid
NSW	New South Wales
PAHs	Polycyclic Aromatic Hydrocarbons
PID	Photo-ionisation Detector
PPE	Personal Protective Equipment
PSH	Phase Separated Hydrocarbon
QA/QC	Quality Assurance/Quality Control
SAQP	Sampling, Analysis and Quality Plan
TPH	Total Petroleum Hydrocarbons
UCL	Upper Confidence Level
UST	Underground Storage Tank

## Executive Summary

### Introduction and Background

JBS&G (NSW & WA) Pty Ltd (JBS&G) was engaged by Infrastructure NSW (INSW, the client) to prepare a Phase 2 Environmental Site Assessment (ESA) of the area of the proposed Walsh Bay Arts Precinct (WBAP). The Walsh Bay Arts Precinct, herein defined as 'the site' is legally defined as:

- Pier 2/3 – Lot 11 in DP 1138931;
- Wharf 4/5 (Pier 4/5 and its shore sheds) – Lot 65 in DP 1048377; and
- The area of water included in the redevelopment Precinct – Lot 12 in DP 1138931.

The objectives of this Phase 2 ESA are to characterise potential contamination at the site through:

- documenting the history of the site to identify areas of potential environmental concern (AECs) and contaminants of potential concern (COPC) associated with the current and former landuses;
- conducting a detailed inspection of current site conditions and surrounding land uses to identify potential on and off-site sources of site contamination;
- completing of a program of soil sampling to assess whether further works, or management plans, are required to address potential site impacts; and
- preparing a report on the results of the investigation in accordance with the requirements of OEH (2011) and DEC (2006) which draws conclusions regarding the likely suitability of the site for the proposed land use, or makes recommendations to enable such conclusions to be drawn.

The investigation was conducted in general accordance with relevant guidelines made or endorsed by the NSW Environment Protection Authority (NSW EPA).

### Summary of Findings

- The site is located within the Walsh Bay Conservation Zone, with a surrounding locality comprised of residential, commercial and public domain land uses.
- The site, which comprises the Walsh Bay Pier 2/3 and Wharf 4/5 structures, the adjacent Shore Shed buildings and associated wharf aprons, is estimated to have an approximate area of 2 hectares. The proposed redevelopment will also extend approximately 40m into Port Jackson, through construction of a floating platform supported on timber piles driven into the seabed, known as the Waterfront Square.
- Historical information indicates that the existing Pier 2/3, Wharf 4/5 and shore shed buildings were constructed circa 1910, however the alignment of the existing built structures and seawall are consistent with earlier versions of the Walsh Bay wharves in operation as early as 1890.
- At the time of the site inspection and sampling completed the entire site surface comprised a concrete ground slab, with the exception of the existing water zone area of the proposed Waterfront Square into Port Jackson. The site was being used as a commercial performing arts centre with public foreshore access external to the existing buildings. The existing Pier 2/3 and Wharf 4/5 buildings were observed to be fully suspended structures founded on timber piles driven into the seabed. Based on observations made during the inspection it would appear that more than 50% of the shore shed buildings are similarly founded on

timber piles driven in the seabed. Less than 50% of the existing shore shed buildings are founded on a seawall and possible backfill material.

- Whilst current use of the site is considered to have negligible potential for contamination of land and sea, the site was previously used as part of the Walsh Bay Wharves shipping facility. This former use, in combination with the location of the site in the central inner city suggested that heavy metals, OCPs, PCBs, PAHs, PCBs, TPH and asbestos were contaminants of potential concern in soil and sediments underlying the site. The proximity of the WBAP to the former Millers Point Gasworks has also led to the inclusion of VOCs and SVOCs as potential contaminants of concern for the site.
- The installation of six boreholes was attempted across the site to assess the potential for these contaminants to be present. One or more concrete slabs at the ground surface at each location, with sandstone bedrock was encountered at all completed locations within 100mm of the slab bases. No evidence of aesthetic issues such as significant anthropogenic inclusions, odours or staining were observed during sampling.
- Representative soil samples from three of the installed boreholes were successfully collected and analysed for contaminants of potential concern (COPCs) identified at the site. Reported concentrations of the COPCs were below the adopted NEPC (2013) human health criteria for standard commercial land use. Based on the analytical results for the COPCs, no unacceptable risk to future on-site human or ecological receptors have been identified within site soils sampled during this investigation. Results of the current investigation did not identify any impacts that indicate widespread or gross contamination of the land. This was also confirmed by the results of analytical testing on one sub-slab vapour sample collected in proximity of bore JBBH06.
- With respect to contaminated sediments in the seabed, review of current studies has indicated that impacts present in sediments across the Sydney Harbour area include heavy metals, PAHs, TPH, OCPs and PCBs. These impacts would be expected to be present within the seabed portion of the site, however the impacts are considered not to be attributable to the current or recent historical use of the site.
- Seawater in the vicinity of the site is likely to be impacted with heavy metals and bacteriological contaminants, however this is consistent within impacts across the entire Sydney Harbour area and are considered not to be attributable to the current use of the site.

## Conclusions

Based on the findings of this investigation and subject to the limitations presented in **Section 11**, JBS&G concludes that the land-based portion of the site is suitable for the continued commercial land use as proposed by the WBAP Stage 2 DA and the associated Master Plan. Standard unexpected find protocols should be implemented during any future development

Additionally, available information suggests that potential contaminants in sediment and seawater at the site do not appear to represent a potential human health risk for continued commercial use of the site and the associated arts/cultural use. This is based on the following:

- With respect to harbor sediments, given that disturbances to the seabed based on the proposed pile installation method are anticipated to be minimal, there are considered to be no direct exposure pathways between site users and potentially contaminated sediments that will exist following site redevelopment. Harbour sediment will remain separated from site users under a water column of at least 6m.
- With respect to potential exposure to seawater as associated with use of the proposed Waterfront Square, it is considered that general exposure to harbor water is safe, subject to

adherence to standard NSW EPA guidance on swimming after rainfall, and current NSW fisheries advice relating to fishing in Sydney Harbour.

Collectively these results suggest that the site is suitable for the uses proposed under the Stage 2 DA and the associated Master Plan.



## 1. Introduction

### 1.1 Introduction and Background

JBS&G Australia Pty Ltd (JBS&G) was engaged by Infrastructure NSW (INSW, the client) to prepare a Phase 1 Environmental Site Assessment (ESA) of the area of the proposed Walsh Bay Arts Precinct (WBAP).

The WBAP, herein defined as ‘the site’ is legally defined as:

- Pier 2/3 – Lot 11 in DP 1138931;
- Wharf 4/5 (Pier 4/5 and its shore sheds) – Lot 65 in DP 1048377; and
- The area of water included in the redevelopment Precinct – Lot 12 in DP 1138931.

The site has a street frontage to Hickson Road and forms part of the Walsh Bay area which is located adjacent to Sydney Harbour within the suburb of Dawes Point. The Barangaroo Precinct is located immediately to the south-west of the site.

It is understood that the client, on behalf of Arts NSW, is delivering an enhanced arts precinct at Walsh Bay which will expand and strengthen the existing cluster of cultural institutions and attractions along Sydney’s harbour foreshore, complementing the other cultural initiatives in surrounding areas.

It is understood that the client is seeking approval for a Stage 2 State Significant Development Application (SSDA) for the proposed WBAP. In consideration of the SSDA, under ‘State Environmental Planning Policy 55 – Remediation of Land’ (SEPP 55), it is required that development consent is not granted unless contamination has been considered and, if required, it can be demonstrated that remediation be feasibly completed such that the site is considered suitable for the proposed use(s).

JBS&G has previously prepared a preliminary assessment (JBS&G 2014<sup>1</sup>) to identify the key areas of environmental concern at the WBAP. Following review of JBS&G (2014) as part of the Stage 1 Environmental Impact Statement (EIS), the NSW EPA recommended that the following conditions be applied to the WBAP Stage 2 SSDA:

1. Investigate the nature and extent of contamination of marine sediments in the vicinity of the proposed development; and
2. To engage a site auditor accredited by the NSW Environment Protection Authority under the Contaminated Land Management Act 1997:
  - a. Prepare a Site Audit Statement, certifying that the site is suitable for the proposed use; and
  - b. Determine the appropriateness of the proposed Construction EMP.

This Phase 2 ESA report has therefore been completed to assist with preparation of a site audit statement for the proposed WBAP.

### 1.2 Objectives

The objectives of this Phase 2 ESA are to characterise potential contamination at the site through:

- documenting the history of the site to identify areas of potential environmental concern (AECs) and contaminants of potential concern (COPC) associated with the current and former landuses;

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<sup>1</sup> Phase 1 Environmental Site Assessment, Proposed Walsh Bay Arts Precinct Redevelopment, Walsh Bay Wharves, Dawes Point NSW, JBS&G 43329-56537 (Rev 2), JBS&G Australia Pty Ltd, 23 June 2014 (JBS&G 2014).

- conducting a detailed inspection of current site conditions and surrounding land uses to identify potential on and off-site sources of site contamination;
- completing of a program of soil sampling to assess whether further works, or management plans, are required to address potential site impacts; and
- preparing a report on the results of the investigation in accordance with the requirements of OEH (2011) and DEC (2006) which draws conclusions regarding the likely suitability of the site for the proposed land use, or makes recommendations to enable such conclusions to be drawn.

The investigation was conducted in general accordance with relevant guidelines made or endorsed by the NSW Environment Protection Authority (NSW EPA).

### **1.3 The Proposed Development**

It is understood that the approved Stage 1 development application comprised:

- A new waterfront public square between Pier 2/3 and Wharf 4/5;
- A series of new stairs and balconies on Pier 2/3 and Wharf 4/5 and modification to the roof of Pier 2/3;
- The inclusion of new tenancy spaces in Pier 2/3 and Wharf 4/5 for arts and cultural activities; and,
- The use of the precinct for arts festivals, events and pop-ups and associated uses, including restaurants, cafes and bars.

The WBAP Stage 2 SSDA seeks consent for construction works for the above to realise the WBAP project, as well as the proposed external alterations and additions to all of Wharf 4/5. It also seeks consent for new commercial and event uses in the Precinct. Key aspects of the proposed development are outlined below:

#### Early works

- Early construction works comprising infrastructure upgrades, demolition, hazmat removal and sub structure works.

#### Pier 2/3

- Internal alterations and reconfiguration to provide for the following:
  - Performance venues;
  - Rehearsal rooms, production workshops, back of house facilities and offices;
  - Function spaces, bars, cafes and foyer spaces extending onto external gantry platforms (balconies) providing breakout space for internal foyers and allowing views of outdoor performances;
  - Mezzanine spaces for offices and back of house facilities;
  - Upgrades to meet compliance with current BCA, DDA and fire codes;
  - New lifts and stairs;
  - Creation of new commercial tenancies and public toilets;
  - Removal of some storey posts and beams to facilitate internal reconfiguration and new uses; and

- Retention of a large proportion of the ground floor in its existing 'raw' heritage state for events and festivals including Sydney Writers' Festival and Biennale including venue and commercial hire.
- External alterations and additions comprising:
  - New balconies and external stairs for fire egress;
  - New external lift for access;
  - Installation of glazing in existing cargo sliding door openings and other solid panels on the eastern, western and northern elevations to allow for views into and out of the building;
  - Roof penetrations within the central valley at the southern and northern end to accommodate new performance spaces and associated structural modifications including truss strengthening;
  - Installation of ESD elements, such as photovoltaic panels and seawater heat exchange systems; and
  - Raising of the external floor level on the eastern side by introducing a new raised deck and continuous set of stairs beyond the existing column line.

#### Wharf 4/5

- Internal alterations and reconfiguration to the Bangarra Dance Theatre (BDT) tenancy to provide for the following:
  - Upgrade of the main rehearsal and performance spaces;
  - Upgraded foyer and exhibition space along the eastern frontage;
  - Improved office space at mezzanine level including a new lift and stairs;
  - Provision of a function space at ground level of the northern end of wharf with associated kitchen facilities; and
  - New entrance and new glazing in bays of sliding cargo doors, opening up the foyer and main studio to the Pier 4 apron.
- Minor internal alterations and additions to the SDC tenancy comprising:
  - Reducing the existing workshop space to create a fifth dance studio; and
  - Upgrading office and reception areas.
- External alterations and additions to SDC tenancy comprising:
  - Raising of the timber wharf deck adjoining the SDC café and opening of the facade with new glazing to activate the waterfront square.
- Creation of new commercial tenancies and public toilets;
- External fabric alterations around the Sydney Theatre Company (STC) tenancy comprising:
  - Improved street entry at Hickson Road involving relocation of the stairs to allow for an improved landing and point of arrival to the STC;
  - New 'gantry' balconies, stairs and lifts mid-wharf and at the end of the wharf to provide for improved accessibility and compliance with fire engineering solutions;
  - Minor amendments to the existing façade to accommodate new entries and exits along the wharf;

- Roof penetrations within the central valley at two locations to accommodate theatre and workshop spaces and associated structural modifications including truss strengthening; and
- Reinstallation of existing photovoltaic panels where applicable.

#### Wharf 4/5 Shore Sheds

- Internal alterations to reconfigure the choir spaces, including provision of a mezzanine for choir administration;
- Creation of new commercial tenancies at ground and mezzanine levels; and
- Provision of office space at ground level.

#### Public Domain

- Construction of a new waterfront square comprising a deck on piled structure;
- Shaded informal performance space on piled structure; and
- Changes to existing levels and steps down to facilitate access between the existing apron and new waterfront square.

#### New Uses

- Use of the precinct for arts festivals, events and pop ups as well as a range of activating uses such as retail, restaurants, cafes and bars.

## 2. Site Condition & Surrounding Environment

### 2.1 Site Identification

The location of the site is shown on **Figure 1**. The available site details are summarised in **Table 2.1** and described in detail in the following sections.

The Walsh Bay Arts Precinct (WBAP) (the “site”) generally comprises Pier 2/3, Pier 4/5 and its shore sheds which make up Wharf 4/5, as well as the adjoining waterway. The site has a street frontage to Hickson Road. The site is part of the Walsh Bay area which is located adjacent to Sydney Harbour within the suburb of Dawes Point. The site is located within the City of Sydney Local Government Area.

Walsh Bay is strategically located to the north of Sydney’s CBD in the vicinity of major tourist destinations including the Sydney Harbour Bridge, the historic areas of Millers Point and The Rocks, Circular Quay and the Sydney Opera House. The Barangaroo redevelopment precinct is located immediately to the south-west.

**Table 2.1: Summary Site Details**

<b>Lot/DP</b>	Lot 11 DP 1138931 and Lot 65 in DP 1048377
<b>Address</b>	Hickson Road, Dawes Point, NSW 2000
<b>Local Government Authority</b>	City of Sydney Council
<b>Site Zoning</b>	Lot 11 DP 1138931: Zone 1-Walsh Bay Conservative Zone and Zone 2-Walsh Bay Waterway Zone in Sydney Regional Environmental Plan No 16. Lot 65 DP 1048377: Zone 1-Walsh Bay Conservative Zone-Sydney Regional Environmental Plan 16.
<b>Approximate co-ordinates of the centre of the site (MGA 56)</b>	Easting: 334091.675 Northing: 6252401.537
<b>Current Use</b>	Owned by Roads and Maritime Services (RMS) and occupied by Arts NSW and Department of Justice under various lease arrangements primarily for arts and cultural uses
<b>Previous Use</b>	Berths for international and inter-state shipping
<b>Site Area</b>	Approximately 18,090 m <sup>2</sup>

Pier 2/3 is legally described as Lot 11 in DP 1138931 and Wharf 4/5 is legally described as Lot 65 in DP 1048377. The total area for these lots is 18,090m<sup>2</sup>.

The area of water that the project proposes to build over is also owned by RMS. Its land title description is Lot 12 in DP 1138931.

### 2.2 Site Description

The site forms part of the Walsh Bay Wharves (**Figure 1**) which are located adjacent to Sydney Harbour. The current formation of the Walsh Bay Wharves comprises ten berths constructed between 1908 and 1922 for international and inter-state shipping, as follows:

- Pier 1 currently occupied by the Sebel Pier One Sydney Hotel;
- Pier 2/3 the last remaining undeveloped pier (has previously received approval for cultural uses, temporary arts events and some commercial events);
- Wharf 4/5 which is occupied by the Sydney Theatre Company (STC), the Australian Theatre for Youth Program (ATYP), Sydney Dance Company (SDC), Bangarra Dance Theatre and the choirs comprising Gondwana, the Song Company and Sydney Philharmonia;
- Pier 6/7 which has been redeveloped for residential apartments and associated boat marina;
- Pier 8/9 which has been redeveloped for office uses; and

- Shore sheds aligning Hickson Road which contain a range of commercial activities, including restaurants, bars, shops and offices.

The recent redevelopment works mentioned above are understood to have occurred between 1997 and 2004 by the NSW Government in conjunction with the Walsh Bay Partnership. The areas of recently development at the Walsh Bay Wharves are external to the boundaries of the site.

A detailed inspection of the site was conducted by JBS&G on 19 February 2014 which included inspection of the nearby surrounding infrastructure. The site layout is shown on **Figure 2**. Entry to Pier 2/3 (and associated shore sheds) and Wharf 4/5 was through vehicle driveways and pedestrian access points (i.e. breezeways) along Hickson Road. Wharf 4/5 was occupied by a large rectangular four storey timber building, extending from the landward end at Hickson Road, to the northern end of the wharf. Pier 2/3 consisted of a wharf occupied by a vacant heritage-listed two-storey warehouse building. Shore sheds, comprising two storey warehouse buildings, were present at the landward end of Pier 2/3, currently occupied by a café/restaurant and small performing arts studio. Land between these buildings and extending to the edges of the Piers comprised a concrete apron which provided public access to the foreshore.

Additionally, visible sections of the seawall were present at the southeastern end of the site. Access stairs to sea level between Pier 2/3 and Wharf 4/5 allowed for observation of foundations underlying the Shore Shed buildings. Timber piles were visible under the concrete apron of the wharf and parts of the Shore Sheds. **Figure 3** shows the approximate position of the seawall under the site based on these locations. Based on this position it is considered that part of the shore shed buildings are supported on timber footings. The client's representative, present during the site inspection, confirmed that only the southern end of the Shore Sheds is founded on land.

Anecdotal information provided during the site inspection from the client's representative indicated that Pier 2/3 is the last wharf structure within the Walsh Bay Wharves remaining in its original state. The following features were observed upon inspection of the Pier 2/3 building:

- structural columns present throughout the building;
- a stairway located towards the central portion of the warehouse building, providing access from the ground floor to the second storey level;
- an elevator lift noted within proximity of the stairway;
- several sections of the building were barricaded, including a small section on the ground level in the western portion of building, and on the second storey towards the central to northern portion of the upper building area was barricaded. These barricaded areas contained several heritage items, including construction material and metal works owned by RMS; and
- basic utility services were present in the building comprising electricity mains and sewer system located on the ground level and storm water conduits located on top of the roof. Observations were also made of new roof insulation installed through the warehouse building.

Anecdotal information provided by the client's representative indicated that several columns will be removed (replaced by steel trusses) to facilitate the proposed arts and cultural development plans. Additionally, it was indicated that the heritage materials observed in the building may potentially be incorporated into the Design.

The Shore Sheds were observed to consist of a row of double-storey (double brick and timber) warehouse sheds, located at the landward end of Pier 2/3. Observations of the Shore Sheds noted that they are currently occupied by commercial tenancies (ground level) and arts and cultural organisations (performing arts studios). Due the current occupancy of the Shore Sheds, a detailed

site inspection was unable to be completed within these buildings. The client's representative confirmed that the general structure of the Shore Sheds will be retained as part of the Master Plan, with any upgrade works restricted to internal refurbishment.

The Wharf 4/5 building was occupied by the STC, ATYP, BDT and other arts organisations at the time of the inspection. A café/restaurant was also located at the southern end of the Wharf 4/5 building. The client's representative confirmed that the Stage 2 DA does not propose any change to the exterior of the Wharf 4/5 building, with works limited to an internal realignment of the existing performance areas, foyers and rehearsal spaces. The third level of the building (towards the central to southern portion of the building) consisted of the stage design/prop workshop. According to Arts NSW, no change was proposed to the workshop as part of the Stage 2 DA works. Observations noted that various painting and oil chemicals were used in the workshop in the construction of stage performance props. A staff member from the Sydney Theatre Company confirmed that an oil and waste recycling drainage system was installed the building. Furthermore, air filtration systems were installed within the workshop area to reduce inhalation exposure to chemicals for employees.

During the inspection of Wharf 4/5, JBS&G field staff were informed that the rooftop of the building is installed with 'green' pipework which collects rainwater as part of the 'Greening the Wharf' project for the City of Sydney Council, a harvesting, storage and reticulation system which supplies non-potable water for all Pier 4/5 amenities. It is also understood that solar panels were also installed to the rooftop of the building on Wharf 4/5 as part of the 'Greening the Wharf' project.

### **2.3 Surrounding Landuse**

The current landuse of adjacent properties or properties across adjacent roads is summarised below.

- North – immediately north is Sydney Harbour.
- East – to the east is Pier One (Sebel) Hotel Sydney Harbour Bridge, The Rocks, Circular Quay and Sydney Opera House.
- South – to the south are a series of smaller property lots which appear to be used for either residential or commercial purposes. South of the site is Sydney's CBD.
- West – to the west are Walsh Bay wharves (Piers 6/7 and Piers 8/9), Millers Point and Sydney Harbour. South-west of the site is the Barangaroo redevelopment precinct.

Inspection of the surrounding properties was beyond the scope of this Phase 1 ESA, however based only on the external viewing of these areas and review of aerial photography, there did not currently appear to be any significant potential offsite contamination sources located in the properties around the site.

### **2.4 Topography**

Survey plans provided indicate that the area of the site is flat and present at a relative level of 2.5m above Australian Height Datum (m AHD) which is level with the adjacent Hickson Road. Site observations noted large sandstone rockfaces are present opposite the site at the southern end of Hickson Road, and that the site is some 10 to 20m below the ground level along Pottinger Street and areas located further south.

### **2.5 Hydrology**

The site is adjacent to, and is in part suspended above, Walsh Bay which forms part of Sydney Harbour. The site is predominantly sealed, covered in concrete footpaths, over which surface water generated by heavy or prolonged rainfall is likely to be run directly into the harbour.



## 2.6 Geology

Review of the regional geological map (DMR 1983) indicated the site is located in an area of Middle Triassic Hawkesbury Sandstone, part of the Wianamatta Group. The Wianamatta Group comprises medium to coarse-grained quartz sandstone, very minor shale and laminite lenses.

Review of the regional soil map (SCS NSW 1989) indicated that the site is located on the GyMEA residual soil landscape group. The typical GyMEA landscape is characterised by undulating to rolling rises and low hills on Hawkesbury Sandstone. GyMEA soils are shallow to moderately deep Yellow Earths and Earthy Sands on crests and inside of benches; shallow Siliceous Sands on leading edges and benches; localised Gleyed Podzolic Soils and Yellow Podzolic Soils on shale lenses; shallow to moderately deep Siliceous Sands and Leached Sands along drainage lines. Limitations of soils in the GyMEA group are localised steep slopes, high soil erosion hazard, rock outcrop, shallow highly permeable soil, very low soil fertility.

Review of the Natural Resource Atlas (DNR website) indicated that the site is located in an area of potential acid sulphate soils (ASS).

## 2.7 Hydrogeology

Registered groundwater bore information obtained from the Natural Resources Atlas database identified 36 groundwater bores within one km of the site. Details registered for these bores is included in **Appendix A** and summarised in **Table 2.2** below.

All bores on the database within 1km of the site have been registered for use as monitoring wells. The monitoring wells are installed to depths of between 3 and 17 m, with standing water levels reported for only two wells at depths of approximately 2.5m below ground level (m bgl).

Where the geology encountered was reported, it consisted of clay, silty sand or gravel fill.

It is anticipated that groundwater in the vicinity of the site would migrate in a northerly direction towards Walsh Bay. As such, and noting that the site borders Walsh Bay, it is considered that the monitoring wells listed in **Table 2.2** would not be influenced by activities at the site.

**Table 2.2: Groundwater Bores Summary Details**

Bore ID	Location (approximate)	Intended Purpose	Drilled Depth (m bgl)	Standing Water Level (m bgl)
GW109085	660 m west of site, property of Sydney water	Monitoring	5.68	N/A
GW109086	661 m west of site, property of Sydney water	Monitoring	5.68	N/A
GW109087	662 m west of site, property of Sydney water	Monitoring	8.50	N/A
GW111570	201 m west of site, within Barangaroo Headland	Monitoring	6.00	2.72
GW111571	200 m west of site, within Barangaroo Headland	Monitoring	6.00	2.65
GW112871	520 m south east of site, within Sydney Opera House premises	Monitoring	20.00	N/A
GW112872	510 m south east of site, within Sydney Opera House premises	Monitoring	20.12	N/A
GW112873	510 m south east of site, within Sydney Opera House premises	Monitoring	15.10	N/A
GW113553	260 m west of site, within Barangaroo Headland	Monitoring	5.20	N/A
GW113554	310 m west of site, within Barangaroo Headland	Monitoring	5.00	N/A
GW113555	351 m south west of site, within Barangaroo Headland	Monitoring	14.00	N/A
GW113556	350 m south west of site, within Barangaroo Headland	Monitoring	14.00	N/A
GW113557	400m south west of site, within Barangaroo Headland	Monitoring	12.00	N/A
GW113558	410 m south west of site, within Barangaroo Headland	Monitoring	14.00	N/A
GW113559	450 m south west of site, within Barangaroo Headland	Monitoring	4.00	N/A
GW113560	460 m south west of site, within Barangaroo Headland	Monitoring	3.60	N/A
GW113561	480 m south west of site, within Barangaroo Headland	Monitoring	4.50	N/A
GW113562	500 m south west of site, within Barangaroo Headland	Monitoring	10.70	N/A
GW113563	530 m south south-west of site, within Barangaroo	Monitoring	11.70	N/A



	Headland			
GW113564	550 m south south-west of site, within Barangaroo Headland	Monitoring	7.00	N/A
GW113565	540 m south south-west of site, within Barangaroo Headland	Monitoring	4.00	N/A
GW113566	530 m south south-west of site, within Barangaroo Headland	Monitoring	3.00	N/A
GW113596	510 m west of site, within Barangaroo Headland	Monitoring	14.10	N/A
GW113597	510 m west of site, within Barangaroo Headland	Monitoring	9.50	N/A
GW113598	520 m west of site, within Barangaroo Headland	Monitoring	13.20	N/A
GW113599	560 m west of site, within Barangaroo Headland	Monitoring	13.50	N/A
GW113602	550 m west of site, within Barangaroo Headland	Monitoring	17.00	N/A
GW113603	555 m west of site, within Barangaroo Headland	Monitoring	14.50	N/A
GW113604	540 m west of site, within Barangaroo Headland	Monitoring	8.20	N/A
GW113605	535 m west of site, within Barangaroo Headland	Monitoring	3.00	N/A
GW113606	545 m west of site, within Barangaroo Headland	Monitoring	13.00	N/A
GW113607	530 m west of site, within Barangaroo Headland	Monitoring	7.20	N/A
GW113608	520 m west of site, within Barangaroo Headland	Monitoring	13.00	N/A
GW113610	525 m west of site, within Barangaroo Headland	Monitoring	12.20	N/A
GW113611	550 m west of site, within Barangaroo Headland	Monitoring	7.50	N/A
GW113612	520 m west of site, within Barangaroo Headland	Monitoring	13.00	N/A

## 2.8 Detailed Consideration of Proposed Redevelopment

A summary of the works associated with the development as provided by the client is presented in **Table 2.3** along with the anticipated built form and landscape modifications required.

**Table 2.3: Summary of Works Required for Redevelopment**

Proposed Change in Land Use	Anticipated Built Form or Landscape Change
The transformation of Pier 2/3 building to accommodate the Australian Chamber Orchestra, Bell Shakespeare and Australian Theatre for Young People. The retention of a large 'raw' space in Pier 2/3 for events, festivals and functions.	Removal of internal columns within the Pier 2/3 building
A major upgrade of ground floor facilities at Wharf 4/5, allowing Bangarra to confirm its place as the premier Indigenous performing arts company and maximise new tourist and engagement opportunities	Removal of internal columns within the Wharf 4/5 building, repair of the external Wharf 4/5 building walls
The expansion of creative and commercial activities along the shore sheds offering cafes, restaurants, retail and commercial activities to further enhance the visitor experience	New tenancies to be established in Pier 2/3 and Wharf 4/5 shore shed buildings but no changes of note to building structures
A new north facing waterfront square supported with new boardwalks which will significantly increase public open space and create a central platform for activity, collaborative outdoor performances, events, festivals and public art	Construction of a new floating platform (the Waterfront Square and the Wings) with retractable roofing and construction of the catenary shade structure which connects the Waterfront Square to the harbour

The works described in **Table 2.3** will be completed within, or will connect to, the original Walsh Bay commercial wharves which are close to 100 years old. JBS&G has been provided with '*Walsh Bay Arts Precinct, Conceptual Structural Design Report*' prepared by Taylor Thomas Whiting and dated February 2014 (TTW 2014) for the proposed works. A copy of TTW (2014) including copies of the proposed redevelopment footprint is provided as **Appendix B**. In assessing the current condition of structures at the site TTW (2014) confirmed that Pier 2/3 and Wharf 4/5 are all timber wharves comprising turpentine timber piles with hardwood pile caps, beams and decking. Some of the exposed apron decks were reportedly replaced with thin concrete slabs in the 1930s.

The wharves were reported to be present in typically 6 to 15 metres depth of water, but the seabed was considered to be extremely soft, with the depth to founding materials in excess of 20m below

seabed level at some locations. Apron deck levels were reported to be typically between 4 and 6m AHD.

It was also reported that the supporting structure for the proposed WBAP will be constructed with reinforced concrete headstocks and beams with hardwood timber bearers supporting the deck planks. All concrete would be reinforced with V-rod reinforcing (glass fibre reinforced deformed plastic) to avoid chloride attack on steel reinforcing.

Provision of advice by INSW has confirmed that screw pile construction will be utilised to spirally wind steel tube piles to foundation levels below the deep marine muds. The seabed between Piers 3 and 4 was considered to comprise deep, very soft overburdens overlying Hawkesbury Sandstone, which in turn is typically characterised by a number of buried "cliffs".

TTW (2014) reported that the original timber piles at Walsh Bay are set out on a 10ft by 10ft grid in the Piers. In the previous upgrades and repairs carried out on the Piers, many of the piles were regarded as redundant and not repaired as the live load for the recent use was considered to be much less than the original design loads as part of a cargo wharf. It was considered that for the proposed Master Plan, the opportunity exists to add jack-up piles in these redundant pile locations to provide extra footing capacity to support the additional loads intended for Pier 2/3.

It was also noted that routine rehabilitation of existing piles under Pier 2/3 and Wharf 4/5 has been occurring over the last decade, understood to comprise the replacement of between 5 and 10 piles per year based on the severity of degradation. It is understood that the routine maintenance works replace the existing timber piles with 'jack-up' piles or pile segments through exposing the existing timber pile, cutting (or splicing) the pile to the sound timber stump, cleaning of the stump, inserting a steel collar at the stump and insert a new pile segment through the collar.

TTW (2014) reported that structural support for the new waterfront square and water steps will comprise new steel tube piles driven into the seabed and founded on sandstone bedrock.

### 3. Site History

#### 3.1 Aerial Photographs

Copies of aerial photographs were obtained from the Department of Land and Property Information, with copies provided in **Appendix C**. Additional aerial photographic imagery from the period from 2011 to September 2016 was reviewed online using NearMap Imagery. Relevant information from the aerial photograph review is summarised below.

- 1930: The quality of the 1930 image is poor which prevented a detailed viewing of the site area. Wharf structures consistent with the current (i.e. 2014) configuration are visible at Pier 2/3 and Wharfs 4/5. Smaller buildings are visible between Pier 2/3 and Wharf 4/5 and the southern end and to the southwest of Wharf 4/5 consistent with the current (i.e. 2014) configuration of the shore sheds. Large shipping vessels are visible adjacent to Piers 2 and 3, consistent with use of this area ship berthing, associated activities and other commercial operations.
- At the eastern end of the site Pier 1 is visible, and the western end of the site Piers 6/7 and 8/9 are visible, also with large shipping vessels adjacent to each structure.
- 1951: The site and surrounding areas appear generally similar to the previous aerial image. Shipping vessels are visible in Darling Harbour adjacent to all piers and wharfs forming the Walsh Bay Wharves. Large buildings are also clearly visible on the 1951 image adjacent to all piers and wharfs forming the Walsh Bay Wharves.
- The road network visible in the area to the south of the Walsh Bay Wharves appears to have undergone significant redevelopment since the previous image.
- 1961: The site appears generally similar to the previous aerial image. The road network visible in the area to the south of the Walsh Bay Wharves appears to have undergone significant redevelopment since the previous image.
- 1970: The site and surrounding areas appear to be generally similar to the previous aerial image.
- 1986: The site and surrounding areas appear to be generally similar to the previous aerial image.
- 1999: The roofing material on the Wharf 4/5 building and the shore sheds on the site appear to have been upgraded, however the shape and nature of these buildings appears to be unchanged. Apart from this minor difference, the site and surrounding areas appear to be generally similar to the previous aerial image.
- 2011: The roofing material on the all buildings on the site appears to have been changed since the 1999 image, however the shape and nature of these buildings appears to be unchanged. Apart from this minor difference, the site and surrounding areas appear to be generally similar to the previous aerial image.
- 2014-2016: The site and surrounding areas remained unchanged in comparison to the 2011 image.

#### 3.2 EPA Records

A search of the EPA's public register under the Protection of the Environment Operations Act 1997 was undertaken (**Appendix D**). The search identified that, for the site, there were:

- No prevention, clean-up or prohibition notices;

- No transfer, variation, suspension, surrender or revocation of an environment protection licence.

A search was also undertaken through the EPA's public contaminated land register (**Appendix D**). The search identified that there have been no notices issued under the Contaminated Land Management Act 1997 (CLM Act) for the site.

The site has not been notified to the EPA as containing significant contamination. It is noted that the nearby site of the former Millers Point gasworks on Hickson Road was subject to several notices (2 current and 2 former) in which the EPA states the former gasworks may be contaminated with the following substances: polycyclic aromatic hydrocarbons (PAHs); benzene, toluene, ethylbenzene and xylene (BTEX); copper; cyanide; lead; and phenol. The latest entry with respect to the former gasworks indicates that the notice has been lifted by the EPA and the former gasworks is no longer subject to regulation by the EPA.

The site is considered not to have been impacted by the former Millers Point gasworks.

### 3.3 Title Details

A historical title search was conducted for Pier 2/3 (Lot 11 in DP 1138931), and Wharf 4/5 (Lot 65 in DP 1048377). Copies of title records are included in **Appendix E**.

The property lots which comprise the site are incorporated within the Sydney Harbour and foreshores title. Numerous leases and easements have been registered over the subject land, however detailed investigation of this complex title is beyond the current scope of works. In lieu of this detailed analysis of title the following information was obtained from the basic historical title search:

- The site is currently registered to the Maritime Authority of New South Wales, and has been in the ownership of the Maritime Authority of New South Wales (currently Roads and Maritime Services) or its predecessors since around 1900; and
- Both Pier 2/3 and Wharf 4/5 are occupied under various leases with the NSW Minister for the Arts including leases registered for Lot 65 in DP 1048377 for the Bangarra Dance company, Australian Dance Council, Australian Theatre for Young People.

### 3.4 Council Records

The zoning certificate for the site was obtained from Sydney City Council, and is included in **Appendix F**. Relevant information for the site (Lot 11 in DP 1138931 and Lot 65 in DP 1048377) is summarised below:

- Pier 2/3 (Lot 11 DP 1138931) is zoned in Zone 1-Walsh Bay Conservative Zone-Sydney Regional Environment Plan 16 and Zone 2-Walsh Bay Waterway Zone-Sydney Regional Environmental Plan No 16.
- Wharf 4/5 (Lot 65 DP 1048377) is zoned in Zone 1-Walsh Bay Conservative Zone-Sydney Regional Environmental Plan 16.
- The land does not include or comprise critical habitat. The property has been identified within a Heritage Conservation Area and has been identified of state heritage significance, and entered on the State Heritage Register.
- The land has been identified as being on an Acid Sulphate Soils Map as being Class 1 or Class 2.
- The land is not a declared investigation area or remediation site, or the subject of an investigation order or remediation order under the CLM Act 1997. The land is not the subject

of a voluntary investigation or remediation proposal or a site audit statement within the meaning of the CLM Act 1997.

### 3.5 WorkCover Dangerous Goods Licence Database

A search of the NSW WorkCover Stored Chemical Information Database (SCID) was conducted, and the results are included in **Appendix G**. WorkCover records show that a licence for the storage of up to 250L of flammable goods has been obtained by the Sydney Theatre Company as part of their operations on Wharf 4/5. The flammable goods registered for the site are ethylmethyl ketone, isopropanol and turpentine substitute and have been listed as being required for production of live performances. Sketches of the storage submitted as part of the licence show these items stored within a flammable gas cupboard within the ground floor props workshop and also within a roofed store. The last renewal of this licence was dated 2006 and is understood to be current.

### 3.6 Heritage Listings

A heritage assessment of the proposed development was undertaken on the site was documented in the report *'Walsh Bay Arts Precinct; Heritage Assessment Report', Design 5 Architects, dated February 2014, (Design 5, 2014)*.

Design 5 (2014) included an assessment of items of national, state and local heritage significance that may be present at the site. It was noted that the entire Walsh Bay Wharves Precinct is listed on the State Heritage Register (SHR).

With respect to history of the Walsh Bay Precinct the following was noted:

- Upon colonisation, the first industry in the area included windmills and quarrying.
- As import/export trades prospered, this increased the value of waterfront areas for merchants and private wharves were constructed in the area. Continued wealth from the Gold Rush during the 1850s boosted Sydney's local economy and the larger sailing vessels of the 1860s and 1870s prompted the expansion of private wharves, and the building of jetties and wharves. By 1900 there were fourteen finger wharves in Walsh Bay (**Figure 4**). The original shoreline through some areas of Walsh Bay was extended through land reclamation, and the building of parallel wharves to reach out to the deep waters where large vessels berthing commenced.
- Private ownership of the wharves prior to 1900 reportedly resulted in makeshift developments and poor conditions. The outbreak of the Bubonic Plague in 1900 acted as a catalyst for the creation of the Sydney Harbour Trust and the resumption of the wharves by the Government. The construction of the present configuration of wharves in Walsh Bay was made possible at that time.
- Sydney Harbour Trust oversaw development of the current timber-pile wharves, two longshore wharves, shore sheds, a low level roadway and an upper level road. Renewal projects commenced in 1909 with the construction of the low-level Hickson Road. This progress was critical to the redevelopment of the area, providing shoreline access to the wharves as well as connectivity to the railway yards at Darling Harbour and the wharves at the Pyrmont peninsula.
- In 1910, as a response to the general panic prompted by the plague, the Sydney Harbour Trust developed an innovative rat-proof sea wall constructed of reinforced concrete, spanning from the head of Darling Harbour to Millers Point. Construction of overhead bridges connecting the Walsh Bay Wharves to Pottinger Street commenced in 1913.
- Pier 2/3 was reportedly commenced in 1912, completed in 1922 and leased to the Adelaide Steamship Company. Pier 2/3 was also reportedly used as a general cargo wharf for overseas vessels from 1925 to the 1970s.

- Wharf 4/5 was reportedly commenced in 1913, completed in 1923, and leased to the Maritime Services Board until 1928;
- By the 1960s Pier 2/3 was reported to be in a deteriorating state and required repairs, including the replacement of the timber apron with concrete, and the renewal of the piles and deck in 1974. By the 1970s the Walsh Bay wharves, unable to accommodate container freight, ceased functioning as commercial wharfage. By the early 1980s the wharves were reported to be severely neglected, and faced 'the very real danger of collapse'; and
- In the 1980s Pier 4/5 was secured by the Sydney Theatre Company which marked the transition of the area into a cultural use space.

### 3.7 Previous Investigations

#### 3.7.1 Soil and Groundwater Investigations

JBS&G has been provided with a copy of '*Initial Contamination Assessment, Walsh Bay Redevelopment Project, Sydney NSW*' Prepared by HLA-Envirosciences Pty Limited and dated August 1996 (HLA 1996). HLA (1996) documents a historical review and limited soil sampling program undertaken across the Walsh Bay Wharves including Hickson Road, but excluding Wharf 4/5. Nine soil bores were drilled in areas considered likely to be underlain by fill and/or in areas likely to require excavation as part of any future Walsh Bay upgrade.

Of relevance to the site, was the drilling of one location, BH-7, which was placed at the southern end of Pier 2/3 and just inside the sea wall. The profile encountered at this location comprised concrete to 0.4m, overlying brown silty sand fill to 1.7m and then weathered sandstone. Refusal in BH-7 was encountered on competent sandstone at 2.5m below ground level. A sample of the fill material at 1 to 1.5 metres from BH-7 was submitted for analysis. While the full set of laboratory results was not summarised in the copy of HLA (1996) provided for review, the tabulated results for this location reported a total polycyclic aromatic hydrocarbons (PAHs) concentration of 23 mg/kg, a concentration of mercury, cadmium and all total petroleum hydrocarbons (TPH) fractions less than the laboratory detection limit and arsenic, lead, copper and zinc concentrations less than 50mg/kg.

While HLA (1996) did not provide detailed assessment or discussion of these results, the report generally concluded that the investigation came across some areas of soil and groundwater contamination that should be considered in the planning of Walsh Bay. However, it was considered that none of the identified contamination was significant enough to affect the feasibility of proposed Walsh Bay redevelopment.

As part of the report review JBS&G has compared the results reported in HLA (1996) to the Health based Investigation Levels (HILs), outlined in NEPC 2013<sup>2</sup>, for commercial/industrial land use (HIL-D) and public open space use (HIL-C). Concentrations in the BH-7 1-1.5m sample were all less than the current HIL-C and HIL-D criteria applicable to the site. This indicates that fill material under the site, if present, is not likely to be grossly impacted.

#### 3.7.2 Marine Impact Assessment

JBS&G has been provided with a copy of '*Walsh Bay Redevelopment, Master Plan Development Application Marine Report*' prepared by Patterson Britton Pty Limited dated 1996 (PB 1996). The report summarises the marine environment at Walsh Bay and assessment of how the marine environment would be affected by the 1996 Master Plan.

In characterising the marine environment at Walsh Bay, PB (1996) noted that:

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<sup>2</sup> National Environment Protection (Assessment of Site Contamination) Measure 1999 (April 2013), NEPC 2013, Canberra.



- the piers associated with the existing Walsh Bay Wharves encroach some 40m into Port Jackson;
- water depths ranged between 6m (in shore areas) to 15m moving west across the wharves;
- the top of the seabed floor under Walsh Bay ranges from RL-3m to RL -15m. Recently deposited surficial silts and clayey silts overlay older marine sediments consisting of interbedded clays, sands and clayey sands. The profile near the seawall is extremely shallow consisting of several metres of recently deposited silts overlying sandstone. The profile towards the ends of the wharves typically consists of up to 8m of recently deposited very soft silts and clayey silts overlying approximately 15 m of loose to medium dense sands and clayey sands, approximately 20m of soft marine clay and then sandstone; and
- the top of the sandstone bedrock under Walsh Bay ranges from RL-5m near the seawall end to RL -51m at the end of the wharves. Sandstone bedrock ranges from extremely weathered to very strong and fresh;

With respect to the effects of the development on the marine environment PB (1996) concluded that:

- repairs or replacement of piles will cause no material disturbance of the seabed while divers are cutting off the top of the pile just above the seabed in order to insert a jacket over the top of the timber stub. It was also noted that such pile replacement works are carried out on a continuous basis at Walsh Bay, and that the completion of such works even in areas of high contamination of seabed material is considered not to cause any deleterious effects due to the localised areas of works and the short time period required for the seabed to subsequently stabilise and recover.
- installation of new piles by driving tubular steel piles were considered to have an almost imperceptible disturbance of seabed materials or re-suspension of sediments during these operations.

Prior to the completion of Cardno (2016), as summarised in **Section 3.7.4**, and in the absence of any readily available documentation regarding sediment quality at the site, JBS&G undertook a review of sediment quality data available for the general Port Jackson area including sediments within Darling Harbour and adjacent to the nearby Barangaroo development site, with the following noted:

- a study of sediment toxicity in the 50km<sup>2</sup> area of the Sydney Harbour (Birch et al. 2008) reported that sediments collected from the central embayment of Sydney Harbour, which includes Walsh Bay, were contaminated with heavy metals, polychlorinated aromatic hydrocarbons (PAHs), organochlorine pesticides (OCPs) and polychlorinated biphenyls (PCBs). While sources of these impacts were not discussed in detail they were generally attributed to urban runoff and discharges.
- With respect to Darling Harbour and the vicinity of Barangaroo, sediments in these areas have also been reported as impacted with heavy metals, PAHs, OCPs and PCBs in addition to petroleum hydrocarbons. The source of these impacts has been reported to be the dumping of fuel and waste from ships and shipping associated operations, discharges from former gasworks, and other commercial operations, directly into the local stormwater network, leaching of antifouling paints, and other land based discharges into Darling Harbour and other areas of Port Jackson.

### 3.7.3 Building Assessments

JBS&G has been provided with a copy of '*Hazardous Materials Re-Assessment, Wharf 4-5 Hickson Road Walsh Bay NSW*' Prepared by Prensa Pty Limited and dated September 2012 (Prensa 2012). Prensa (2012) documented and inspection of the interior and exterior of the Wharf building during

which bonded asbestos, lead containing paint, synthetic mineral fibres and polychlorinated biphenyls were all identified as present within the fabric of the current structure. Prensa (2012) included recommendations for management of these items during the proposed redevelopment including nominating conditions which would trigger the need for an Occupational Hygienist to be present during redevelopment works to ensure appropriate management of identified/suspected hazardous materials as may be disturbed during site works.

### **3.7.4 Sediment Investigation**

JBS&G has been provided with a copy of 'Walsh Bay Redevelopment Preliminary Sediment Investigation' prepared by Cardno (NSW/ACT) Pty Ltd and dated 7 November 2016 (Cardno 2016). Cardno (2016) documents a historical review and a sediment sampling program undertaken to characterise the marine sediments in the vicinity of the Walsh Bay Wharves. Sediment samples were collected from seven sites (S1-S7) within the proposed waterfront square between Pier 2/3 and Wharf 4/5, with additional samples collected from two reference sites (S8-S9) between Wharf 4/5 and Wharf 6/7.

Sediment samples were collected using handheld corers (7 cm diameter and 40 cm length) by divers at a water depth of approximately 10-12 m. The top and bottom 20 cm of the core was separated, mixed and placed in different containers. Samples from S1, S2, S4, S6 and two reference samples were submitted for laboratory analysis. The 95% upper confidence limit (UCL) values calculated were used to assess data using screening levels adopted from National Guidelines for Dredging (Commonwealth of Australia 2009) and Interim Sediment Quality Guidelines (ISQGs) in ANZECC/ARMCANZ (2000), revised as Sediment Quality Guideline Values (SQGV) in Simpson et al (2013).

While laboratory certificates of analysis for sediment samples were not included in Cardno (2016), tabulated analytical results were provided in the report. The 95% UCL calculated for arsenic and chromium marginally exceeded SQGV (low) value in top and bottom sediment, whilst copper was reported several times above this level. The 95% UCL calculated for lead, silver and zinc exceeded SQGV (low) and SQGV (high) values in top and bottom sediment. 95% UCL for total PAHs and OCP compound DDD in bottom sediment and OCP compound DDE in top sediment marginally exceeded SQGV (low) values. All detected TPHs were below adopted assessment criteria, while BTEX was reported below laboratory limit of reporting.

Cardno (2016) considered that contaminant concentrations were generally comparable between top and bottom sediments with the exception of OCP compound HCB detected at low concentrations in the S6 bottom sediment. Additionally, it was considered that the contaminant concentrations reported within the site were also comparable with the reference samples. It was noted that heavy metals, PAHs and OCPs concentrations reported exceeding assessment criteria were considered indicative of historical industrial practices in the wider Sydney Harbour area, with reported concentration comparable with or less than historical data from other locations in Sydney Harbour. As such, further assessment of bioavailability and toxicity of sediment bound contaminants to determine possible ecosystem risk was not considered to be necessary. Additionally, the amount of disturbance to the seabed due to proposed development was considered relatively minimal and would be confined to the area in the immediate vicinity of individual piles. Furthermore, as no off-site disposal or transportation of sediment was expected to take place, this would minimise the risk of spread of contaminants and effects on the marine environment in nearby locations.

### **3.7.5 Environmental, Construction and Site Management Plan**

JBS&G has been provided with a copy of Draft 'Environmental, Construction and Site Management Plan' prepared by Cadence Australia Pty Ltd dated 27 July 2016 (Cadence 2016). Cadence (2016) documents provisions for occupational health and safety measures; identification of hazardous materials; unexpected finds relating to contamination; remediation of identified hazardous



materials; handling of hazardous substances; sediment and water discharge/management; dust control and waste management during the proposed construction and fitout works associated with the WBAP.

Sediment and water discharge management measures were provided as follows:

- Existing stormwater discharge provisions will need to be maintained during construction, however, protective measures may include use of filter fabric, hay bales and temporary diversion gutters and drains. Risk mitigating measures to prevent any concrete entering the harbour during placement may include use of local silt fences along the edge of the pier, temporary hay bales to catch any cement slurry runoff and temporary plastic sheeting to catch any concrete spills. The contractor should have within its standard procedures, the requirement to use spill kits for hazardous materials also including environmental audits that review the usage and storage of hazardous materials onsite.
- Construction zones will need to be kept clean to ensure trucks/vehicles exit the site in same condition as entering.
- During construction of the Waterfront Square, silt curtains will need to be positioned around the construction area to confine sediment generation, with regular monitoring/inspection to be conducted. The silt curtains will need to be installed prior to commencement of works, allowing a 5-15 m buffer zone. Vessel movements across the silt curtain need to be minimised during works and suspended sediments should be allowed to settle prior to removal of the curtain.
- Water quality parameters (primarily turbidity) should be monitored to validate effectiveness of control measures. Monitoring can include visual inspection of water turbidity and sediment plumes; and monitoring of metal contaminants that had been recorded in the sediments. A suitable approach to monitoring of water quality would include sampling of turbidity immediately inside and outside of the silt curtain; and baseline monitoring of water quality in the immediate vicinity of Walsh Bay to provide data for comparison with that measured during construction.

The implementation of above controls was considered to be sufficient to reduce residual impacts to the marine environment due to the project to acceptable levels.

## 4. Conceptual Site Model

### 4.1 Potential Areas of Environmental Concern

Based on the history review and observations of the site, areas of environmental concern (AECs) and associated COPCs have been identified and are presented in **Table 4.1**. AECs in **Table 4.1** are based only on the known historical activities undertaken at the site.

**Table 4.1 Areas of Environmental Concern and Associated Contaminants of Potential Concern**

Area of Environmental Concern	Nature of Environmental Concern	Contaminants of Potential Concern
AEC 1: Shore shed building southern end 3m strip of fill/soil inside seawall –	Use of potentially contaminated imported material as fill	Heavy metals, TPH, BTEX, PAHs, OCP/OPPs, PCBs, asbestos, VOCs, SVOCs
AEC 2: All site area except for the land based portion of site (mentioned above)	Potential contaminants in seabed sediments	Heavy metals, TPH, BTEX, PAHs, OCP/OPPs, PCBs, asbestos
AEC 3: Areas of potential access to seawater -	Potential contaminants in seawater	Heavy metals, TPH, BTEX, PAHs, OCP/OPPs, viruses/bacteria/pathogens
AEC 4: Pier 2/3, Wharf 4/5 and Shore Shed building exteriors and interiors	Use of hazardous materials in building construction	Asbestos, lead based paint, SMF, PCBs

Notes: BTEX = Benzene, Toluene, Ethylbenzene and Xylene

Heavy metals = 8 priority heavy metals (arsenic, cadmium, chromium, copper, lead, nickel, mercury and zinc)

OCPs = organochlorine pesticides

OPPs = organophosphorus pesticides

PAHs = polycyclic aromatic hydrocarbons

PCBs = polychlorinated biphenyls

TPH = Total Petroleum Hydrocarbons

VOCs = volatile organic compounds

SVOCs = semi-volatile organic compounds

In addition to the specific AECs, wide-scale filling has previously occurred in land to the south of Hickson Road, and as noted in **Section 3.2**, the Millers Point gasworks was operational in the general vicinity of the site between 1841 and 1921. As such it is likely that impacted fill from the surrounding area has been historically used in neighbouring land to the south of the site. This may include fill material as sourced from the gasworks. However, noting that development of Walsh Bay occurred as part of the shipping use of the area and the alignment of the initial wharves suggest that limited filling was required as part of the wharf construction, it is considered that use of imported fill near the site, if at all, was likely to have been highly localised. It is also considered unlikely that gasworks waste or significant volumes of other fill materials were imported onto the site. Should small volumes of imported fill have been used on the site then the range of contaminants potentially present would be consistent with those listed in **Table 4.1**.

### 4.2 Potentially Contaminated Media

Potentially contaminated media present at the site were listed in **Table 4.1** and comprised:

- Potential fill materials present in the small land based area of the site inside the seawall. This was included in **Table 4.1** for completeness, however based on consideration of the HLA (1996) results relevant to the site, it is considered that the potential for fill under the site to be contaminated is very low.
- Hazardous materials present in the building fabric and that have the potential to be released during the proposed building upgrades. It is however considered that if the works on the building are completed (and validated) in accordance with the recommendations of the hazardous materials assessment (Prensa 2012), then these exposure pathways will be rendered incomplete for future users of the site. Hazardous materials are therefore no longer considered a significant AEC for the site.

- Seabed sediments impacted by urban runoff and other emissions from the surrounding foreshore area.

Cardno (2016), as summarised in **Section 3.7.3**, provides an initial assessment of the condition of sediments in proximity of the WBAP. Impacts to sediment, and seawater, if any are influenced by the dynamic tidal system and not readily quantifiable. As such while these media have been identified as potentially contaminated, their effect on suitability of the proposed redevelopment of the site has been assessed based on whether the pathways to these potentially contaminated media are complete.

**Table 4.2** summarises the potential exposure pathways associated with the identified AECs.

**Table 4.2: Potential Exposure Pathways for Long Term Users Following Redevelopment of the site**

AEC	Population	Exposure Pathways <u>Post Construction During Long Term Use</u> (Complete or Not Complete?)			
		Inhalation - Particulates	Inhalation – Vapour	Oral	Dermal
1 – potentially impacted sediment seabased portion of site	Commercial Site worker	N	C	N	N
	Subsurface Maintenance Worker	C	C	C	C
	Site Patron	N	C	N	N
2 – potential contaminated seawater	Commercial Site worker	N	N	C	C
	Site Patron	N	N	C	C
3 – Potentially impacted fill material present beneath the land based portion of the site	Commercial Site worker	N	C	N	N
	Site Patron	N	C	N	N

Notes:

C = potentially complete exposure pathway

N = exposure pathway incomplete

- = exposure pathway not applicable for user group

Review of **Table 4.2** indicates that:

- at least one potentially complete exposure pathway exists for future above ground users of the WBAP, i.e. inhalation of vapours, if any, as originating from subsurface materials present below the existing ground slab; and
- multiple exposure pathways also exist for any future subsurface excavation workers on the land-based portion of the WBAP.

On this basis it is considered that while the potential for impacted fill material to be present on site is low, impacted fill material will require investigation to provide an assessment of site suitability.

While seabed sediment underlying the site may be contaminated, review of **Table 4.2** confirms that future users will have no complete exposure pathways to this material. Sediments will remain below a minimum depth of 6 m of water, and advice provided in the assessment of maritime conditions (**Section 3.7.2**) has confirmed that the proposed pile construction methods are likely to result in only minor and localised disruptions to the seabed.

The construction of the water steps as part of the development will provide future site users with access to sea water at the site. It is noted that the NSW EPA Beachwatch Monitoring Program reports that Sydney Harbour is generally safe for swimming. There is only one general precaution provided by Beachwatch for recreational use of Sydney Harbour as based on bacterial contamination. This precaution states that swimming in Sydney Harbour should be avoided for up to three days following rainfall or for as long as stormwater is present. Similarly, Fisheries NSW advises

that recreational boating activities, swimming and fishing in the Harbour is safe, but consumption of seafood caught in the Harbour should be limited to recommended maximum values based on the potential for sea organisms to have consumed contaminated sediments. Based on these assessments of safe recreational use of the Harbour, the risks from exposure to seawater for users of the proposed Water Steps are considered to be negligible.

In addition to the receptors listed in **Table 4.2**, it is considered that completion of the proposed redevelopment works may provide the opportunity for construction site personnel to be exposed to fill, sediment and seawater at the site. However, it is considered that implementation of the construction management plan measures as documented in Cadence (2016) and summarised in **Section 3.7.3**, should adequately manage risks to the health and safety of the construction site staff and the surrounding marine environment.

## 5. Sampling and Analysis Plan

### 5.1 Data Quality Objectives

Data quality objectives (DQOs) were developed for the investigation, as discussed in the following sections.

#### 5.1.1 State the Problem

A Stage 2 Environmental Impact Statement (EIS) for the WBAP will be submitted to the Department of Planning. The site area has been subject to several previous uses (including uses associated with wharfage and commercial / industrial activities) and potential historical filling activities. Given the historical use of the area as wharfage and other commercial activities, an assessment of potential contamination is required to support the SSDA application, identifying whether the WBAP site is suitable, from a contamination perspective, for the proposed use.

#### 5.1.2 Identify the Decision

Based on the decision making process for assessing urban redevelopment site detailed in DEC (2006), modified to meet the specific project objectives, the following decisions must be made:

- Are there any unacceptable risks to likely future onsite receptors from soil?
- Are there any issues relating to the local area background soil concentrations that exceed appropriate soil criteria?
- Are there any impacts of chemical mixtures?
- Are there any aesthetic issues?
- Is there any evidence of, or potential for, migration of contaminants from the site?
- Is a site management strategy required?

#### 5.1.3 Identify Inputs to the Decision

Inputs to the decisions are:

- The site description provided in **Section 2**;
- The potential for contamination of the site as detailed in **Section 4**;
- Soil environmental data collected by soil sampling and analysis consisting of total concentrations;
- Soil criteria based on the proposed land use as defined in **Section 6**; and
- Confirmation that data generated by sample analysis are of an acceptable quality to allow reliable comparison to assessment criteria by assessment of quality assurance / quality control as per the data quality indicators established in **Section 5.1.6**

#### 5.1.4 Define the Study Boundaries

The study boundary is described as the land-based extent of the proposed WBAP as shown on **Figure 3**. Noting that the exact position of the seawall is unclear, the land based portion of the WBAP is considered to have an area of less than 0.1 hectares.

The vertical extent of the soil investigation was set to a maximum depth of 1.5 m below the base of the existing ground slab or refusal, whichever was shallower. This was anticipated to be a depth of approximately 2.0 m below ground level, based on results of previous investigations in proximity of the WBAP.

Due to the project objectives, seasonality was not assessed as part of this investigation. Data collected was considered to be representative of the timing and duration of the current investigation.

### 5.1.5 Develop and Decision Rule

Soil analytical data were assessed against the appropriate criteria as identified in **Section 6**. Given the low number of samples collected no statistical analysis of the data was considered. The decision rules adopted to answer the decisions identified in **Section 5.1.2** are summarised in **Table 5.1**.

**Table 5.1: Summary of Decision Rules**

Decisions Required to be Made	Decision Rule
1. Are there any unacceptable risks to onsite future receptors?	Analytical data was compared against the criteria in <b>Section 6.2</b> with respect to soils: Where each of the reported concentrations was below the site criteria then the answer to the decision was No. If the criteria were not satisfied, the answer to the decision was Yes.
2. Are there any background contamination issues	Background soil concentrations as detailed in Trace Element Concentrations in Soils from Rural and Urban Areas of Australia (Henry Olzworthy <i>Et Al.</i> 1995 <sup>[1]</sup> ) were used for comparison of site soil data. If there were any contaminants at concentrations substantially outside background ranges, then the answer was yes, otherwise the answer was no.
2. Are there any chemical mixtures?	Was there more than one group of contaminants present which increase the risk of harm? If there was, the answer to the decision was Yes. Otherwise, the answer to the decision was No.
3. Are there any aesthetic issues?	If there were any Asbestos Containing Material (ACM) fragments on the ground surface, any unacceptable odours, any soil discolouration, or excessive amounts of anthropogenic material, the answer to the decision was Yes. Otherwise, the answer to the decision was No.
4. Is there any evidence of, or potential for, migration of contaminants from the Site?	Based on assessment results, was there any evidence of, or the potential for, unacceptable contaminant concentrations to migrate from the site? If yes, the answer to the decisions was Yes. Otherwise, the answer to the decision was No.
5. Is a site management strategy required?	Is the answer to any of the above decisions Yes? If yes, a site management strategy is required to address unacceptable contamination concerns at the Site so as to make the Site suitable for permissible site uses. If no, a site management strategy is not required and the Site is considered suitable, from a contamination view point for the proposed use.

### 5.1.6 Specific Limits on Decision Errors

This step is to establish the decision maker's tolerable limits on decision errors, which are used to establish performance goals for limiting uncertainty in the data. Data generated during this project must be appropriate to allow decisions to be made with confidence.

Specific limits for this project have been adopted in accordance with the appropriate guidance from the NSW EPA, National Environmental Protection Measure (NEPM) (NEPC 2013<sup>3</sup>), appropriate Data Quality Indicators (DQIs, used to assess quality assurance / quality control) and standard JBS&G procedures for field sampling and handling.

<sup>[1]</sup> 'Trace Element Concentrations in Soils from Rural and Urban Areas of Australia', Henry Olzowy *Et Al.*, (Henry Olzowy *et Al.* 1995)

<sup>3</sup> National Environmental Protection (Assessment of Site Contamination) Measure 1999. As compiled 16 May 2013 National Environmental Council (NEPC 2013)

To assess the usability of the data prior to making decisions, the data will be assessed against pre-determined DQIs for precision, accuracy, representativeness, comparability, completeness and sensitivity (PARCCS parameters). The acceptable limit on decision error is 95% compliance with DQIs.

The pre-determined DQIs established for the project are discussed below in relation to the PARCCS parameters, and are shown in **Table 5.2**.

- **Precision** - measures the reproducibility of measurements under a given set of conditions. The precision of the laboratory data and sampling techniques is assessed by calculating the Relative Percent Difference (RPD) of duplicate samples.
- **Accuracy** - measures the bias in a measurement system. The accuracy of the laboratory data that are generated during this study is a measure of the closeness of the analytical results obtained by a method to the 'true' value. Accuracy is assessed by reference to the analytical results of laboratory control samples, laboratory spikes and analyses against reference standards.
- **Representativeness** –expresses the degree which sample data accurately and precisely represent a characteristic of a population or an environmental condition. Representativeness is achieved by collecting samples on a representative basis across the site, and by using an adequate number of sample locations to characterise the site to the required accuracy.
- **Comparability** - expresses the confidence with which one data set can be compared with another. This is achieved through maintaining a level of consistency in techniques used to collect samples; and ensuring analysing laboratories use consistent analysis techniques; and reporting methods.
- **Completeness** – is defined as the percentage of measurements made which are judged to be valid measurements. The completeness goal is set at there being sufficient valid data generated during the study.
- **Sensitivity** – expresses the appropriateness of the chosen field and laboratory methods, including the limits of reporting, in producing reliable data in relation to the adopted site assessment criteria.

**Table 5.2: Data Quality Indicators**

Data Quality Indicators	Frequency	Data Quality Criteria
<b>Precision</b>		
Split duplicates (intra laboratory)	1 / 20 samples	<50% RPD <sup>1</sup>
Blind duplicates (inter laboratory)	1 / 20 samples	<50% RPD <sup>1</sup>
Laboratory Duplicates	1 / 20 samples	<50% RPD <sup>1</sup>
<b>Accuracy</b>		
Surrogate spikes	All organic samples	70-130%
Laboratory control samples	1 per lab batch	70-130%
Matrix spikes	1 per lab batch	70-130%
<b>Representativeness</b>		
Sampling appropriate for media and analytes	All samples	.. <sup>2</sup>
Samples extracted and analysed within holding times.	-	Soil: organics (14 days), inorganics (6 months)
Laboratory Blanks	1 per lab batch	<LOR
Trip spike	1 per lab batch	70-130% recovery
Storage blank	1 per lab batch	<LOR
Rinsate sample	1 per sampling event/media	<LOR
<b>Comparability</b>		
Standard operating procedures for sample collection & handling	All Samples	All Samples
Standard analytical methods used for all analyses	All Samples	NATA accreditation
Consistent field conditions, sampling staff and laboratory analysis	All Samples	All samples <sup>2</sup>
Limits of reporting appropriate and consistent	All Samples	All samples <sup>2</sup>
<b>Completeness</b>		
Sample description and COCs completed and appropriate	All Samples	All samples <sup>2</sup>
Appropriate documentation	All Samples	All samples <sup>2</sup>
Satisfactory frequency and result for QC samples		95% compliance
Data from critical samples is considered valid	-	Critical samples valid
<b>Sensitivity</b>		
Analytical methods and limits of recovery appropriate for media and adopted Site assessment criteria	All samples	LOR ≤ site assessment criteria

<sup>1</sup> If the RPD between duplicates is greater than the pre-determined data quality indicator, a judgment will be made as to whether the excess is critical in relation to the validation of the data set or unacceptable sampling error is occurring in the field.

<sup>2</sup> A qualitative assessment of compliance with standard procedures and appropriate sample collection methods will be completed during the DQI compliance assessment.

## 5.2 Optimise the Design of Obtaining Data

Various strategies for developing a statistically based sampling plan are identified in EPA 1995, including judgemental, random, systematic and stratified sampling patterns.

Random sampling is not appropriate based on the areas of environmental concern identified in previous investigation and the site inspection. Stratified sampling is not appropriate given the size of the site, and purely judgemental sampling is inappropriate given the potential for localised impacts across much of the site.

Based on the site inspection and known history of the site, a generally systematic sampling program was considered the most appropriate for the current investigation. Table A of NSW EPA (1995) specifies that for detailed characterisation of soil conditions, the minimum sampling density on a site of 1000 m<sup>2</sup> area should can detect a circular hotspot 25m in diameter with a 95 % level of confidence. A minimum of 6 new evenly spaced locations was required to achieve these



requirements and provide general coverage of the site. A figure showing the distribution of sampling locations is provided as **Figure 5**. These positions were finalised on site in consultation with INSW, current leasers of the site and the potential presence of underground services.

### 5.2.1 Soil Sampling Approach

EPA (1995) recommends 6 sampling points for sites up to 1,000 m<sup>2</sup>. The sampling locations for investigations are shown on **Figure 5**. Prior to commencement of the sampling event a total of 6 locations were proposed to be placed on a generally systematic grid. It is noted that during completion of field works, soil samples were unable to be collected from JBH04 and JBH05 due to the presence of multiple concrete slabs underlying the building at these locations, while the limited sample volume of sandstone bedrock obtained from JBH06 was considered insufficient for analysis by the analytical laboratory.

The final implemented sampling and analysis plan is summarised in **Table 5.3**.

**Table 5.3: Executed Sampling and Analysis Plan**

Media	Number of Sampling Locations	Primary Analyses (exc. QA/QC)
Soil	6 attempted, samples suitable for laboratory analysis obtained from only 3 locations	Heavy metals (As, Cd, Cr, Cu, Hg, Ni, Pb, Zn)– 3 samples TPH – 3 samples BTEX – 3 samples PAHs – 3 samples OCP/OPPs – 3 samples PCBs – 3 samples VOCs/SVOCs – 3 samples Asbestos – 3 samples
Soil Vapour	1 (JBBH06)	VOCs – 1 samples

### 5.2.2 Soil Sampling Methodology

As discussed in **Section 2.2**, the land-based area of the site is entirely encapsulated by hardstand concrete or asphaltic pavements. Prior to advancing boreholes, concrete coring was undertaken with a bolt-mounted concrete coring drill. Concrete coring was successful at facilitating access to the sub-slab soil at locations JBH01, JBH02, JBH03 and JBH06. Concrete coring was not able to completed at proposed locations JBH04 and JBBH06 due to the presence of concrete pavements to significant depth (i.e. in excess of 0.75 m).

At locations JBH01, JBH02, JBH03 and JBH06, once the overlying concrete was removed, one soil sample was collected via the use of a hand auger from the area immediately underlying the concrete slabs. At all boreholes, hand auger refusal was encountered on apparent sandstone bedrock within 100mm of the base of the deepest concrete slab. As such, a single soil sample was collected from fill material underlying the hardstands at JBBH01, JBBH02, JBBH03 and JBBH06.

Collected samples were immediately transferred to laboratory supplied sample jars and plastic resealable 'ziplock' bags (for field screening). Care was taken to minimise the potential for loss of volatile contaminants during sampling.

Filled sample jars were transferred to a chilled ice box for sample preservation prior to and during shipment to the testing laboratory. A chain-of-custody form was completed and forwarded with the samples to the testing laboratory. Based upon field observations and the PID screening results, samples were analysed in accordance with the laboratory schedule in **Table 5.3**.

### 5.2.3 Sub-slab Vapour Methodology

Noting the inability to complete sampling at two of the proposed locations, one subslab vapour sample was collected in proximity of JBH06. Sub-slab vapour sampling was considered appropriate due to the concrete slabs and sealed surfaces present across site surface and was considered to be of the most direct relevance to assessing potential contamination risks.

The following methodology was adopted for the installation of sub-slab vapour point:

- Recording of location;
- Coring of concrete slab (20 mm diameter); and
- Placement of a section of 6 mm diameter Teflon tube fixed with a Teflon sample tip into the cored hole to below the base of the slab, then sealing the core hole with air-drying clay and an overlying layer of bentonite slurry. The sub-slab point was purged and sampled immediately following installation.

The following methodology was adopted for the sampling of the sub-slab vapour point:

- Placement of a shroud around the sample point, and sealing by placement of clay or 'blue-tack' around the shroud edge;
- Purging of the sub-slab vapour point or soil vapour probe for a period using a calibrated photo-ionisation detector (PID) (10.6 eV lamp) and multi-gas meter to measure and record oxygen and methane (as an LEL) concentrations until the parameters stabilised;
- Assessment of leaks, by placing a rag soaked in 2-propanol around the probe/tubing within the shroud at the ground surface and continued purging with the PID. In the event of PID readings increasing significantly this was considered to indicate a potential leak and mitigation measures were required to adequately seal the point. The 2-propanol soaked rag and shroud remained in place during the sampling process as an indicator of leaks;
- Removal of tips from a carbon sorbent tube and connection to vapour point tubing. Connection of the downstream end of carbon sorbent tube to a closed three-way valve and syringe of known volume (100 mL);
- Collection of an approximate 6 L volume vapour sample by hand use of the syringe to draw the vapour sample through the carbon sorbent tube, using the three-way valve to prevent back-flow from the syringe through the tube. The volume of air was confirmed by the known volume of the syringe used to collect samples and by counting the number of syringe volumes passed through the carbon tube;
- Disassembly of the syringe and tubing, removal of the carbon tube, replacement of tube caps and placement in Zip-Lock bag; and
- Submission of the carbon tube for analysis for the VOC 8260 suite, which includes BTEXN compounds.

One duplicate vapour sample was collected by splitting the flow into three carbon tubes using a three-way valve.

Carbon tubes were supplied by Eurofins and were advised to be appropriate specific to the target analytes and the analysis method proposed (US EPA 8260).

#### **5.2.4 Decontamination**

Prior to the commencement of sampling activities, non-disposable sampling equipment, including the hand trowel and hand auger, was cleaned with a high pressure water/detergent spray, rinsed with water and then air dried. The equipment was then inspected to ensure that no soil, oil, debris or other contaminants were apparent on the equipment prior to the commencement of works.

Soil samples were removed from the hand auger head with the hand trowel and laid on clean plastic sheets for inspection prior to collection. A new pair of disposable nitrile gloves were used to collect each sample.

Sampling equipment was subsequently decontaminated using the above process between each sampling location.

A rinsate sample from the trowel was collected at the completion of field sampling activities to determine the effectiveness of the decontamination procedures implemented on re-usable sampling equipment.

#### **5.2.5 Duplicate and Triplicate Sample Preparation**

At selected sample locations sufficient soil was collected to provide a primary, blind (intra-laboratory) duplicate and split (inter-laboratory) duplicate (triplicate) sample using the sampling methodology outlined above.

The collected soil sample was divided laterally into three samples with minimal disturbance to reduce the potential for loss of volatiles and placed in three clean glass jars and sample bags as appropriate. Soil samples were not homogenised in order to minimise the loss of volatiles.

Each sample was labelled with primary, duplicate or triplicate sample identification before being placed in the same chilled esky for transport to the laboratory.

#### **5.2.6 Laboratory Analysis**

JBS&G contracted Eurofins MGT (Eurofins) as the primary laboratory for the required chemical analyses. The secondary laboratory was Envirolab Services Pty Ltd (Envirolab). Both laboratories were NATA accredited for the required analyses. In addition, the laboratories were required to meet JBS&G's internal quality assurance/quality control (QA/QC) requirements. The completed analysis schedule is summarised in **Table 5.3**.

In addition to the above primary analyses, to address the DQIs, field duplicate and triplicate soil samples were analysed at a rate of one per 20 primary samples. A rinsate sample was obtained from non-disposable soil sampling equipment, plus a single trip spike and single trip blank accompanied the sample batch.

## 6. Assessment Criteria

### 6.1 Regulatory Guidelines

Development of site assessment criteria and the associated scope of investigation was undertaken with consideration to aspects of the following guidelines, as relevant:

- *National Environment Protection (Assessment of Site Contamination) Amendment Measure 2013 (No. 1)*, National Environment Protection Council (NEPC 2013);
- *Contaminated Sites: Sampling Design Guidelines*, NSW EPA, 1995 (EPA 1995);
- *Contaminated Sites: Guidelines for Consultants Reporting on Contaminated Sites*, NSW OEH, 2011 (OEH 2011); and
- *Contaminated Sites: Guidelines for the NSW Site Auditor Scheme*, 2nd Edition, NSW EPA, 2006 (DEC 2006).

### 6.2 Assessment Criteria Selection

Based on the proposed ongoing commercial/industrial use and industrial zoning, concentrations of contaminants in soil were compared against NEPC (2013) health-based investigation and screening levels (HILs and HSLs), and ecological investigation and screening levels (EILs and ESLs), for commercial/industrial land use, as outlined below and in **Table 6.1**:

- HILs: HIL D - Commercial/industrial, includes premises such as shops, offices, factories and industrial sites;
- HSLs: HSL D – Commercial/industrial; and
- EILs and ESLs: Commercial/industrial.

The results of asbestos observations and analysis were assessed in general accordance with NEPC (2013) and WA DOH (2009) guidance.

**Table 6.1: Soil Assessment Criteria (all units in mg/kg)**

Analytes	Limit of Reporting	Health-Based Investigation Level HIL-D <sup>1</sup>	Soil HSLs for Vapour Intrusion (Sand 0-1m)	EILs/ESLs Commercial and Industrial (Coarse soil)
<b>METALS</b>				
Arsenic	2	3000	-	160
Cadmium	0.4	900	-	-
Chromium (Total) <sup>2</sup>	5	3600 (Cr VI)	-	310 <sup>7</sup>
Copper	5	240 000	-	140 <sup>7</sup>
Lead	5	1500	-	1800
Nickel	5	6000	-	55 <sup>7</sup>
Mercury (inorganic)	0.05	730	-	-
Zinc	5	400 000	-	210 <sup>7</sup>
<b>TOTAL RECOVERABLE HYDROCARBONS</b>				
F1 C6 – C10 Fraction	20	-	260	215
F2 >C10 – C16 Fraction	50	-	NL	170
F3 >C16 – C34 Fraction	100	-	-	1700
F4 >C34 – C40 Fraction	100	-	-	3300
<b>BTEX</b>				
Benzene	0.1	-	3	75
Toluene	0.1	-	NL	135
Ethylbenzene	0.1	-	NL	165
Total Xylenes	0.1	-	230	180
<b>POLYCYCLIC AROMATIC HYDROCARBONS</b>				
Naphthalene	0.5	-	NL	370
Benzo(a)pyrene	0.5	-	-	1.4
Carcinogenic PAHs <sup>4</sup>	0.5	40 <sup>4</sup>	-	-
Total PAH's	0.5	4000	-	-
<b>ORGANOCHLORINE PESTICIDES</b>				
Aldrin + Dieldrin	0.05	45	-	-
Chlordane	0.05	530	-	-
DDT + DDD + DDE	0.05	3600	-	640 (DDT only)
Heptachlor	0.05	50	-	-
Endosulfan	0.05	2000	-	-
Endrin	0.05	100	-	-
HCB	0.05	80	-	-
Methoxychlor	0.2	2500	-	-
Toxaphene	1	160	-	-
<b>PCBs</b>				
PCBs (total)	0.5	7	-	-
<b>Asbestos</b>				
Bonded ACM	0.1g/kg	0.05% (w/w) <sup>5</sup>	-	-
FA and AF (friable asbestos)	Presence	0.001% (w/w) <sup>5,6</sup>	-	-
All forms of asbestos	Presence	No visible asbestos for surface soils	-	-

1 Table1A (1) – Commercial/industrial, NEPC (2013)

2 HIL for Cr VI. If total Cr exceeds HIL then further analysis for Cr VI will need to be completed to verify the nature of Cr at the site

3 Table 1B (6), ESLs for TPH fractions, Commercial/industrial (sand soil type, 0-1 m), NEPC (2013)

4 As B(a)P TEQ

5 500 mL sample

6 Not applicable to free fibres

7 Indicative EIL criteria provided based on land use (i.e. commercial) proposed. No site specific cation exchange capacity values determined for the site. The EILs have been calculated by assuming an aged soil type with cation exchange capacity (CEC) of 5 cmolc/kg soil pH of 5, organic carbon content of 1%, site location of NSW. It is noted that the site is completely sealed and there are no existing landscaped areas. As a result, comparison to ecological investigation levels (EILs) is provided for information purposes only.

## 7. Quality Assurance/Quality Control

### 7.1 QA/QC Results

Analysis of the Quality Analysis / Quality Control (QA/QC) has been undertaken for analytical results from assessment. QA/QC results for soil samples collected at the Site are summarised in **Table 7.1** and discussed in **Section 7.2**. Detailed QA/QC results are included in the laboratory reports in **Appendix H**, and in the Quality Assurance/Control in **Appendix I**.

**Table 7.1: QA/QC Results Summary**

Data Quality Indicator	Results	DQI met?
<b>Precision</b>		
Soil Blind duplicates (intra laboratory)	1 / 3 primary samples 0-173 % RPD	Partial <sup>1</sup>
Soil Blind triplicates (inter laboratory)	1/3 primary samples 0-66 % RPD	Partial <sup>1</sup>
Laboratory duplicates	<50 % RPD Intra laboratory samples were analysed at a rate of 1 in 20 samples.	Yes <sup>1</sup>
<b>Accuracy</b>		
Surrogate spikes	50 - 125 % Recovery Surrogate spikes were completed for all organic samples	Partial <sup>1</sup>
Laboratory Control Samples	1 / 3 primary samples 73-130 % Recovery	Yes
Matrix spikes	26-102 % Recovery Matrix spikes were completed for all organic and metals samples	Partial <sup>1</sup>
<b>Representativeness</b>		
Sampling appropriate for media and analytes	All sampling conducted in accordance with JBS&G procedures	Yes
Laboratory blanks	<LOR	Yes
Samples extracted and analysed within holding times.	All samples were extracted and analysed within holding times.	Yes
Trip spikes	96-103 %	Yes
Trip blanks	<LOR	Yes
Rinsate blank	<LOR	Yes
<b>Comparability</b>		
Standard operating procedures used for sample collection & handling	Two JBS&G field scientists used standard operating procedures throughout works.	Yes
Standard analytical methods used	Standard analytical methods used as listed in <b>Tables 6.2, 6.3 and 6.4</b> .	Yes
Consistent field conditions, sampling staff and laboratory analysis	Sampling was conducted by two field staff members using standard operating procedures in the same conditions throughout the works. The laboratories remained consistent throughout the investigation.	Yes
Limits of reporting appropriate and consistent	Limits of reporting were consistent and appropriate.	Yes
<b>Completeness</b>		
Soil description & Chains of Custody completed	All borehole logs and Chains of Custody were completed appropriately.	Yes
Appropriate documentation	All appropriate field documentation processes were undertaken. Borehole logs and Calibration records are included as <b>Appendix J</b> .	Yes
Satisfactory frequency/result for QC samples	The QC results are considered adequate for the purposes of the investigation.	Yes
Data from critical samples is considered valid	Data from critical samples is considered valid.	Yes
<b>Sensitivity</b>		

Analytical methods and limits of recovery appropriate for media and adopted site assessment criteria	Appropriate laboratory analysis methods and detection limits were considered to have been achieved during the field and laboratory phases of this investigation.	Yes
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1. See discussion of DQI exceedances in **Section 7.2**.

## 7.2 QA/QC Discussion

### 7.2.1 Precision

RPDs calculated for the blind duplicate pair were within the JBS&G preferred range, with the exceptions of RPDs of 110% and 121% for copper and lead respectively, and RPDs in the range of 63 to 185% for several PAH compounds. These exceedances are considered to be the result of heterogeneity in the soil samples collected, and further, are considered not to affect the precision of the data collected.

RPDs calculated for the split duplicate pair were within the JBS&G preferred range, with the exceptions of an RPD of 66% for copper, and RPDs in the range of 63 to 185% for several PAH compounds. These exceedances are considered to be the result of heterogeneity in the soil samples collected, and further, are considered not to affect the precision of the data collected.

All laboratory duplicates returned RPDs within the acceptable limits.

On this basis the DQIs for precision are considered to have been achieved for this investigation.

### 7.2.2 Accuracy

Surrogate spike recoveries were within the acceptable range of 70-130%, with the exception of two SVOC surrogates of phenol-d6 and nitrobenzene-d6 with recoveries of 50 % and 65 % respectively, and OCP surrogate dibutylchlorendate in 2 samples with recoveries between 57 and 59%. While these values were outside of the JBS&G preferred range, it is noted that all reported surrogate recoveries were within the dynamic limits nominated by the laboratory. It is therefore considered that these low surrogate recoveries do not affect the accuracy of the reported data.

Laboratory control sample (LCS) recoveries were within the acceptable range of 70-130% and are considered acceptable.

Matrix spike and laboratory control sample recoveries were within the acceptable range of 70-130%, with the exception of recoveries below 70% for 3 SVOC compounds in the split duplicate sample. It is however noted that these low recoveries (between 26 and 45%) were within the acceptable range of dynamic limits nominated by the laboratory. .

On this basis the DQIs for accuracy are considered to have been achieved for this investigation.

### 7.2.3 Representativeness

The extraction and analysis of selected soil samples was completed within the recommended holding times for all analytes.

A rinsate sample was collected following decontamination of all non-disposable sampling equipment for the soil sampling event. All analyte concentrations in the rinsate blanks were below the laboratory limit of reporting (LOR).

A trip spike was submitted with the soil samples collected during the assessment. Trip spike recoveries for analytes was within the acceptable limit of 70-130%.

All laboratory blanks analysed reported analyte concentrations less than the laboratory LOR.

All field equipment was decontaminated appropriately as per the procedure identified in **Section 5.2.3**. Collected samples were immediately placed into the sample containers, sealed and then placed into chilled eskies to minimise volatile loss.

Based on the above comments the DQIs for representativeness were considered to have been satisfactorily achieved.

#### **7.2.4 Comparability**

Eurofins, the primary laboratory, and Envirolab Services, the secondary laboratory, are NATA accredited for all analytical methods used. The laboratories used similar analytical methods and the analytical data were comparable between laboratories as indicated by the results of duplicate analysis. Where different LORs were adopted by the laboratories, this did not impact upon the usability of the data given that all values were considerably less than the adopted assessment criteria.

The samples collected for assessment purposes are considered comparable as all samples were collected by experienced JBS&G personnel in accordance with standard JBS&G sampling methods.

#### **7.2.5 Completeness**

All laboratory and field documentation is complete and correct. Chain of custody documentation is provided with laboratory reports in **Appendix H**. Bore hole logs are presented in **Appendix J**.

The frequency of analysis of all QA/QC samples was considered appropriate and valid.

#### **7.2.6 Sensitivity**

The adopted soil analytical methods provided suitable LORs with respect to the adopted site assessment criteria.

#### **7.2.7 QA/QC Conclusions**

The field sampling and handling procedures across the site produced QA/QC results which indicate that soil and subslab data collected is of an acceptable quality.

The NATA certified laboratory reports indicate that the project laboratories were achieving levels of performance within its recommended control limits during the period when the samples from this program were analysed.

On the basis of the results of the field and laboratory QA/QC program, the soil and subslab vapour data is of an acceptable quality upon which to draw conclusions regarding the environmental condition of the site.



## 8. Results

### 8.1 Soil Observations

Soil sampling was conducted on 19 January 2017 at the sampling locations shown on **Figure 5**. Borehole logs are included in **Appendix K**.

As discussed in **Section 2.2**, the entire land-based portion of the site surface was sealed, with cover typically comprising indoor or outdoor concrete slabs, or asphalt.

A summary of soil conditions at the site is presented as follows. Concrete coring at 6 locations indicated that the surface slabs extended to a depth of between 0.25m at JBBH01 to in excess of 0.75m at JBBH04 and JBBH05 located within the on-site shore shed buildings. Coring equipment refusal occurred at depth in JBBH04 and JBBH05, where multiple (and suspended) concrete slab were encountered below the ground surface. At those locations where it was possible to fully penetrate the ground slab(s), boreholes were advanced through the underlying fill or sandstone, until hand auger refusal occurred in seemingly competent sandstone bedrock. Refusal typically occurred within 100mm of the base of the deepest concrete slab at each location. Fill material, where observed, comprised gravelly roadbase fill. No asbestos containing material (ACM), odours or staining were observed on site surfaces and no odours or staining were observed within the subsurface profile.

### 8.2 Soil Contamination Analytical Results

Detailed laboratory reports and chain of custody documentation are provided in **Appendix H**. Summarised soil analytical data for COPCs are presented in **Table A, Appendix K** and are discussed in the following sections.

#### 8.2.1 Metals

All individual heavy metals concentrations were reported at levels less than the adopted health based assessment criteria for all samples analysed.

#### 8.2.2 PAHs

Total PAH, B(a)P and carcinogenic PAHs as B(a)P Toxic Equivalence Quotient (TEQ) values for all analysed samples were reported at concentrations less than the adopted health-based site assessment criteria.

#### 8.2.3 BTEX

Concentrations of all BTEX were reported below the laboratory LOR and the adopted health based site assessment criteria in all soil samples selected for analysis.

#### 8.2.4 TRHs

Concentrations of all TRH were reported below the laboratory LOR and/or the adopted health based assessment criteria for all samples analysed.

#### 8.2.5 OCPs/PCBs

Concentrations of OCP compounds were reported below the adopted health based assessment criteria for all soil samples selected for analysis.

Concentrations of total PCB compounds were reported below the laboratory LOR and the adopted health based assessment criteria for all soil samples selected for analysis.

### **8.2.6 VOCs/SVOCs**

Concentrations of all VOCs and SVOCs were reported below the laboratory LOR for all samples analysed.

### **8.2.7 Asbestos**

Asbestos fines (AF) and friable asbestos (FA) were not detected at or above the reporting limit of 0.001 % w/w in any of the samples analysed.

## **8.3 Sub-Slab Vapour**

### **8.3.1 Field Observations**

The sub-slab vapour monitoring was undertaken on 20 January 2017 by experienced JBS&G field scientists. During purging, sub slab oxygen levels were found to be approximately 20.9%, PID measurements ranged from 0 to 0.3 ppm and there was no LEL (expressed in terms of CH<sub>4</sub>) above the instrument level of reporting (as provided in **Appendix J**). The probe was purged for a period of at least 2 minutes with an MX6 Multi Gas Detector which purges at a rate of 300 mL/min and no significant odours were noted in air purged from below the slab.

### **8.3.2 Analytical Results**

Sub-slab soil vapour analytical results in off-site locations along the western site boundary are presented in **Table B, Appendix K**.

Review of **Table B, Appendix K** indicates that all VOCs and BTEX compounds were reported to be below detection limits in both the primary and duplicate vapour samples.

## 9. Site Characterisation

Based on the decision making process for assessing urban redevelopment sites detailed in DEC (2006) and discussed in **Section 5.1.2**, the decisions required to be made are discussed below.

### 9.1 Potential Risk to On-Site Users

Representative soil samples were analysed for COPCs identified at the site (as listed in **Table 4.3**). Reported concentrations of the COPCs were below the adopted NEPC (2013) human health criteria for commercial land use. Based on the analytical results for the COPCs, no unacceptable risk to future on-site human receptors have been identified within site soils. While it is acknowledged that site conditions and access constraints at the time of sampling prevented the analysis of soil samples from 3 of the 6 proposed soil bores, the subsurface profile at each of these locations was generally consistent with the sampled boreholes, for which all COPCs were within the relevant criteria.

Furthermore:

- the presence of competent bedrock at shallow depths below the existing concrete slabs at the site, suggests that future works on the site are unlikely to involve the installation, or maintenance of underground services; and
- the results of the sub-slab vapour sample collected at JBBH06, provides data to indicate that concentrations of common, and volatile, urban contaminants are not present in sub-slab vapours at the site at levels in excess of laboratory reporting limits.

On this basis it is considered that there is no unacceptable risk associated with the potentially complete exposure pathways identified in **Table 4.2** for current and future users of the site.

### 9.2 Soil Background Issues

Soil contaminant results indicate there are likely no issues relating to local area background conditions that require consideration with respect to the suitability of the site.

### 9.3 Chemical Mixtures

There were no potential chemical mixtures identified during the investigation that may pose a management issue at the site.

### 9.4 Aesthetic Issues

No visible ACM, odours, stains or other aesthetic concerns were identified on ground surfaces or within site soils sampled during the investigation that may pose an unacceptable issue at the site.

### 9.5 Potential Migration of Contaminants

Based on contaminant concentrations identified at the site during this investigation, there is not considered to be any significant potential for migration of contaminants from the site.

### 9.6 Site Management Strategy

Results of the current investigation did not identify any impacts that indicate widespread or gross contamination of the land. Based on the findings and limitations of this investigation, the site is considered suitable for continued commercial land use. Standard unexpected find protocols should be implemented during any future development.

## 10. Conclusions and Recommendations

### 10.1 Findings

- The site is located within the Walsh Bay Conservation Zone, with a surrounding locality comprised of residential, commercial and public domain land uses.
- The site, which comprises the Walsh Bay Pier 2/3 and Wharf 4/5 structures, the adjacent shore shed buildings and associated wharf aprons, is estimated to have an approximate area of 2 hectares. The proposed redevelopment will also extend approximately 40m into Port Jackson, through construction of a floating platform supported on timber piles driven into the seabed.
- Historical information indicates that the existing Pier 2/3, Wharf 4/5 and shore shed buildings were constructed circa 1910, however the alignment of the existing built structures and seawall are consistent with earlier versions of the Walsh Bay wharves in operation as early as 1890.
- At the time of the site inspection and sampling completed the entire site surface comprised a concrete ground slab, with the exception of the existing water zone area of the proposed floating platform into Port Jackson. The site was being used as a commercial performing arts centre with public foreshore access external to the existing buildings. The existing Pier 2/3 and Wharf 4/5 buildings were observed to be fully suspended structures founded on timber piles driven into the seabed. Based on observations made during the inspection it would appear that more than 50% of the shore shed buildings are similarly founded on timber piles driven in the seabed. Less than 50% of the existing shore shed buildings are founded on a seawall and possibly backfill material.
- Whilst current use of the site is considered to have negligible potential for contamination of land and sea, the site was previously used as part of the Walsh Bay Wharves shipping facility. This former use, in combination with the location of the site in the central inner city suggested that heavy metals, OCPs, PCBs, PAHs, PCBs, TPH and asbestos were contaminants of potential concern in soil and sediments underlying the site. The proximity of the WBAP to the former Millers Point Gasworks has also led to the inclusion of VOCs and SVOCs as potential contaminants of concern for the site.
- The installation of six boreholes was attempted across the site to assess the potential for these contaminants to be present. One or more concrete slabs at the ground surface at each location, with sandstone bedrock was encountered at all completed locations within 100mm of the slab bases. No evidence of aesthetic issues such as significant anthropogenic inclusions, odours or staining were observed during sampling.
- Representative soil samples were from three of the installed boreholes were successfully analysed for contaminants of potential concern (COPCs) identified at the site. Reported concentrations of the COPCs were below the adopted NEPC (2013) human health criteria for standard commercial land use. Based on the analytical results for the COPCs, no unacceptable risk to future on-site human or ecological receptors have been identified within site soils sampled during this investigation. Results of the current investigation did not identify any impacts that indicate widespread or gross contamination of the land. This was also confirmed by the results of analytical testing on one sub-slab vapour sample collected in proximity of bore JBBH06.
- With respect to contaminated sediments in the seabed, review of current studies has indicated that impacts present in sediments across the Sydney Harbour area include heavy metals, PAHs, TPH, OCPs and PCBs. These impacts would be expected to be present within

the seabed portion of the site, however the impacts are considered not to be attributable to the current or recent historical use of the site.

- Seawater in the vicinity of the site is likely to be impacted with heavy metals and bacteriological contaminants, however this is consistent within impacts across the entire Sydney Harbour and are considered not to be attributable to the current use of the site.

## 10.2 Conclusions

Based on the findings of this investigation and subject to the limitations presented in **Section 11**, JBS&G concludes that the land-based portion of the site is suitable for the continued commercial land use as proposed by the WBAP Stage 2 DA and the associated Master Plan. A standard unexpected find protocols should be implemented during any future development works to enable identification and suitable management of any potential contamination concerns as may be encountered at the site.

Additionally, available information suggests that potential contaminants in sediment and seawater at the site do not appear to represent a potential human health risk for continued commercial use of the site and the associated arts/cultural use. This is based on the following:

- With respect to harbor sediments, given that disturbances to the seabed based on the proposed pile installation method are anticipated to be minimal, there are considered to be no direct exposure pathways to potentially contaminated sediments that will exist following site redevelopment. Harbour sediment will remain separated from site users under a water column of at least 6m.
- With respect to potential exposure to seawater, as associated with use of the proposed Water Steps, it is considered that general exposure to harbor water is safe, subject to adherence to standard NSW EPA guidance on swimming after rainfall, and current NSW fisheries advice relating to fishing in Sydney Harbour.

Collectively these results suggest that the site is suitable for the uses proposed under the Stage 2 DA and the associated Master Plan.

## 11. Limitations

This report has been prepared for use by the client who has commissioned the works in accordance with the project brief only, and has been based in part on information obtained from the client and other parties.

The advice herein relates only to this project and all results conclusions and recommendations made should be reviewed by a competent person with experience in environmental investigations, before being used for any other purpose.

JBS&G accepts no liability for use or interpretation by any person or body other than the client who commissioned the works. This report should not be reproduced without prior approval by the client, or amended in any way without prior approval by JBS&G, and should not be relied upon by other parties, who should make their own enquires.

Sampling and chemical analysis of environmental media is based on appropriate guidance documents made and approved by the relevant regulatory authorities. Conclusions arising from the review and assessment of environmental data are based on the sampling and analysis considered appropriate based on the regulatory requirements.

Limited sampling and laboratory analyses were undertaken as part of the investigations undertaken, as described herein. Ground conditions between sampling locations and media may vary, and this should be considered when extrapolating between sampling points. Chemical analytes are based on the information detailed in the site history. Further chemicals or categories of chemicals may exist at the site, which were not identified in the site history and which may not be expected at the site.

Changes to the subsurface conditions may occur subsequent to the investigations described herein, through natural processes or through the intentional or accidental addition of contaminants. The conclusions and recommendations reached in this report are based on the information obtained at the time of the investigations.

This report does not provide a complete assessment of the environmental status of the site, and it is limited to the scope defined herein. Should information become available regarding conditions at the site including previously unknown sources of contamination, JBS&G reserves the right to review the report in the context of the additional information.

## 12. References

JBS&G Australia Pty Ltd, *'Phase 1 Environmental Site Assessment, Proposed Walsh Bay Arts Precinct Redevelopment, Walsh Bay Wharves, Dawes Point NSW, JBS&G 43329-56537 (Rev 2), 23 June 2014 (JBS&G 2014)*

Design 5 Architects, *'Walsh Bay Arts Precinct; Heritage Assessment Report', February 2014, (Design 5 2014)*

Cadence Australia Pty Ltd, Draft *'Environmental, Construction and Site Management Plan'* 27 July 2016, (Cadence 2016).

Cardno (NSW/ACT) Pty Ltd, 7 November 2016 *Walsh Bay Redevelopment Preliminary Sediment Investigation'* (Cardno 2016).

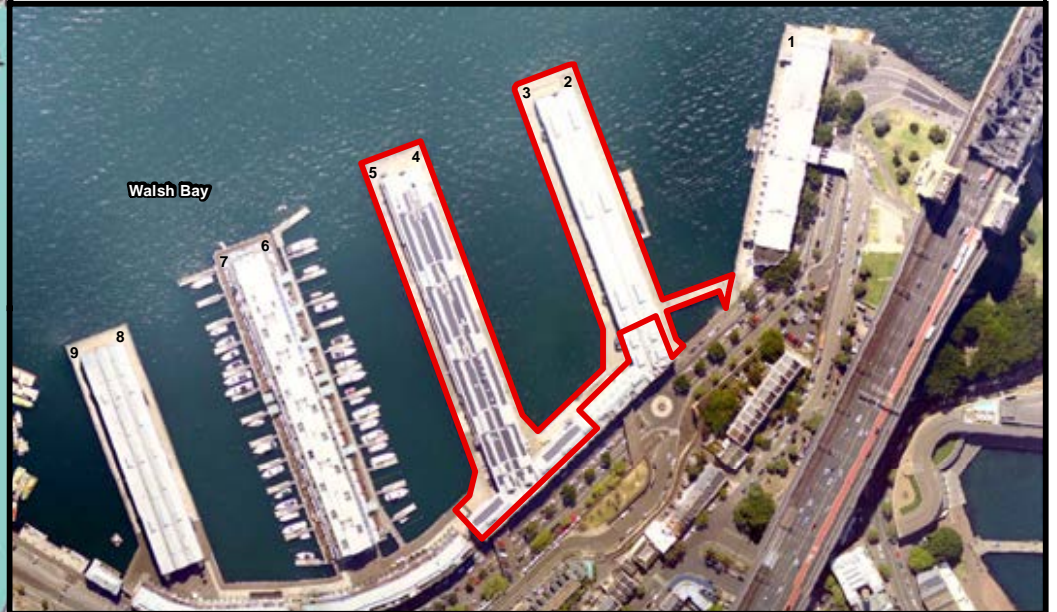
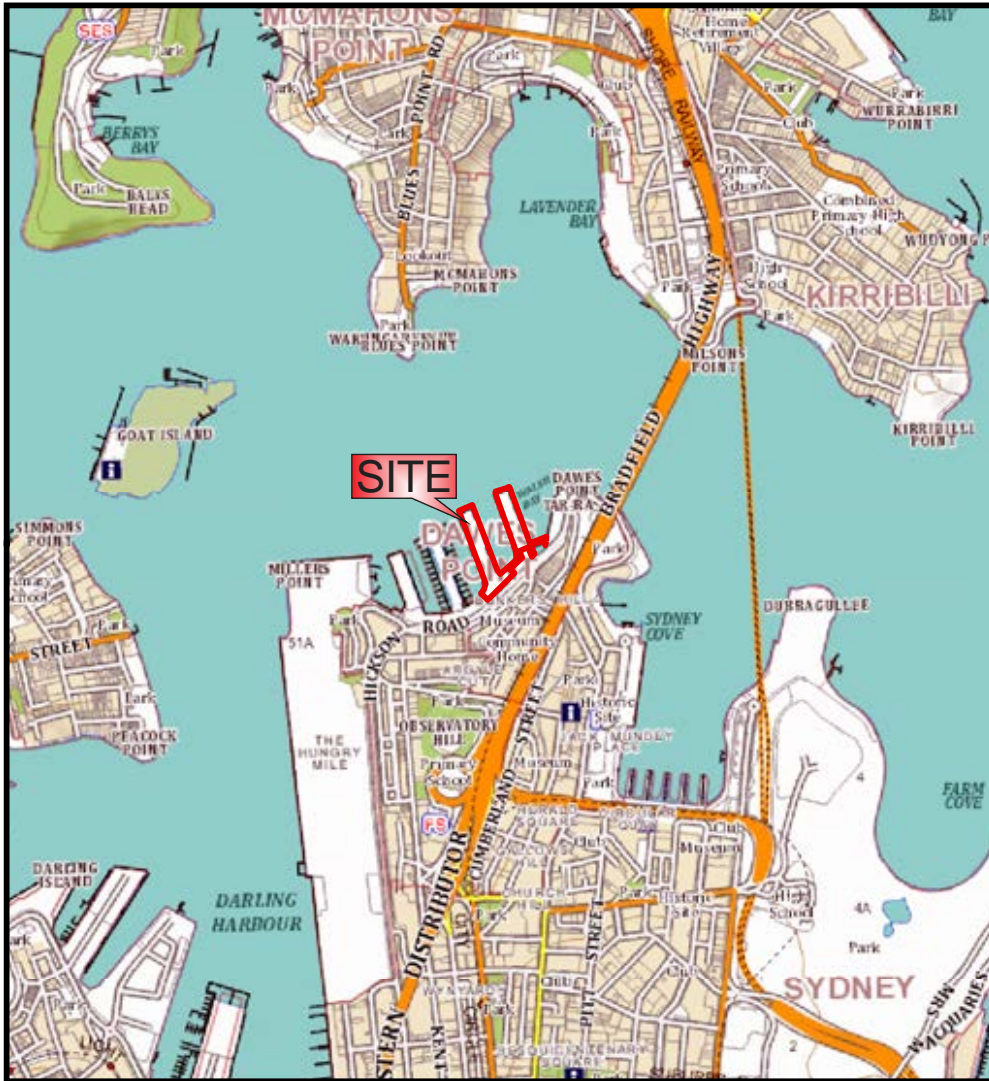
Prensa Pty Limited *'Hazardous Materials Re-Assessment, Wharf 4-5 Hickson Road Walsh Bay NSW,* dated September 2012 (Prensa 2012).

HLA-Envirosciences Pty Limited *'Initial Contamination Assessment, Walsh Bay Redevelopment Project, Sydney NSW'* dated August 1996 (HLA 1996).

Patterson Britton Pty Limited *'Walsh Bay Redevelopment, Master Plan Development Application Marine Report'* dated 1996 (PB 1996).

## Figures





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m  
Scale: 1:20,000

Source: Base Image - © SIX Maps www.maps.six.nsw.gov.au, accessed 17-03-2014

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m  
Scale: 1:4,750

Source: Base Image - © NearMap www.nearmap.com, imagery date 19-0-2013, accessed 17-03-2014

© 2016 JBS&G

Legend:

Approximate Site Boundary

Datum: GDA 1994 MGA Zone 56 - AHD			
A4			
A	Original Issue - R01	SE	07-11-2016
Rev	Description	Dmn.	Date:

**JBS&G** Figure 1: Site Location

Client: Infrastructure NSW

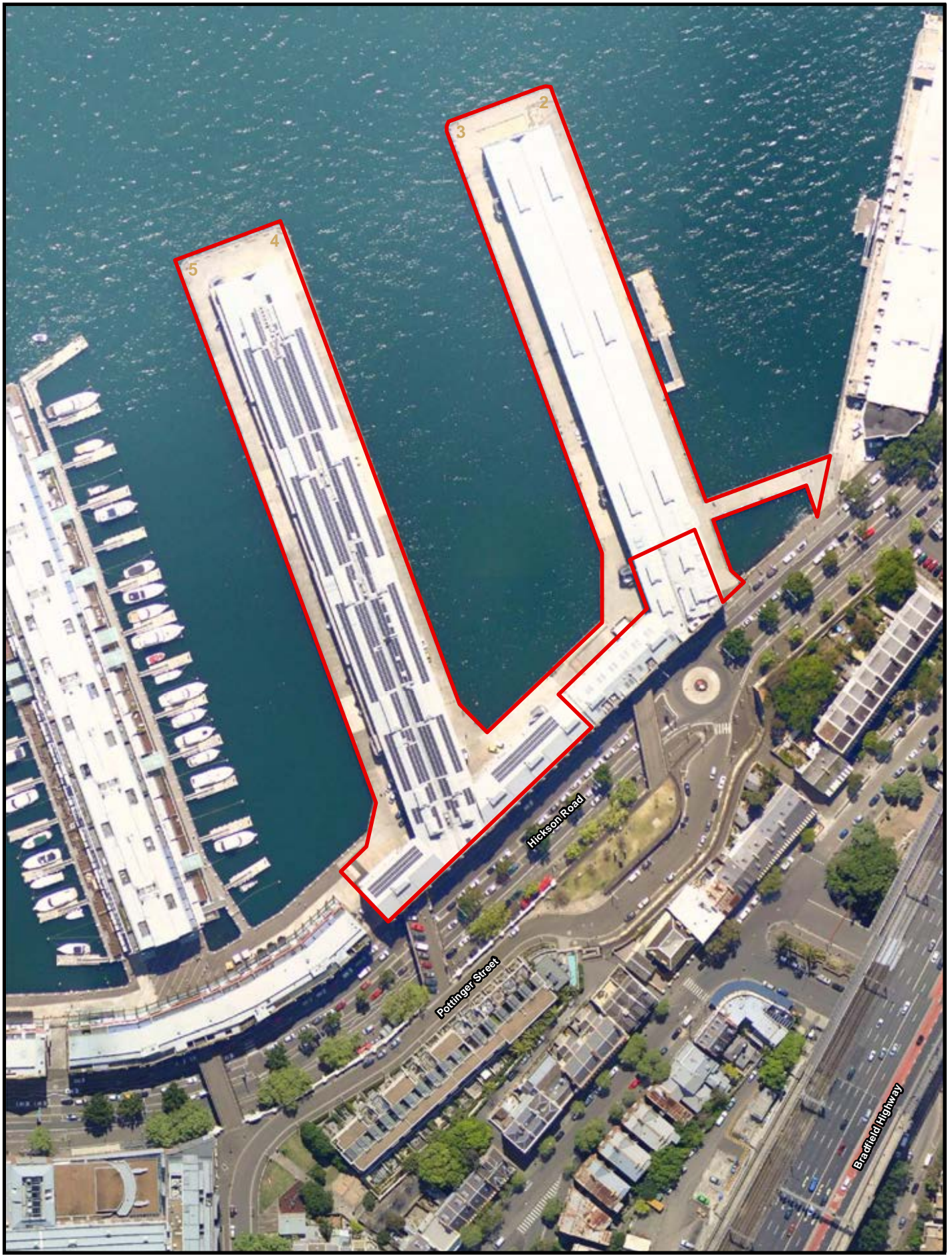
Project: Walsh Bay Arts Precinct

Job No: 52304

File Name: 52304\_01







Source: Base Image - © www.nearmap.com.au - Imagery Date September 19, 2013

© 2016 JBS&G

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Scale: 1:1,800			
Datum: GDA 1994 MGA Zone 56 - AHD			
A4			
A	Original Issue - R01	SE	07-11-2016
Rev	Description	Dm.	Date:

Legend:  
 Approximate Site Boundary

**JBS&G** Figure 2: Site Layout

Client: Infrastructure NSW

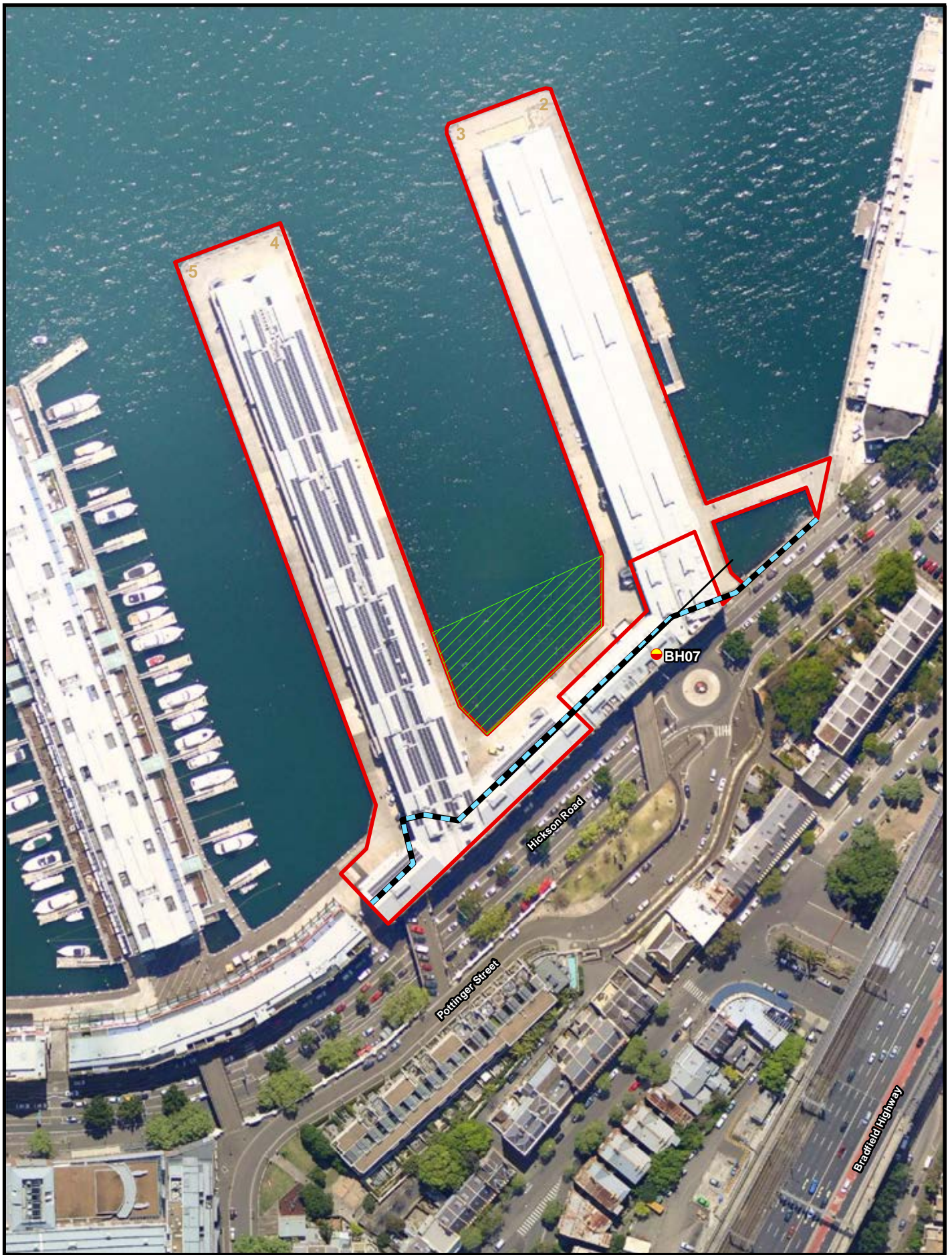
Project: Walsh Bay Arts Precinct

Job No: 52304

File Name: 52304\_02







Source: Base Image - © www.nearmap.com.au - Imagery Date September 19, 2013

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m

Scale: 1:1,800

Datum: GDA 1994 MGA Zone 56 - AHD

A4			
A	Original Issue - R01	SE	07-11-2016
Rev	Description	Dm.	Date:

Legend:

Approximate Site Boundary

Approximate Extent of Waterfront Square, The Wings and The Watersteps

Approximate Location of Seawall

● Former Soil Sampling Location (HLA 1996)



**Figure 3: Proposed Building Envelope**

Client: Infrastructure NSW

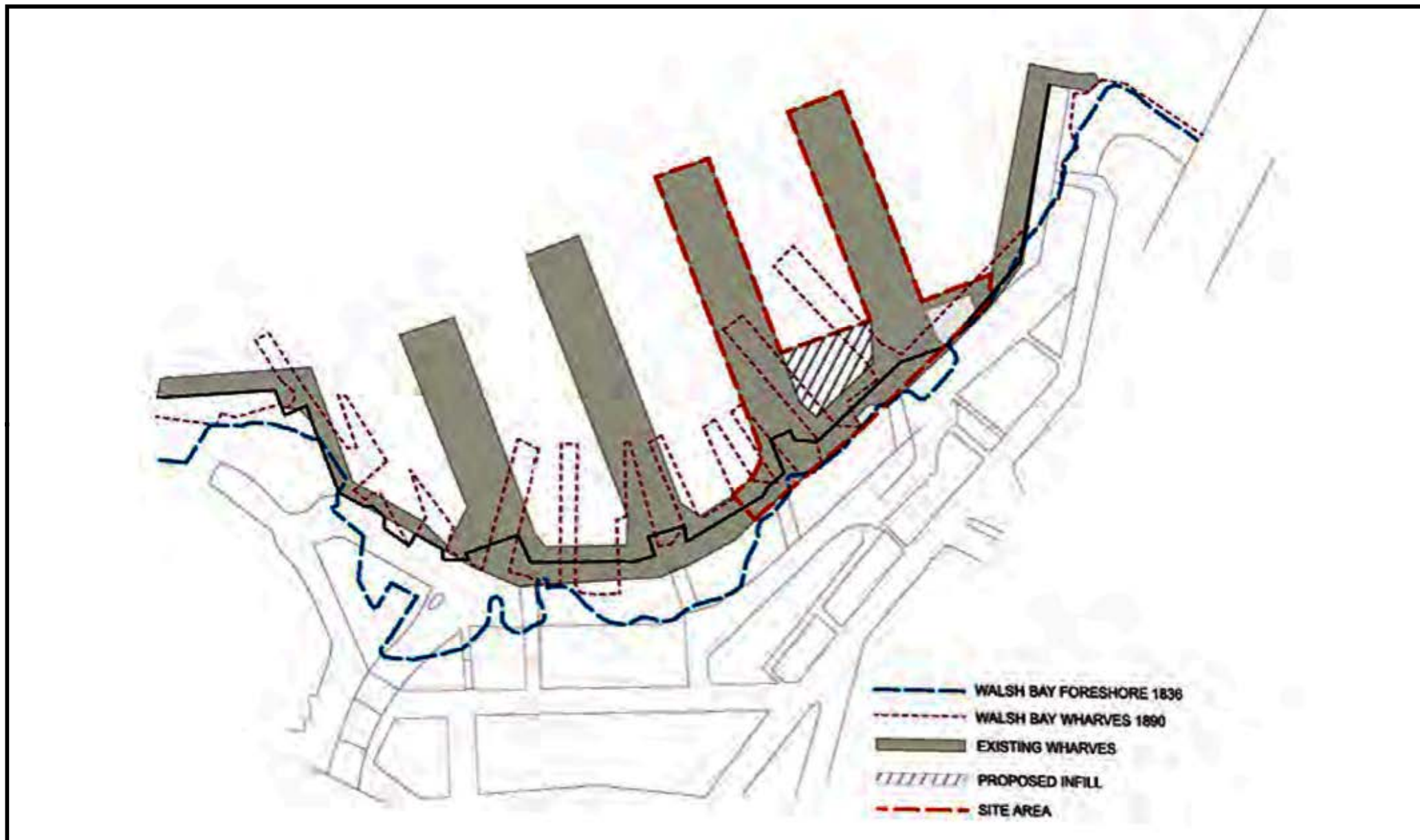
Project: Walsh Bay Arts Precinct

Job No: 52304

File Name: 52304\_03







Source: Base Image - Design 5 Architects, 2014. Walsh Bay Arts Precinct, Heritage Assessment Report DRAFT.

© 2016 JBS&G

0 25 50 100 m			
Scale: 1:3,750			
Datum: GDA 1994 MGA Zone 56 - AHD			
A4			
A	Original Issue - R01	SE	07-11-2016
Rev	Description	Drm.	Date:



**Figure 4: Approximate overlay of current wharves with early foreshore and early wharves**

Client: Infrastructure NSW

Project: Walsh Bay Arts Precinct

Job No: 52304

File Name: 52304\_04





Source: Base Image - © www.nearmap.com.au - Imagery Date September 19, 2013

© 2017 JBS&G

0 10 20 40 m

Scale: 1:1,000

Datum: GDA 1994 MGA Zone 56 - AHD

A4			
A	Original Issue - R01	SE	02-02-2017
Rev	Description	Dm.	Date:

**Legend:**

- Approximate Site Boundary
- ▨ Approximate Extent of Waterfront Square, The Wings and The Watersteps
- - - Approximate Location of Seawall
- Former Soil Sampling Location (HLA 1996)
- Proposed Location (unable to advance)
- Sample Locations
- ▲ Sublab Sample Location



**Figure 5: Sampling Locations**

Client: Infrastructure NSW

Project: Walsh Bay Arts Precinct

Job No: 52304

File Name: 52304\_05



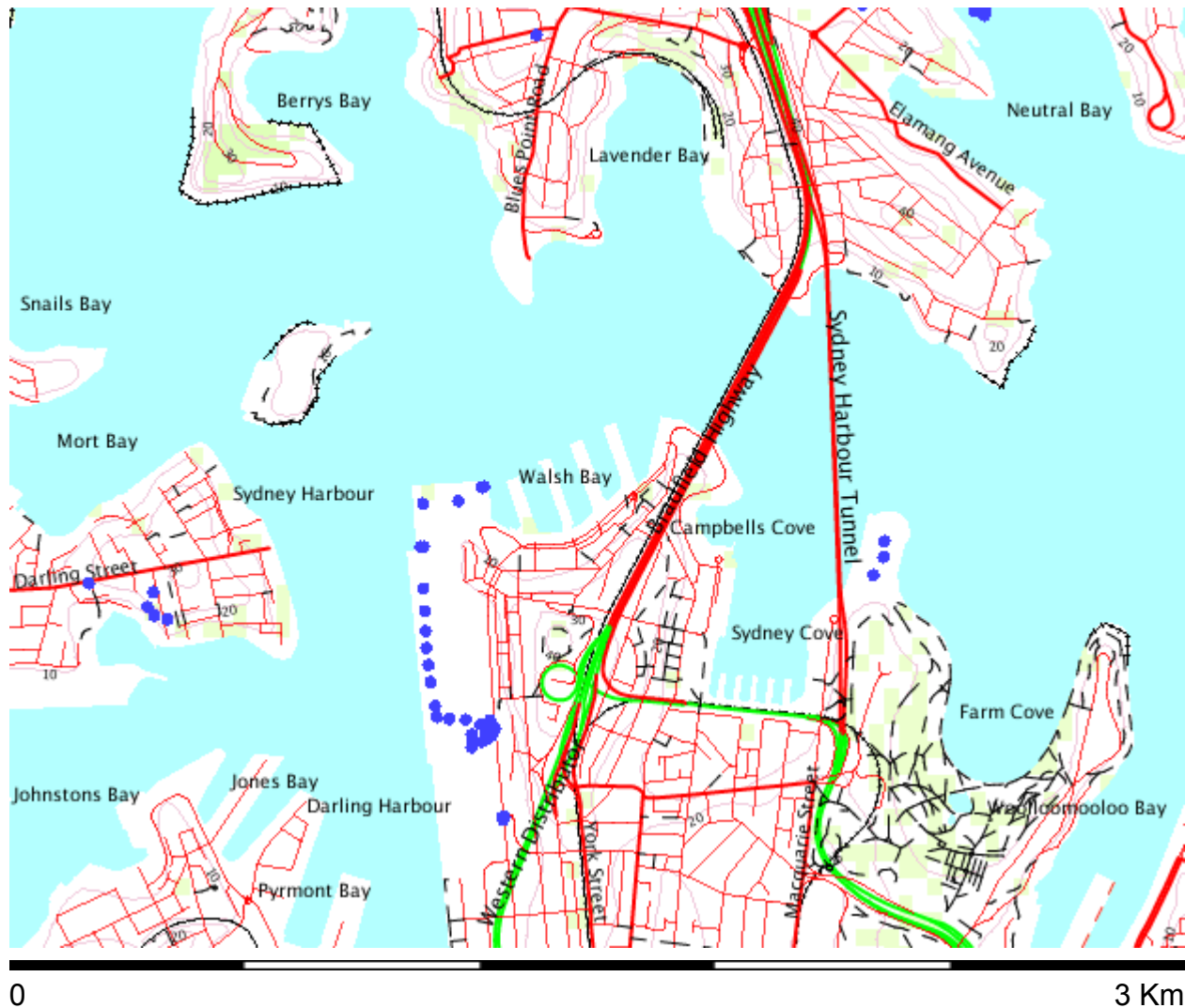
## **Appendix A Registered Groundwater Bore Search**



43329

Map created with NSW Natural Resource Atlas - <http://www.nratlas.nsw.gov.au>

Wednesday, February 12, 2014



## Legend

Symbol	Layer	Custodian
	Cities and large towns	renderImage: Cannot build image from features
	Populated places	renderImage: Cannot build image from features
	Towns	
	Groundwater Bores	
	Catchment Management Authority boundaries	
	Major rivers	

Topographic base map

# Groundwater Works Summary

For information on the meaning of fields please see [Glossary](#)  
Document Generated on Wednesday, February 12, 2014

[Print Report](#)

[Works Details](#) [Site Details](#) [Form A](#) [Licensed](#) [Construction](#) [Water Bearing Zones](#) [Drillers Log](#)

## Work Requested -- GW109085

### Works Details [\(top\)](#)

GROUNDWATER NUMBER	GW109085
LIC-NUM	10BL602334
AUTHORISED-PURPOSES	MONITORING BORE
INTENDED-PURPOSES	MONITORING BORE
WORK-TYPE	Bore
WORK-STATUS	
CONSTRUCTION-METHOD	
OWNER-TYPE	Other Govt
COMMENCE-DATE	
COMPLETION-DATE	2008-07-22
FINAL-DEPTH (metres)	5.68
DRILLED-DEPTH (metres)	5.68
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	SYDNEY WATER
GWMA	-
GW-ZONE	-
STANDING-WATER-LEVEL	
SALINITY	
YIELD	

### Site Details [\(top\)](#)

REGION	10 - SYDNEY SOUTH COAST
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6251263.00
EASTING	333786.00
LATITUDE	33 51' 57"
LONGITUDE	151 12' 11"
GS-MAP	



AMG-ZONE 56  
 COORD-SOURCE  
 REMARK

### Form-A [\(top\)](#)

COUNTY CUMBERLAND  
 PARISH ST PHILIP  
 PORTION-LOT-DP 1//87659

### Licensed [\(top\)](#)

COUNTY CUMBERLAND  
 PARISH ST PHILIP  
 PORTION-LOT-DP 1 87659

### Construction [\(top\)](#)

Negative depths indicate Above Ground Level;H-Hole;P-Pipe;OD-Outside Diameter;  
 ID-Inside Diameter;C-Cemented;SL-Slot Length;A-Aperture;GS-Grain Size;Q-Quantity

HOLE- NO	PIPE- NO	COMPONENT- CODE	COMPONENT- TYPE	DEPTH- FROM (metres)	DEPTH- TO (metres)	OD (mm)	ID (mm)	INTERVAL	DETAIL
1		Hole	Hole	0.00	5.68	120			
1	1	Casing	P.V.C.	0.00	3.20	40			

### Water Bearing Zones [\(top\)](#)

no details

### Drillers Log [\(top\)](#)

FROM	TO	THICKNESS	DESC	GEO-MATERIAL	COMMENT
0.00	1.30	1.30	FILL,SILTY SAND MEDIUM TO COARSE		
1.30	2.10	0.80	FILL,SILT SAND CLAY MIXTURE		
2.10	2.20	0.10	FILL, SHINY GRAVEL ,BLACK SILT		
2.20	3.10	0.90	FILL,SILTY SAND BROWN RED		
3.10	4.00	0.90	FILL CLAY,GREY,BROWN,MOIST		
4.00	5.68	1.68	SAND,FINE TO MEDIUM		

---

**Warning To Clients:** This raw data has been supplied to the Department of Infrastructure, Planning and Natural Resources (DIPNR) by drillers, licensees and other sources. The DIPNR does not verify the accuracy of this data. The data is presented for use by you at your own risk. You should consider verifying this data before relying on it. Professional hydrogeological advice should be sought in interpreting and using this data.

# Groundwater Works Summary

For information on the meaning of fields please see [Glossary](#)  
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[Works Details](#) [Site Details](#) [Form A](#) [Licensed](#) [Construction](#) [Water Bearing Zones](#) [Drillers Log](#)

## Work Requested -- GW109086

### Works Details [\(top\)](#)

GROUNDWATER NUMBER	GW109086
LIC-NUM	10BL602334
AUTHORISED-PURPOSES	MONITORING BORE
INTENDED-PURPOSES	MONITORING BORE
WORK-TYPE	Bore
WORK-STATUS	
CONSTRUCTION-METHOD	
OWNER-TYPE	Other Govt
COMMENCE-DATE	
COMPLETION-DATE	2008-07-22
FINAL-DEPTH (metres)	5.68
DRILLED-DEPTH (metres)	5.68
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	SYDNEY WATER
GWMA	-
GW-ZONE	-
STANDING-WATER-LEVEL	
SALINITY	
YIELD	

### Site Details [\(top\)](#)

REGION	10 - SYDNEY SOUTH COAST
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6251262.00
EASTING	333781.00
LATITUDE	33 51' 57"
LONGITUDE	151 12' 11"
GS-MAP	

AMG-ZONE 56  
 COORD-SOURCE  
 REMARK

### Form-A [\(top\)](#)

COUNTY CUMBERLAND  
 PARISH ST PHILIP  
 PORTION-LOT-DP 1//87659

### Licensed [\(top\)](#)

COUNTY CUMBERLAND  
 PARISH ST PHILIP  
 PORTION-LOT-DP 1 87659

### Construction [\(top\)](#)

Negative depths indicate Above Ground Level;H-Hole;P-Pipe;OD-Outside Diameter;  
 ID-Inside Diameter;C-Cemented;SL-Slot Length;A-Aperture;GS-Grain Size;Q-Quantity

HOLE- NO	PIPE- NO	COMPONENT- CODE	COMPONENT- TYPE	DEPTH- FROM (metres)	DEPTH- TO (metres)	OD (mm)	ID (mm)	INTERVAL	DETAIL
1		Hole	Hole	0.00	5.80	120			
1	1	Casing	P.V.C.	0.00	3.20	40			

### Water Bearing Zones [\(top\)](#)

no details

### Drillers Log [\(top\)](#)

FROM	TO	THICKNESS	DESC	GEO-MATERIAL	COMMENT
0.00	0.50	0.50	FILL,MEDIUM TO COARSE		
0.50	1.00	0.50	FILL,SILTY SAND		
1.00	1.80	0.80	FILL,CLAYEY SAND FINE GRAINED		
1.80	2.00	0.20	FILL,GRAVELLY SAND		
2.00	3.20	1.20	FILL,SAND WITH SOME SILT		
3.20	3.80	0.60	FILL SILTY SAND		
3.80	4.50	0.70	FILL CLAY SILT SAND MIXTURE		
4.50	5.68	1.18	SAND,FINE TO MEDIUM GRAINED		

---

**Warning To Clients:** This raw data has been supplied to the Department of Infrastructure, Planning and Natural Resources (DIPNR) by drillers, licensees and other sources. The DIPNR does not verify the accuracy of this data. The data is presented for use by you at your own risk. You should consider verifying this data before relying on it. Professional hydrogeological advice should be sought in interpreting and using this data.

# Groundwater Works Summary

For information on the meaning of fields please see [Glossary](#)  
Document Generated on Wednesday, February 12, 2014

Print Report

[Works Details](#) [Site Details](#) [Form A](#) [Licensed](#) [Construction](#) [Water Bearing Zones](#) [Drillers Log](#)

## Work Requested -- GW109087

### Works Details [\(top\)](#)

GROUNDWATER NUMBER GW109087  
LIC-NUM 10BL602334  
AUTHORISED-PURPOSES MONITORING BORE  
INTENDED-PURPOSES MONITORING BORE  
WORK-TYPE Bore  
WORK-STATUS  
CONSTRUCTION-METHOD  
OWNER-TYPE Other Govt  
COMMENCE-DATE  
COMPLETION-DATE 2008-07-22  
FINAL-DEPTH (metres) 8.50  
DRILLED-DEPTH (metres) 8.50  
CONTRACTOR-NAME  
DRILLER-NAME  
PROPERTY SYDNEY WATER  
GWMA -  
GW-ZONE -  
STANDING-WATER-LEVEL  
SALINITY  
YIELD

### Site Details [\(top\)](#)

REGION 10 - SYDNEY SOUTH COAST  
RIVER-BASIN  
AREA-DISTRICT  
CMA-MAP  
GRID-ZONE  
SCALE  
ELEVATION  
ELEVATION-SOURCE  
NORTHING 6251252.00  
EASTING 333783.00  
LATITUDE 33 51' 57"  
LONGITUDE 151 12' 11"  
GS-MAP

AMG-ZONE 56  
 COORD-SOURCE  
 REMARK

### Form-A [\(top\)](#)

COUNTY CUMBERLAND  
 PARISH ST PHILIP  
 PORTION-LOT-DP 1//87659

### Licensed [\(top\)](#)

COUNTY CUMBERLAND  
 PARISH ST PHILIP  
 PORTION-LOT-DP 1 87659

### Construction [\(top\)](#)

Negative depths indicate Above Ground Level;H-Hole;P-Pipe;OD-Outside Diameter;  
 ID-Inside Diameter;C-Cemented;SL-Slot Length;A-Aperture;GS-Grain Size;Q-Quantity

HOLE- NO	PIPE- NO	COMPONENT- CODE	COMPONENT- TYPE	DEPTH- FROM (metres)	DEPTH- TO (metres)	OD (mm)	ID (mm)	INTERVAL	DETAIL
1		Hole	Hole	0.00	8.50	120			
1	1	Casing	P.V.C.	0.00	3.20	40			

### Water Bearing Zones [\(top\)](#)

no details

### Drillers Log [\(top\)](#)

FROM	TO	THICKNESS	DESC	GEO-MATERIAL	COMMENT
0.00	1.00	1.00	FILL,CLAY MIXED WITH COARSE GRAVEL		
1.00	1.50	0.50	FILL SAND MEDIUM GRAINED		
1.50	2.20	0.70	FILL,SILTY SAND,MOIST,FIRM WITH GRAVEL		
2.20	3.50	1.30	FILL,SAND MEDIUM GRAINED,GREY/BROWN		
3.50	4.00	0.50	FILL,SILTY SAND,MOIST,LOOSE TO FIRM		
4.00	4.50	0.50	FILL,CRUSHED SANDSTONE		
4.50	5.90	1.40	SAND MEDIUM TO FINE ,SILT BROWN,CLAY		
5.90	7.00	1.10	CLAY,HIGH PLASTICITY,WET,SHELLS		
7.00	8.50	1.50	SAND,FINE TO MEDIUM GRAINED,BEIGE		

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## Work Requested -- GW109712

### Works Details [\(top\)](#)

GROUNDWATER NUMBER GW109712  
LIC-NUM 10BL163286  
AUTHORISED-PURPOSES MONITORING BORE  
INTENDED-PURPOSES MONITORING BORE  
WORK-TYPE Well  
WORK-STATUS  
CONSTRUCTION-METHOD  
OWNER-TYPE Other Govt  
COMMENCE-DATE  
COMPLETION-DATE 2004-01-21  
FINAL-DEPTH (metres) 5.80  
DRILLED-DEPTH (metres) 5.80  
CONTRACTOR-NAME  
DRILLER-NAME  
PROPERTY MINISTER FOR POLICE  
GWMA -  
GW-ZONE -  
STANDING-WATER-LEVEL 2.64  
SALINITY  
YIELD

### Site Details [\(top\)](#)

REGION 10 - SYDNEY SOUTH COAST  
RIVER-BASIN  
AREA-DISTRICT  
CMA-MAP  
GRID-ZONE  
SCALE  
ELEVATION  
ELEVATION-SOURCE  
NORTHING 6251938.00  
EASTING 332788.00  
LATITUDE 33 51' 35"  
LONGITUDE 151 11' 33"  
GS-MAP

AMG-ZONE 56  
COORD-SOURCE  
REMARK

### Form-A [\(top\)](#)

COUNTY CUMBERLAND  
PARISH PETERSHAM  
PORTION-LOT-DP 1//773671

### Licensed [\(top\)](#)

COUNTY CUMBERLAND  
PARISH PETERSHAM  
PORTION-LOT-DP 1 812813

### Construction [\(top\)](#)

Negative depths indicate Above Ground Level;H-Hole;P-Pipe;OD-Outside Diameter;  
ID-Inside Diameter;C-Cemented;SL-Slot Length;A-Aperture;GS-Grain Size;Q-Quantity

HOLE- NO	PIPE- NO	COMPONENT- CODE	COMPONENT- TYPE	DEPTH- FROM (metres)	DEPTH- TO (metres)	OD (mm)	ID (mm)	INTERVAL	DETAIL
1		Hole	Hole	0.00	5.80	100			
1	1	Casing	PVC Class 18	0.00	5.80	50			Screwed; Seated on Bottom
1		Annulus	Crushed Aggregate	0.00	0.00				Graded; GS: 1- 5.8mm

### Water Bearing Zones [\(top\)](#)

FROM- DEPTH (metres)	TO-DEPTH (metres)	THICKNESS (metres)	ROCK- CAT- DESC	S- W-L	D- D- L	YIELD	TEST-HOLE- DEPTH (metres)	DURATION	SALINITY
0.00	5.80	5.80		2.64					

### Drillers Log [\(top\)](#)

FROM	TO	THICKNESS	DESC	GEO- MATERIAL	COMMENT
0.00	1.50	1.50	TOPSOIL AND FILL		
1.50	5.80	4.30	WEATHERED SANDSTONE,MEDIUM TO COARSE GRAINED		

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# Groundwater Works Summary

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## Work Requested -- GW109713

### Works Details [\(top\)](#)

GROUNDWATER NUMBER	GW109713
LIC-NUM	10BL163286
AUTHORISED-PURPOSES	MONITORING BORE
INTENDED-PURPOSES	MONITORING BORE
WORK-TYPE	Well
WORK-STATUS	
CONSTRUCTION-METHOD	Other
OWNER-TYPE	Other Govt
COMMENCE-DATE	
COMPLETION-DATE	2004-01-21
FINAL-DEPTH (metres)	6.00
DRILLED-DEPTH (metres)	6.00
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	MINISTER FOR POLICE
GWMA	-
GW-ZONE	-
STANDING-WATER-LEVEL	2.52
SALINITY	
YIELD	

### Site Details [\(top\)](#)

REGION	10 - SYDNEY SOUTH COAST
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6251951.00
EASTING	332750.00
LATITUDE	33 51' 34"
LONGITUDE	151 11' 31"
GS-MAP	



AMG-ZONE 56  
 COORD-SOURCE  
 REMARK

### Form-A [\(top\)](#)

COUNTY CUMBERLAND  
 PARISH PETERSHAM  
 PORTION-LOT-DP 1//812813

### Licensed [\(top\)](#)

COUNTY CUMBERLAND  
 PARISH PETERSHAM  
 PORTION-LOT-DP 1 812813

### Construction [\(top\)](#)

Negative depths indicate Above Ground Level;H-Hole;P-Pipe;OD-Outside Diameter;  
 ID-Inside Diameter;C-Cemented;SL-Slot Length;A-Aperture;GS-Grain Size;Q-Quantity

HOLE- NO	PIPE- NO	COMPONENT- CODE	COMPONENT- TYPE	DEPTH- FROM (metres)	DEPTH- TO (metres)	OD (mm)	ID (mm)	INTERVAL	DETAIL
1		Hole	Hole	0.00	6.00	100			Other
1	1	Casing	PVC Class 18	0.00	6.00	50			Screwed
1		Annulus	Crushed Aggregate	0.00	0.00				Graded; GS: 1- 6mm

### Water Bearing Zones [\(top\)](#)

FROM- DEPTH (metres)	TO-DEPTH (metres)	THICKNESS (metres)	ROCK- CAT- DESC	S- W-L	D- D- L	YIELD	TEST-HOLE- DEPTH (metres)	DURATION	SALINITY
6.00	6.00	0.00		2.52					

### Drillers Log [\(top\)](#)

FROM	TO	THICKNESS	DESC	GEO- MATERIAL	COMMENT
0.00	2.60	2.60	FILL		
2.60	6.00	3.40	SANDSTONE,WEATHERED,MEDIUM TO COARSE GRAINED/SOME CLAY		

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# Groundwater Works Summary

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## Work Requested -- GW109714

### Works Details [\(top\)](#)

GROUNDWATER NUMBER	GW109714
LIC-NUM	10BL163286
AUTHORISED-PURPOSES	MONITORING BORE
INTENDED-PURPOSES	MONITORING BORE
WORK-TYPE	Well
WORK-STATUS	
CONSTRUCTION-METHOD	Other
OWNER-TYPE	Other Govt
COMMENCE-DATE	
COMPLETION-DATE	2004-01-22
FINAL-DEPTH (metres)	5.90
DRILLED-DEPTH (metres)	5.90
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	MINISTER FOR POLICE
GWMA	-
GW-ZONE	-
STANDING-WATER-LEVEL	2.55
SALINITY	
YIELD	

### Site Details [\(top\)](#)

REGION	10 - SYDNEY SOUTH COAST
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6252032.00
EASTING	332745.00
LATITUDE	33 51' 32"
LONGITUDE	151 11' 31"
GS-MAP	

AMG-ZONE 56  
 COORD-SOURCE  
 REMARK

### Form-A [\(top\)](#)

COUNTY CUMBERLAND  
 PARISH PETERSHAM  
 PORTION-LOT-DP 1//812813

### Licensed [\(top\)](#)

COUNTY CUMBERLAND  
 PARISH PETERSHAM  
 PORTION-LOT-DP 1 812813

### Construction [\(top\)](#)

Negative depths indicate Above Ground Level;H-Hole;P-Pipe;OD-Outside Diameter;  
 ID-Inside Diameter;C-Cemented;SL-Slot Length;A-Aperture;GS-Grain Size;Q-Quantity

HOLE- NO	PIPE- NO	COMPONENT- CODE	COMPONENT- TYPE	DEPTH- FROM (metres)	DEPTH- TO (metres)	OD (mm)	ID (mm)	INTERVAL	DETAIL
1		Hole	Hole	0.00	5.90	100			Other
1	1	Casing	PVC Class 18	0.00	5.90	50			Screwed; Seated on Bottom
1		Annulus	Crushed Aggregate	0.00	0.00				Graded; GS: .5- 5.9mm

### Water Bearing Zones [\(top\)](#)

FROM- DEPTH (metres)	TO-DEPTH (metres)	THICKNESS (metres)	ROCK- CAT- DESC	S- W-L	D- D- L	YIELD	TEST-HOLE- DEPTH (metres)	DURATION	SALINITY
0.00	5.90	5.90		2.55					

### Drillers Log [\(top\)](#)

FROM	TO	THICKNESS	DESC	GEO- MATERIAL	COMMENT
0.00	1.20	1.20	FILL		
1.20	5.90	4.70	SANDSTONE WEATHERED,MEDIUM TO COARSE,GRAINED,SOME CLAY		

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# Groundwater Works Summary

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## Work Requested -- GW109715

### Works Details [\(top\)](#)

GROUNDWATER NUMBER	GW109715
LIC-NUM	10BL163286
AUTHORISED-PURPOSES	MONITORING BORE
INTENDED-PURPOSES	MONITORING BORE
WORK-TYPE	Well
WORK-STATUS	
CONSTRUCTION-METHOD	Other
OWNER-TYPE	Other Govt
COMMENCE-DATE	
COMPLETION-DATE	2004-01-22
FINAL-DEPTH (metres)	5.90
DRILLED-DEPTH (metres)	5.90
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	MINISTER FOR POLICE
GWMA	-
GW-ZONE	-
STANDING-WATER-LEVEL	4.40
SALINITY	
YIELD	

### Site Details [\(top\)](#)

REGION	10 - SYDNEY SOUTH COAST
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6252060.00
EASTING	332556.00
LATITUDE	33 51' 31"
LONGITUDE	151 11' 24"
GS-MAP	

AMG-ZONE 56  
 COORD-SOURCE  
 REMARK

### Form-A [\(top\)](#)

COUNTY CUMBERLAND  
 PARISH PETERSHAM  
 PORTION-LOT-DP 1//812813

### Licensed [\(top\)](#)

COUNTY CUMBERLAND  
 PARISH PETERSHAM  
 PORTION-LOT-DP 1 812813

### Construction [\(top\)](#)

Negative depths indicate Above Ground Level;H-Hole;P-Pipe;OD-Outside Diameter;  
 ID-Inside Diameter;C-Cemented;SL-Slot Length;A-Aperture;GS-Grain Size;Q-Quantity

HOLE- NO	PIPE- NO	COMPONENT- CODE	COMPONENT- TYPE	DEPTH- FROM (metres)	DEPTH- TO (metres)	OD (mm)	ID (mm)	INTERVAL	DETAIL
1		Hole	Hole	0.00	5.90	100			Other
1	1	Casing	PVC Class 18	0.00	5.90	50			Screwed; Seated on Bottom
1		Annulus	Crushed Aggregate	0.00	0.00				Graded; GS: 1- 5.9mm

### Water Bearing Zones [\(top\)](#)

FROM- DEPTH (metres)	TO-DEPTH (metres)	THICKNESS (metres)	ROCK- CAT- DESC	S- W-L	D- D- L	YIELD	TEST-HOLE- DEPTH (metres)	DURATION	SALINITY
0.00	5.90	5.90		4.40					

### Drillers Log [\(top\)](#)

FROM	TO	THICKNESS	DESC	GEO- MATERIAL	COMMENT
0.00	1.20	1.20	FILL		
1.20	5.90	4.70	SANDSTONE WEATHERED MEDIUM TO COARSE GRAINED,CLAY SEAMS		

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# Groundwater Works Summary

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## Work Requested -- GW109716

### Works Details [\(top\)](#)

GROUNDWATER NUMBER	GW109716
LIC-NUM	10BL163286
AUTHORISED-PURPOSES	MONITORING BORE
INTENDED-PURPOSES	MONITORING BORE
WORK-TYPE	Well
WORK-STATUS	
CONSTRUCTION-METHOD	Other
OWNER-TYPE	Other Govt
COMMENCE-DATE	
COMPLETION-DATE	2004-01-22
FINAL-DEPTH (metres)	6.00
DRILLED-DEPTH (metres)	6.00
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	MINISTER FOR POLICE
GWMA	-
GW-ZONE	-
STANDING-WATER-LEVEL	1.79
SALINITY	
YIELD	

### Site Details [\(top\)](#)

REGION	10 - SYDNEY SOUTH COAST
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6251981.00
EASTING	332729.00
LATITUDE	33 51' 33"
LONGITUDE	151 11' 30"
GS-MAP	

AMG-ZONE 56  
 COORD-SOURCE  
 REMARK

### Form-A [\(top\)](#)

COUNTY CUMBERLAND  
 PARISH PETERSHAM  
 PORTION-LOT-DP 1//812813

### Licensed [\(top\)](#)

COUNTY CUMBERLAND  
 PARISH PETERSHAM  
 PORTION-LOT-DP 1 812813

### Construction [\(top\)](#)

Negative depths indicate Above Ground Level;H-Hole;P-Pipe;OD-Outside Diameter;  
 ID-Inside Diameter;C-Cemented;SL-Slot Length;A-Aperture;GS-Grain Size;Q-Quantity

HOLE- NO	PIPE- NO	COMPONENT- CODE	COMPONENT- TYPE	DEPTH- FROM (metres)	DEPTH- TO (metres)	OD (mm)	ID (mm)	INTERVAL	DETAIL
1		Hole	Hole	0.00	6.00	100			Other
1	1	Casing	PVC Class 18	0.00	6.00	50			Screwed; Seated on Bottom
1		Annulus	Crushed Aggregate	0.00	0.00				Graded; GS: 1- 5mm

### Water Bearing Zones [\(top\)](#)

FROM- DEPTH (metres)	TO-DEPTH (metres)	THICKNESS (metres)	ROCK- CAT- DESC	S- W-L	D- D- L	YIELD	TEST-HOLE- DEPTH (metres)	DURATION	SALINITY
0.00	6.00	6.00		1.79					

### Drillers Log [\(top\)](#)

FROM	TO	THICKNESS	DESC	GEO-MATERIAL	COMMENT
0.00	4.20	4.20	FILL		
4.20	5.80	1.60	MARINE SILT		
5.80	6.00	0.20	SANDSTONE		

---

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# Groundwater Works Summary

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## Work Requested -- GW111570

### Works Details [\(top\)](#)

GROUNDWATER NUMBER	GW111570
LIC-NUM	10BL604689
AUTHORISED-PURPOSES	MONITORING BORE
INTENDED-PURPOSES	MONITORING BORE
WORK-TYPE	Bore
WORK-STATUS	Equipped - bore used for obs
CONSTRUCTION-METHOD	Auger - Solid Flight
OWNER-TYPE	Other Govt
COMMENCE-DATE	
COMPLETION-DATE	2011-06-27
FINAL-DEPTH (metres)	6.00
DRILLED-DEPTH (metres)	6.00
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	SYDNEY PORTS CORPORATION
GWMA	-
GW-ZONE	-
STANDING-WATER-LEVEL	2.72
SALINITY	
YIELD	1.00

### Site Details [\(top\)](#)

REGION	10 - SYDNEY SOUTH COAST
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6252417.00
EASTING	333701.00
LATITUDE	33 51' 20"
LONGITUDE	151 12' 8"
GS-MAP	



AMG-ZONE 56  
 COORD-SOURCE  
 REMARK

### Form-A [\(top\)](#)

COUNTY CUMBERLAND  
 PARISH ST PHILIP  
 PORTION-LOT-DP 2//876514

### Licensed [\(top\)](#)

COUNTY CUMBERLAND  
 PARISH ST PHILIP  
 PORTION-LOT-DP 2 876514

### Construction [\(top\)](#)

Negative depths indicate Above Ground Level;H-Hole;P-Pipe;OD-Outside Diameter;  
 ID-Inside Diameter;C-Cemented;SL-Slot Length;A-Aperture;GS-Grain Size;Q-Quantity

HOLE- NO	PIPE- NO	COMPONENT- CODE	COMPONENT- TYPE	DEPTH- FROM (metres)	DEPTH- TO (metres)	OD (mm)	ID (mm)	INTERVAL	DETAIL
1		Hole	Hole	0.00	6.00	90			Auger - Solid Flight
1	1	Casing	PVC Class 18	0.00	2.00	61	51		Screwed; Seated on Bottom; End cap
1	1	Opening	Slots - Horizontal	2.00	5.80	61			PVC Class 18; Casing - Machine Slotted; SL: 40mm; A: .5mm; Screwed
1		Annulus	Bentonite/Grout	0.10	1.00				
1		Annulus	Crushed Aggregate	1.00	6.00				Graded; GS: 1-3mm

### Water Bearing Zones [\(top\)](#)

FROM- DEPTH (metres)	TO- DEPTH (metres)	THICKNESS (metres)	ROCK- CAT- DESC	S- W-L	D- D-L	YIELD	TEST- HOLE- DEPTH (metres)	DURATION	SALINITY
2.50	6.00	3.50		2.72	5.80	1.00			

### Drillers Log [\(top\)](#)

FROM	TO	THICKNESS	DESC	GEO-MATERIAL	COMMENT
0.00	0.20	0.20	CONCRETE		

0.20	1.00	0.80	FILL,CLAYEY SAND,YELLOW BROWN
1.00	6.00	5.00	FILL. SAND,YELLOW

---

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# Groundwater Works Summary

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## Work Requested -- GW111571

### Works Details [\(top\)](#)

GROUNDWATER NUMBER	GW111571
LIC-NUM	10BL604689
AUTHORISED-PURPOSES	MONITORING BORE
INTENDED-PURPOSES	MONITORING BORE
WORK-TYPE	Bore
WORK-STATUS	Equipped - bore used for obs
CONSTRUCTION-METHOD	Auger - Solid Flight
OWNER-TYPE	Other Govt
COMMENCE-DATE	
COMPLETION-DATE	2011-06-27
FINAL-DEPTH (metres)	6.00
DRILLED-DEPTH (metres)	6.00
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	SYDNEY PORTS CORPORATION
GWMA	-
GW-ZONE	-
STANDING-WATER-LEVEL	2.65
SALINITY	
YIELD	1.00

### Site Details [\(top\)](#)

REGION	10 - SYDNEY SOUTH COAST
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6252420.00
EASTING	333707.00
LATITUDE	33 51' 20"
LONGITUDE	151 12' 9"
GS-MAP	

AMG-ZONE 56  
 COORD-SOURCE  
 REMARK

### Form-A [\(top\)](#)

COUNTY CUMBERLAND  
 PARISH ST PHILIP  
 PORTION-LOT-DP 2//876514

### Licensed [\(top\)](#)

COUNTY CUMBERLAND  
 PARISH ST PHILIP  
 PORTION-LOT-DP 2 876514

### Construction [\(top\)](#)

Negative depths indicate Above Ground Level;H-Hole;P-Pipe;OD-Outside Diameter;  
 ID-Inside Diameter;C-Cemented;SL-Slot Length;A-Aperture;GS-Grain Size;Q-Quantity

HOLE- NO	PIPE- NO	COMPONENT- CODE	COMPONENT- TYPE	DEPTH- FROM (metres)	DEPTH- TO (metres)	OD (mm)	ID (mm)	INTERVAL	DETAIL
1		Hole	Hole	0.00	6.00	90			Auger - Solid Flight
1	1	Casing	PVC Class 18	0.00	2.00	61	51		Screwed; Seated on Bottom; Open End
1	1	Opening	Slots - Horizontal	2.00	5.80	61			PVC Class 18; Casing - Machine Slotted; SL: 40mm; A: .5mm; Screwed
1		Annulus	Bentonite/Grout	0.10	1.00				
1		Annulus	Crushed Aggregate	1.00	6.00				Graded; GS: 1-3mm

### Water Bearing Zones [\(top\)](#)

FROM- DEPTH (metres)	TO- DEPTH (metres)	THICKNESS (metres)	ROCK- CAT- DESC	S- W-L	D- D-L	YIELD	TEST- HOLE- DEPTH (metres)	DURATION	SALINITY
2.50	6.00	3.50		2.65	5.80	1.00			

### Drillers Log [\(top\)](#)

FROM	TO	THICKNESS	DESC	GEO-MATERIAL	COMMENT
0.00	0.20	0.20	CONCRETE		

0.20	1.80	1.60	FILL,CLAYEY SAND,YELLOW BROWN
1.80	6.00	4.20	FILL,SAND YELLOW

---

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# Groundwater Works Summary

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## Work Requested -- GW112871

### Works Details [\(top\)](#)

GROUNDWATER NUMBER GW112871  
LIC-NUM 10BL604486  
AUTHORISED-PURPOSES MONITORING BORE  
INTENDED-PURPOSES MONITORING BORE  
WORK-TYPE Well  
WORK-STATUS  
CONSTRUCTION-METHOD  
OWNER-TYPE Private  
COMMENCE-DATE  
COMPLETION-DATE 2011-02-11  
FINAL-DEPTH (metres) 20.00  
DRILLED-DEPTH (metres)  
CONTRACTOR-NAME  
DRILLER-NAME  
PROPERTY SYDNEY OPERA HOUSE TRUST  
GWMA -  
GW-ZONE -  
STANDING-WATER-LEVEL  
SALINITY  
YIELD

### Site Details [\(top\)](#)

REGION 10 - SYDNEY SOUTH COAST  
RIVER-BASIN  
AREA-DISTRICT  
CMA-MAP  
GRID-ZONE  
SCALE  
ELEVATION  
ELEVATION-SOURCE  
NORTHING 6252193.00  
EASTING 334880.00  
LATITUDE 33 51' 28"  
LONGITUDE 151 12' 54"  
GS-MAP

AMG-ZONE 56  
COORD-SOURCE  
REMARK

### Form-A [\(top\)](#)

COUNTY CUMBERLAND  
PARISH ST JAMES  
PORTION-LOT-DP 5//775888

### Licensed [\(top\)](#)

COUNTY CUMBERLAND  
PARISH ST JAMES  
PORTION-LOT-DP 5 775888

### Water Bearing Zones [\(top\)](#)

no details

### Drillers Log [\(top\)](#)

no details

---

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## Work Requested -- GW112872

### Works Details [\(top\)](#)

GROUNDWATER NUMBER	GW112872
LIC-NUM	10BL604486
AUTHORISED-PURPOSES	MONITORING BORE
INTENDED-PURPOSES	MONITORING BORE
WORK-TYPE	Well
WORK-STATUS	
CONSTRUCTION-METHOD	
OWNER-TYPE	Private
COMMENCE-DATE	
COMPLETION-DATE	2011-04-28
FINAL-DEPTH (metres)	20.12
DRILLED-DEPTH (metres)	
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	SYDNEY OPERA HOUSE TRUST
GWMA	-
GW-ZONE	-
STANDING-WATER-LEVEL	
SALINITY	
YIELD	

### Site Details [\(top\)](#)

REGION	10 - SYDNEY SOUTH COAST
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6252249.00
EASTING	334881.00
LATITUDE	33 51' 26"
LONGITUDE	151 12' 54"
GS-MAP	



AMG-ZONE 56  
COORD-SOURCE  
REMARK

### Form-A [\(top\)](#)

COUNTY CUMBERLAND  
PARISH ST JAMES  
PORTION-LOT-DP 5//775888

### Licensed [\(top\)](#)

COUNTY CUMBERLAND  
PARISH ST JAMES  
PORTION-LOT-DP 5 775888

### Water Bearing Zones [\(top\)](#)

no details

### Drillers Log [\(top\)](#)

no details

---

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## Work Requested -- GW112873

### Works Details [\(top\)](#)

GROUNDWATER NUMBER GW112873  
LIC-NUM 10BL604486  
AUTHORISED-PURPOSES MONITORING BORE  
INTENDED-PURPOSES MONITORING BORE  
WORK-TYPE Well  
WORK-STATUS  
CONSTRUCTION-METHOD  
OWNER-TYPE Private  
COMMENCE-DATE  
COMPLETION-DATE 2011-04-28  
FINAL-DEPTH (metres) 15.10  
DRILLED-DEPTH (metres)  
CONTRACTOR-NAME  
DRILLER-NAME  
PROPERTY SYDNEY OPERA HOUSE TRUST  
GWMA -  
GW-ZONE -  
STANDING-WATER-LEVEL  
SALINITY  
YIELD

### Site Details [\(top\)](#)

REGION 10 - SYDNEY SOUTH COAST  
RIVER-BASIN  
AREA-DISTRICT  
CMA-MAP  
GRID-ZONE  
SCALE  
ELEVATION  
ELEVATION-SOURCE  
NORTHING 6252129.00  
EASTING 334851.00  
LATITUDE 33 51' 30"  
LONGITUDE 151 12' 53"  
GS-MAP

AMG-ZONE 56  
COORD-SOURCE  
REMARK

### Form-A [\(top\)](#)

COUNTY CUMBERLAND  
PARISH ST JAMES  
PORTION-LOT-DP 5//775888

### Licensed [\(top\)](#)

COUNTY CUMBERLAND  
PARISH ST JAMES  
PORTION-LOT-DP 5 775888

### Water Bearing Zones [\(top\)](#)

no details

### Drillers Log [\(top\)](#)

no details

---

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## Work Requested -- GW113553

### Works Details [\(top\)](#)

GROUNDWATER NUMBER	GW113553
LIC-NUM	10BL604425
AUTHORISED-PURPOSES	MONITORING BORE
INTENDED-PURPOSES	MONITORING BORE
WORK-TYPE	Bore
WORK-STATUS	
CONSTRUCTION-METHOD	
OWNER-TYPE	Private
COMMENCE-DATE	
COMPLETION-DATE	2011-01-06
FINAL-DEPTH (metres)	5.20
DRILLED-DEPTH (metres)	
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	BARANGAROO DELIVERY AUTHORITY
GWMA	-
GW-ZONE	-
STANDING-WATER-LEVEL	
SALINITY	
YIELD	

### Site Details [\(top\)](#)

REGION	10 - SYDNEY SOUTH COAST
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6252368.00
EASTING	333632.00
LATITUDE	33 51' 21"
LONGITUDE	151 12' 6"
GS-MAP	

AMG-ZONE 56  
COORD-SOURCE  
REMARK

### Form-A [\(top\)](#)

COUNTY CUMBERLAND  
PARISH ST PHILIP  
PORTION-LOT-DP 5//876514

### Licensed [\(top\)](#)

COUNTY CUMBERLAND  
PARISH ST PHILIP  
PORTION-LOT-DP 5 876514

### Water Bearing Zones [\(top\)](#)

no details

### Drillers Log [\(top\)](#)

no details

---

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## Work Requested -- GW113554

### Works Details [\(top\)](#)

GROUNDWATER NUMBER	GW113554
LIC-NUM	10BL604425
AUTHORISED-PURPOSES	MONITORING BORE
INTENDED-PURPOSES	MONITORING BORE
WORK-TYPE	Bore
WORK-STATUS	
CONSTRUCTION-METHOD	
OWNER-TYPE	Private
COMMENCE-DATE	
COMPLETION-DATE	2011-01-06
FINAL-DEPTH (metres)	5.00
DRILLED-DEPTH (metres)	
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	BARANGAROO DELIVERY AUTHORITY
GWMA	-
GW-ZONE	-
STANDING-WATER-LEVEL	
SALINITY	
YIELD	

### Site Details [\(top\)](#)

REGION	10 - SYDNEY SOUTH COAST
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6252357.00
EASTING	333529.00
LATITUDE	33 51' 21"
LONGITUDE	151 12' 2"
GS-MAP	

AMG-ZONE 56  
COORD-SOURCE  
REMARK

### Form-A [\(top\)](#)

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PARISH ST PHILIP  
PORTION-LOT-DP 5//876514

### Licensed [\(top\)](#)

COUNTY CUMBERLAND  
PARISH ST PHILIP  
PORTION-LOT-DP 5 876514

### Water Bearing Zones [\(top\)](#)

no details

### Drillers Log [\(top\)](#)

no details

---

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# Groundwater Works Summary

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## Work Requested -- GW113555

### Works Details [\(top\)](#)

GROUNDWATER NUMBER	GW113555
LIC-NUM	10BL604425
AUTHORISED-PURPOSES	MONITORING BORE
INTENDED-PURPOSES	MONITORING BORE
WORK-TYPE	Bore
WORK-STATUS	
CONSTRUCTION-METHOD	
OWNER-TYPE	Private
COMMENCE-DATE	
COMPLETION-DATE	2011-01-06
FINAL-DEPTH (metres)	14.00
DRILLED-DEPTH (metres)	
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	BARANGAROO DELIVERY AUTHORITY
GWMA	-
GW-ZONE	-
STANDING-WATER-LEVEL	
SALINITY	
YIELD	

### Site Details [\(top\)](#)

REGION	10 - SYDNEY SOUTH COAST
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6252205.00
EASTING	333533.00
LATITUDE	33 51' 26"
LONGITUDE	151 12' 2"
GS-MAP	



AMG-ZONE 56  
COORD-SOURCE  
REMARK

### Form-A [\(top\)](#)

COUNTY CUMBERLAND  
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### Licensed [\(top\)](#)

COUNTY CUMBERLAND  
PARISH ST PHILIP  
PORTION-LOT-DP 5 876514

### Water Bearing Zones [\(top\)](#)

no details

### Drillers Log [\(top\)](#)

no details

---

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## Work Requested -- GW113556

### Works Details [\(top\)](#)

GROUNDWATER NUMBER	GW113556
LIC-NUM	10BL604425
AUTHORISED-PURPOSES	MONITORING BORE
INTENDED-PURPOSES	MONITORING BORE
WORK-TYPE	Bore
WORK-STATUS	
CONSTRUCTION-METHOD	
OWNER-TYPE	Private
COMMENCE-DATE	
COMPLETION-DATE	2011-01-06
FINAL-DEPTH (metres)	14.00
DRILLED-DEPTH (metres)	
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	BARANGAROO DELIVERY AUTHORITY
GWMA	-
GW-ZONE	-
STANDING-WATER-LEVEL	
SALINITY	
YIELD	

### Site Details [\(top\)](#)

REGION	10 - SYDNEY SOUTH COAST
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6252205.00
EASTING	333524.00
LATITUDE	33 51' 26"
LONGITUDE	151 12' 1"
GS-MAP	

AMG-ZONE 56  
COORD-SOURCE  
REMARK

### Form-A [\(top\)](#)

COUNTY CUMBERLAND  
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PORTION-LOT-DP 5//876514

### Licensed [\(top\)](#)

COUNTY CUMBERLAND  
PARISH ST PHILIP  
PORTION-LOT-DP 5 876514

### Water Bearing Zones [\(top\)](#)

no details

### Drillers Log [\(top\)](#)

no details

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# Groundwater Works Summary

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## Work Requested -- GW113557

### Works Details [\(top\)](#)

GROUNDWATER NUMBER	GW113557
LIC-NUM	10BL604425
AUTHORISED-PURPOSES	MONITORING BORE
INTENDED-PURPOSES	MONITORING BORE
WORK-TYPE	Bore
WORK-STATUS	
CONSTRUCTION-METHOD	
OWNER-TYPE	Private
COMMENCE-DATE	
COMPLETION-DATE	2011-01-06
FINAL-DEPTH (metres)	12.00
DRILLED-DEPTH (metres)	
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	BARANGAROO DELIVERY AUTHORITY
GWMA	-
GW-ZONE	-
STANDING-WATER-LEVEL	
SALINITY	
YIELD	

### Site Details [\(top\)](#)

REGION	10 - SYDNEY SOUTH COAST
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6252060.00
EASTING	333535.00
LATITUDE	33 51' 31"
LONGITUDE	151 12' 2"
GS-MAP	

AMG-ZONE 56  
COORD-SOURCE  
REMARK

### Form-A [\(top\)](#)

COUNTY CUMBERLAND  
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### Licensed [\(top\)](#)

COUNTY CUMBERLAND  
PARISH ST PHILIP  
PORTION-LOT-DP 5 876514

### Water Bearing Zones [\(top\)](#)

no details

### Drillers Log [\(top\)](#)

no details

---

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## Work Requested -- GW113558

### Works Details [\(top\)](#)

GROUNDWATER NUMBER	GW113558
LIC-NUM	10BL604425
AUTHORISED-PURPOSES	MONITORING BORE
INTENDED-PURPOSES	MONITORING BORE
WORK-TYPE	Bore
WORK-STATUS	
CONSTRUCTION-METHOD	
OWNER-TYPE	Private
COMMENCE-DATE	
COMPLETION-DATE	2011-01-06
FINAL-DEPTH (metres)	14.00
DRILLED-DEPTH (metres)	
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	BARANGAROO DELIVERY AUTHORITY
GWMA	-
GW-ZONE	-
STANDING-WATER-LEVEL	
SALINITY	
YIELD	

### Site Details [\(top\)](#)

REGION	10 - SYDNEY SOUTH COAST
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6251980.00
EASTING	333541.00
LATITUDE	33 51' 34"
LONGITUDE	151 12' 2"
GS-MAP	

AMG-ZONE 56  
COORD-SOURCE  
REMARK

### Form-A [\(top\)](#)

COUNTY CUMBERLAND  
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PORTION-LOT-DP 5//876514

### Licensed [\(top\)](#)

COUNTY CUMBERLAND  
PARISH ST PHILIP  
PORTION-LOT-DP 5 876514

### Water Bearing Zones [\(top\)](#)

no details

### Drillers Log [\(top\)](#)

no details

---

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# Groundwater Works Summary

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## Work Requested -- GW113559

### Works Details [\(top\)](#)

GROUNDWATER NUMBER	GW113559
LIC-NUM	10BL604425
AUTHORISED-PURPOSES	MONITORING BORE
INTENDED-PURPOSES	MONITORING BORE
WORK-TYPE	Bore
WORK-STATUS	
CONSTRUCTION-METHOD	
OWNER-TYPE	Private
COMMENCE-DATE	
COMPLETION-DATE	2011-01-06
FINAL-DEPTH (metres)	4.00
DRILLED-DEPTH (metres)	
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	BARANGAROO DELIVERY AUTHORITY
GWMA	-
GW-ZONE	-
STANDING-WATER-LEVEL	
SALINITY	
YIELD	

### Site Details [\(top\)](#)

REGION	10 - SYDNEY SOUTH COAST
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6251910.00
EASTING	333544.00
LATITUDE	33 51' 36"
LONGITUDE	151 12' 2"
GS-MAP	

AMG-ZONE 56  
COORD-SOURCE  
REMARK

### Form-A [\(top\)](#)

COUNTY CUMBERLAND  
PARISH ST PHILIP  
PORTION-LOT-DP 5//876514

### Licensed [\(top\)](#)

COUNTY CUMBERLAND  
PARISH ST PHILIP  
PORTION-LOT-DP 5 876514

### Water Bearing Zones [\(top\)](#)

no details

### Drillers Log [\(top\)](#)

no details

---

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# Groundwater Works Summary

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## Work Requested -- GW113560

### Works Details [\(top\)](#)

GROUNDWATER NUMBER	GW113560
LIC-NUM	10BL604425
AUTHORISED-PURPOSES	MONITORING BORE
INTENDED-PURPOSES	MONITORING BORE
WORK-TYPE	Bore
WORK-STATUS	
CONSTRUCTION-METHOD	
OWNER-TYPE	Private
COMMENCE-DATE	
COMPLETION-DATE	2011-01-06
FINAL-DEPTH (metres)	3.60
DRILLED-DEPTH (metres)	
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	BARANGAROO DELIVERY AUTHORITY
GWMA	-
GW-ZONE	-
STANDING-WATER-LEVEL	
SALINITY	
YIELD	

### Site Details [\(top\)](#)

REGION	10 - SYDNEY SOUTH COAST
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6251850.00
EASTING	333548.00
LATITUDE	33 51' 38"
LONGITUDE	151 12' 2"
GS-MAP	

AMG-ZONE 56  
COORD-SOURCE  
REMARK

### Form-A [\(top\)](#)

COUNTY CUMBERLAND  
PARISH ST PHILIP  
PORTION-LOT-DP 5//876514

### Licensed [\(top\)](#)

COUNTY CUMBERLAND  
PARISH ST PHILIP  
PORTION-LOT-DP 5 876514

### Water Bearing Zones [\(top\)](#)

no details

### Drillers Log [\(top\)](#)

no details

---

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# Groundwater Works Summary

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## Work Requested -- GW113561

### Works Details [\(top\)](#)

GROUNDWATER NUMBER	GW113561
LIC-NUM	10BL604425
AUTHORISED-PURPOSES	MONITORING BORE
INTENDED-PURPOSES	MONITORING BORE
WORK-TYPE	Bore
WORK-STATUS	
CONSTRUCTION-METHOD	
OWNER-TYPE	Private
COMMENCE-DATE	
COMPLETION-DATE	2011-01-06
FINAL-DEPTH (metres)	4.50
DRILLED-DEPTH (metres)	
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	BARANGAROO DELIVERY AUTHORITY
GWMA	-
GW-ZONE	-
STANDING-WATER-LEVEL	
SALINITY	
YIELD	

### Site Details [\(top\)](#)

REGION	10 - SYDNEY SOUTH COAST
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6251791.00
EASTING	333555.00
LATITUDE	33 51' 40"
LONGITUDE	151 12' 2"
GS-MAP	

AMG-ZONE 56  
COORD-SOURCE  
REMARK

### Form-A [\(top\)](#)

COUNTY CUMBERLAND  
PARISH ST PHILIP  
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### Licensed [\(top\)](#)

COUNTY CUMBERLAND  
PARISH ST PHILIP  
PORTION-LOT-DP 5 876514

### Water Bearing Zones [\(top\)](#)

no details

### Drillers Log [\(top\)](#)

no details

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# Groundwater Works Summary

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## Work Requested -- GW113562

### Works Details [\(top\)](#)

GROUNDWATER NUMBER	GW113562
LIC-NUM	10BL604425
AUTHORISED-PURPOSES	MONITORING BORE
INTENDED-PURPOSES	MONITORING BORE
WORK-TYPE	Bore
WORK-STATUS	
CONSTRUCTION-METHOD	
OWNER-TYPE	Private
COMMENCE-DATE	
COMPLETION-DATE	2011-01-06
FINAL-DEPTH (metres)	10.70
DRILLED-DEPTH (metres)	
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	BARANGAROO DELIVERY AUTHORITY
GWMA	-
GW-ZONE	-
STANDING-WATER-LEVEL	
SALINITY	
YIELD	

### Site Details [\(top\)](#)

REGION	10 - SYDNEY SOUTH COAST
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6251731.00
EASTING	333562.00
LATITUDE	33 51' 42"
LONGITUDE	151 12' 3"
GS-MAP	



AMG-ZONE 56  
COORD-SOURCE  
REMARK

### Form-A [\(top\)](#)

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### Licensed [\(top\)](#)

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### Water Bearing Zones [\(top\)](#)

no details

### Drillers Log [\(top\)](#)

no details

---

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## Work Requested -- GW113563

### Works Details [\(top\)](#)

GROUNDWATER NUMBER	GW113563
LIC-NUM	10BL604425
AUTHORISED-PURPOSES	MONITORING BORE
INTENDED-PURPOSES	MONITORING BORE
WORK-TYPE	Bore
WORK-STATUS	
CONSTRUCTION-METHOD	
OWNER-TYPE	Private
COMMENCE-DATE	
COMPLETION-DATE	2011-01-06
FINAL-DEPTH (metres)	11.70
DRILLED-DEPTH (metres)	
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	BARANGAROO DELIVERY AUTHORITY
GWMA	-
GW-ZONE	-
STANDING-WATER-LEVEL	
SALINITY	
YIELD	

### Site Details [\(top\)](#)

REGION	10 - SYDNEY SOUTH COAST
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6251647.00
EASTING	333577.00
LATITUDE	33 51' 45"
LONGITUDE	151 12' 3"
GS-MAP	

AMG-ZONE 56  
COORD-SOURCE  
REMARK

### Form-A [\(top\)](#)

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### Licensed [\(top\)](#)

COUNTY CUMBERLAND  
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### Water Bearing Zones [\(top\)](#)

no details

### Drillers Log [\(top\)](#)

no details

---

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## Work Requested -- GW113564

### Works Details [\(top\)](#)

GROUNDWATER NUMBER	GW113564
LIC-NUM	10BL604425
AUTHORISED-PURPOSES	MONITORING BORE
INTENDED-PURPOSES	MONITORING BORE
WORK-TYPE	Bore
WORK-STATUS	
CONSTRUCTION-METHOD	
OWNER-TYPE	Private
COMMENCE-DATE	
COMPLETION-DATE	2011-01-06
FINAL-DEPTH (metres)	7.00
DRILLED-DEPTH (metres)	
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	BARANGAROO DELIVERY AUTHORITY
GWMA	-
GW-ZONE	-
STANDING-WATER-LEVEL	
SALINITY	
YIELD	

### Site Details [\(top\)](#)

REGION	10 - SYDNEY SOUTH COAST
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6251610.00
EASTING	333582.00
LATITUDE	33 51' 46"
LONGITUDE	151 12' 3"
GS-MAP	

AMG-ZONE 56  
COORD-SOURCE  
REMARK

### Form-A [\(top\)](#)

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### Licensed [\(top\)](#)

COUNTY CUMBERLAND  
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### Water Bearing Zones [\(top\)](#)

no details

### Drillers Log [\(top\)](#)

no details

---

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## Work Requested -- GW113565

### Works Details [\(top\)](#)

GROUNDWATER NUMBER	GW113565
LIC-NUM	10BL604425
AUTHORISED-PURPOSES	MONITORING BORE
INTENDED-PURPOSES	MONITORING BORE
WORK-TYPE	Bore
WORK-STATUS	
CONSTRUCTION-METHOD	
OWNER-TYPE	Private
COMMENCE-DATE	
COMPLETION-DATE	2011-01-06
FINAL-DEPTH (metres)	4.00
DRILLED-DEPTH (metres)	
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	BARANGAROO DELIVERY AUTHORITY
GWMA	-
GW-ZONE	-
STANDING-WATER-LEVEL	
SALINITY	
YIELD	

### Site Details [\(top\)](#)

REGION	10 - SYDNEY SOUTH COAST
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6251603.00
EASTING	333619.00
LATITUDE	33 51' 46"
LONGITUDE	151 12' 5"
GS-MAP	

AMG-ZONE 56  
COORD-SOURCE  
REMARK

### Form-A [\(top\)](#)

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### Licensed [\(top\)](#)

COUNTY CUMBERLAND  
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### Water Bearing Zones [\(top\)](#)

no details

### Drillers Log [\(top\)](#)

no details

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## Work Requested -- GW113566

### Works Details [\(top\)](#)

GROUNDWATER NUMBER	GW113566
LIC-NUM	10BL604425
AUTHORISED-PURPOSES	MONITORING BORE
INTENDED-PURPOSES	MONITORING BORE
WORK-TYPE	Bore
WORK-STATUS	
CONSTRUCTION-METHOD	
OWNER-TYPE	Private
COMMENCE-DATE	
COMPLETION-DATE	2011-01-06
FINAL-DEPTH (metres)	3.00
DRILLED-DEPTH (metres)	
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	BARANGAROO DELIVERY AUTHORITY
GWMA	-
GW-ZONE	-
STANDING-WATER-LEVEL	
SALINITY	
YIELD	

### Site Details [\(top\)](#)

REGION	10 - SYDNEY SOUTH COAST
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6251601.00
EASTING	333667.00
LATITUDE	33 51' 46"
LONGITUDE	151 12' 7"
GS-MAP	

AMG-ZONE 56  
COORD-SOURCE  
REMARK

### Form-A [\(top\)](#)

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COUNTY CUMBERLAND  
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### Water Bearing Zones [\(top\)](#)

no details

### Drillers Log [\(top\)](#)

no details

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## Work Requested -- GW113596

### Works Details [\(top\)](#)

GROUNDWATER NUMBER	GW113596
LIC-NUM	10BL604366
AUTHORISED-PURPOSES	MONITORING BORE
INTENDED-PURPOSES	MONITORING BORE
WORK-TYPE	Well
WORK-STATUS	
CONSTRUCTION-METHOD	
OWNER-TYPE	Private
COMMENCE-DATE	
COMPLETION-DATE	2009-12-08
FINAL-DEPTH (metres)	14.10
DRILLED-DEPTH (metres)	
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	BARANGAROO DELIVERY AUTHORITY
GWMA	-
GW-ZONE	-
STANDING-WATER-LEVEL	
SALINITY	
YIELD	

### Site Details [\(top\)](#)

REGION	10 - SYDNEY SOUTH COAST
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6251591.00
EASTING	333741.00
LATITUDE	33 51' 46"
LONGITUDE	151 12' 9"
GS-MAP	

AMG-ZONE 56  
COORD-SOURCE  
REMARK

### Form-A [\(top\)](#)

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### Water Bearing Zones [\(top\)](#)

no details

### Drillers Log [\(top\)](#)

no details

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## Work Requested -- GW113597

### Works Details [\(top\)](#)

GROUNDWATER NUMBER	GW113597
LIC-NUM	10BL604366
AUTHORISED-PURPOSES	MONITORING BORE
INTENDED-PURPOSES	MONITORING BORE
WORK-TYPE	Well
WORK-STATUS	
CONSTRUCTION-METHOD	
OWNER-TYPE	Private
COMMENCE-DATE	
COMPLETION-DATE	2009-12-07
FINAL-DEPTH (metres)	9.50
DRILLED-DEPTH (metres)	
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	BARANGAROO DELIVERY AUTHORITY
GWMA	-
GW-ZONE	-
STANDING-WATER-LEVEL	
SALINITY	
YIELD	

### Site Details [\(top\)](#)

REGION	10 - SYDNEY SOUTH COAST
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6251600.00
EASTING	333738.00
LATITUDE	33 51' 46"
LONGITUDE	151 12' 9"
GS-MAP	

AMG-ZONE 56  
COORD-SOURCE  
REMARK

### Form-A [\(top\)](#)

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### Water Bearing Zones [\(top\)](#)

no details

### Drillers Log [\(top\)](#)

no details

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## Work Requested -- GW113598

### Works Details [\(top\)](#)

GROUNDWATER NUMBER	GW113598
LIC-NUM	10BL604366
AUTHORISED-PURPOSES	MONITORING BORE
INTENDED-PURPOSES	MONITORING BORE
WORK-TYPE	Well
WORK-STATUS	
CONSTRUCTION-METHOD	
OWNER-TYPE	Private
COMMENCE-DATE	
COMPLETION-DATE	2010-02-10
FINAL-DEPTH (metres)	13.20
DRILLED-DEPTH (metres)	
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	BARANGAROO DELIVERY AUTHORITY
GWMA	-
GW-ZONE	-
STANDING-WATER-LEVEL	
SALINITY	
YIELD	

### Site Details [\(top\)](#)

REGION	10 - SYDNEY SOUTH COAST
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6251581.00
EASTING	333745.00
LATITUDE	33 51' 47"
LONGITUDE	151 12' 10"
GS-MAP	



AMG-ZONE 56  
COORD-SOURCE  
REMARK

### Form-A [\(top\)](#)

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### Licensed [\(top\)](#)

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PARISH ST PHILIP  
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### Water Bearing Zones [\(top\)](#)

no details

### Drillers Log [\(top\)](#)

no details

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## Work Requested -- GW113599

### Works Details [\(top\)](#)

GROUNDWATER NUMBER	GW113599
LIC-NUM	10BL604366
AUTHORISED-PURPOSES	MONITORING BORE
INTENDED-PURPOSES	MONITORING BORE
WORK-TYPE	Well
WORK-STATUS	
CONSTRUCTION-METHOD	
OWNER-TYPE	Private
COMMENCE-DATE	
COMPLETION-DATE	2010-02-09
FINAL-DEPTH (metres)	13.50
DRILLED-DEPTH (metres)	
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	BARANGAROO DELIVERY AUTHORITY
GWMA	-
GW-ZONE	-
STANDING-WATER-LEVEL	
SALINITY	
YIELD	

### Site Details [\(top\)](#)

REGION	10 - SYDNEY SOUTH COAST
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6251505.00
EASTING	333687.00
LATITUDE	33 51' 49"
LONGITUDE	151 12' 7"
GS-MAP	

AMG-ZONE 56  
COORD-SOURCE  
REMARK

### Form-A [\(top\)](#)

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### Licensed [\(top\)](#)

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### Water Bearing Zones [\(top\)](#)

no details

### Drillers Log [\(top\)](#)

no details

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## Work Requested -- GW113602

### Works Details [\(top\)](#)

GROUNDWATER NUMBER	GW113602
LIC-NUM	10BL604366
AUTHORISED-PURPOSES	MONITORING BORE
INTENDED-PURPOSES	MONITORING BORE
WORK-TYPE	Well
WORK-STATUS	
CONSTRUCTION-METHOD	
OWNER-TYPE	Private
COMMENCE-DATE	
COMPLETION-DATE	2010-02-11
FINAL-DEPTH (metres)	17.00
DRILLED-DEPTH (metres)	
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	BARANGAROO DELIVERY AUTHORITY
GWMA	-
GW-ZONE	-
STANDING-WATER-LEVEL	
SALINITY	
YIELD	

### Site Details [\(top\)](#)

REGION	10 - SYDNEY SOUTH COAST
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6251531.00
EASTING	333727.00
LATITUDE	33 51' 48"
LONGITUDE	151 12' 9"
GS-MAP	

AMG-ZONE 56  
COORD-SOURCE  
REMARK

### Form-A [\(top\)](#)

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### Licensed [\(top\)](#)

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### Water Bearing Zones [\(top\)](#)

no details

### Drillers Log [\(top\)](#)

no details

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## Work Requested -- GW113603

### Works Details [\(top\)](#)

GROUNDWATER NUMBER	GW113603
LIC-NUM	10BL604366
AUTHORISED-PURPOSES	MONITORING BORE
INTENDED-PURPOSES	MONITORING BORE
WORK-TYPE	Well
WORK-STATUS	
CONSTRUCTION-METHOD	
OWNER-TYPE	Private
COMMENCE-DATE	
COMPLETION-DATE	2010-02-19
FINAL-DEPTH (metres)	14.50
DRILLED-DEPTH (metres)	
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	BARANGAROO DELIVERY AUTHORITY
GWMA	-
GW-ZONE	-
STANDING-WATER-LEVEL	
SALINITY	
YIELD	

### Site Details [\(top\)](#)

REGION	10 - SYDNEY SOUTH COAST
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6251525.00
EASTING	333717.00
LATITUDE	33 51' 49"
LONGITUDE	151 12' 9"
GS-MAP	

AMG-ZONE 56  
COORD-SOURCE  
REMARK

### Form-A [\(top\)](#)

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### Licensed [\(top\)](#)

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### Water Bearing Zones [\(top\)](#)

no details

### Drillers Log [\(top\)](#)

no details

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# Groundwater Works Summary

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## Work Requested -- GW113604

### Works Details [\(top\)](#)

GROUNDWATER NUMBER	GW113604
LIC-NUM	10BL604366
AUTHORISED-PURPOSES	MONITORING BORE
INTENDED-PURPOSES	MONITORING BORE
WORK-TYPE	Well
WORK-STATUS	
CONSTRUCTION-METHOD	
OWNER-TYPE	Private
COMMENCE-DATE	
COMPLETION-DATE	2010-02-23
FINAL-DEPTH (metres)	8.20
DRILLED-DEPTH (metres)	
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	BARANGAROO DELIVERY AUTHORITY
GWMA	-
GW-ZONE	-
STANDING-WATER-LEVEL	
SALINITY	
YIELD	

### Site Details [\(top\)](#)

REGION	10 - SYDNEY SOUTH COAST
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6251538.00
EASTING	333735.00
LATITUDE	33 51' 48"
LONGITUDE	151 12' 9"
GS-MAP	



AMG-ZONE 56  
COORD-SOURCE  
REMARK

### Form-A [\(top\)](#)

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### Licensed [\(top\)](#)

COUNTY CUMBERLAND  
PARISH ST PHILIP  
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### Water Bearing Zones [\(top\)](#)

no details

### Drillers Log [\(top\)](#)

no details

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# Groundwater Works Summary

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[Works Details](#) [Site Details](#) [Form A](#) [Licensed](#) [Construction](#) [Water Bearing Zones](#) [Drillers Log](#)

## Work Requested -- GW113605

### Works Details [\(top\)](#)

GROUNDWATER NUMBER	GW113605
LIC-NUM	10BL604366
AUTHORISED-PURPOSES	MONITORING BORE
INTENDED-PURPOSES	MONITORING BORE
WORK-TYPE	Well
WORK-STATUS	
CONSTRUCTION-METHOD	
OWNER-TYPE	Private
COMMENCE-DATE	
COMPLETION-DATE	2010-02-23
FINAL-DEPTH (metres)	3.00
DRILLED-DEPTH (metres)	
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	BARANGAROO DELIVERY AUTHORITY
GWMA	-
GW-ZONE	-
STANDING-WATER-LEVEL	
SALINITY	
YIELD	

### Site Details [\(top\)](#)

REGION	10 - SYDNEY SOUTH COAST
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6251547.00
EASTING	333744.00
LATITUDE	33 51' 48"
LONGITUDE	151 12' 10"
GS-MAP	

AMG-ZONE 56  
COORD-SOURCE  
REMARK

### Form-A [\(top\)](#)

COUNTY CUMBERLAND  
PARISH ST PHILIP  
PORTION-LOT-DP 3//876514

### Licensed [\(top\)](#)

COUNTY CUMBERLAND  
PARISH ST PHILIP  
PORTION-LOT-DP 3 876514

### Water Bearing Zones [\(top\)](#)

no details

### Drillers Log [\(top\)](#)

no details

---

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## Work Requested -- GW113606

### Works Details [\(top\)](#)

GROUNDWATER NUMBER	GW113606
LIC-NUM	10BL604366
AUTHORISED-PURPOSES	MONITORING BORE
INTENDED-PURPOSES	MONITORING BORE
WORK-TYPE	Well
WORK-STATUS	
CONSTRUCTION-METHOD	
OWNER-TYPE	Private
COMMENCE-DATE	
COMPLETION-DATE	2010-03-04
FINAL-DEPTH (metres)	13.00
DRILLED-DEPTH (metres)	
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	BARANGAROO DELIVERY AUTHORITY
GWMA	-
GW-ZONE	-
STANDING-WATER-LEVEL	
SALINITY	
YIELD	

### Site Details [\(top\)](#)

REGION	10 - SYDNEY SOUTH COAST
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6251550.00
EASTING	333686.00
LATITUDE	33 51' 48"
LONGITUDE	151 12' 7"
GS-MAP	

AMG-ZONE 56  
COORD-SOURCE  
REMARK

### Form-A [\(top\)](#)

COUNTY CUMBERLAND  
PARISH ST PHILIP  
PORTION-LOT-DP 5//876514

### Licensed [\(top\)](#)

COUNTY CUMBERLAND  
PARISH ST PHILIP  
PORTION-LOT-DP 3 876514

### Water Bearing Zones [\(top\)](#)

no details

### Drillers Log [\(top\)](#)

no details

---

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## Work Requested -- GW113607

### Works Details [\(top\)](#)

GROUNDWATER NUMBER GW113607  
LIC-NUM 10BL604366  
AUTHORISED-PURPOSES MONITORING BORE  
INTENDED-PURPOSES  
WORK-TYPE Well  
WORK-STATUS  
CONSTRUCTION-METHOD  
OWNER-TYPE Private  
COMMENCE-DATE  
COMPLETION-DATE 2010-02-22  
FINAL-DEPTH (metres) 7.20  
DRILLED-DEPTH (metres)  
CONTRACTOR-NAME  
DRILLER-NAME  
PROPERTY BARANGAROO DELIVERY AUTHORITY  
GWMA -  
GW-ZONE -  
STANDING-WATER-LEVEL  
SALINITY  
YIELD

### Site Details [\(top\)](#)

REGION 10 - SYDNEY SOUTH COAST  
RIVER-BASIN  
AREA-DISTRICT  
CMA-MAP  
GRID-ZONE  
SCALE  
ELEVATION  
ELEVATION-SOURCE  
NORTHING 6251558.00  
EASTING 333727.00  
LATITUDE 33 51' 48"  
LONGITUDE 151 12' 9"  
GS-MAP

AMG-ZONE 56  
COORD-SOURCE  
REMARK

### Form-A [\(top\)](#)

COUNTY CUMBERLAND  
PARISH ST PHILIP  
PORTION-LOT-DP 3//876514

### Licensed [\(top\)](#)

COUNTY CUMBERLAND  
PARISH ST PHILIP  
PORTION-LOT-DP 3 876514

### Water Bearing Zones [\(top\)](#)

no details

### Drillers Log [\(top\)](#)

no details

---

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Print Report

[Works Details](#) [Site Details](#) [Form A](#) [Licensed](#) [Construction](#) [Water Bearing Zones](#) [Drillers Log](#)

## Work Requested -- GW113608

### Works Details [\(top\)](#)

GROUNDWATER NUMBER	GW113608
LIC-NUM	10BL604366
AUTHORISED-PURPOSES	MONITORING BORE
INTENDED-PURPOSES	MONITORING BORE
WORK-TYPE	Well
WORK-STATUS	
CONSTRUCTION-METHOD	
OWNER-TYPE	Private
COMMENCE-DATE	
COMPLETION-DATE	2010-03-02
FINAL-DEPTH (metres)	13.00
DRILLED-DEPTH (metres)	
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	BARANGAROO DELIVERY AUTHORITY
GWMA	-
GW-ZONE	-
STANDING-WATER-LEVEL	
SALINITY	
YIELD	

### Site Details [\(top\)](#)

REGION	10 - SYDNEY SOUTH COAST
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6251570.00
EASTING	333754.00
LATITUDE	33 51' 47"
LONGITUDE	151 12' 10"
GS-MAP	



AMG-ZONE 56  
COORD-SOURCE  
REMARK

### Form-A [\(top\)](#)

COUNTY CUMBERLAND  
PARISH ST PHILIP  
PORTION-LOT-DP 3//876514

### Licensed [\(top\)](#)

COUNTY CUMBERLAND  
PARISH ST PHILIP  
PORTION-LOT-DP 3 876514

### Water Bearing Zones [\(top\)](#)

no details

### Drillers Log [\(top\)](#)

no details

---

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## Work Requested -- GW113610

### Works Details [\(top\)](#)

GROUNDWATER NUMBER GW113610  
LIC-NUM 10BL604366  
AUTHORISED-PURPOSES MONITORING BORE  
INTENDED-PURPOSES MONITORING BORE  
WORK-TYPE Well  
WORK-STATUS  
CONSTRUCTION-METHOD  
OWNER-TYPE Private  
COMMENCE-DATE  
COMPLETION-DATE 2010-02-26  
FINAL-DEPTH (metres) 12.20  
DRILLED-DEPTH (metres)  
CONTRACTOR-NAME  
DRILLER-NAME  
PROPERTY BARANGAROO DELIVERY AUTHORITY  
GWMA -  
GW-ZONE -  
STANDING-WATER-LEVEL  
SALINITY  
YIELD

### Site Details [\(top\)](#)

REGION 10 - SYDNEY SOUTH COAST  
RIVER-BASIN  
AREA-DISTRICT  
CMA-MAP  
GRID-ZONE  
SCALE  
ELEVATION  
ELEVATION-SOURCE  
NORTHING 6251579.00  
EASTING 333722.00  
LATITUDE 33 51' 47"  
LONGITUDE 151 12' 9"  
GS-MAP

AMG-ZONE 56  
COORD-SOURCE  
REMARK

### Form-A [\(top\)](#)

COUNTY CUMBERLAND  
PARISH ST PHILIP  
PORTION-LOT-DP 3//876514

### Licensed [\(top\)](#)

COUNTY CUMBERLAND  
PARISH ST PHILIP  
PORTION-LOT-DP 3 876514

### Water Bearing Zones [\(top\)](#)

no details

### Drillers Log [\(top\)](#)

no details

---

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[Works Details](#) [Site Details](#) [Form A](#) [Licensed](#) [Construction](#) [Water Bearing Zones](#) [Drillers Log](#)

## Work Requested -- GW113611

### Works Details [\(top\)](#)

GROUNDWATER NUMBER	GW113611
LIC-NUM	10BL604366
AUTHORISED-PURPOSES	MONITORING BORE
INTENDED-PURPOSES	MONITORING BORE
WORK-TYPE	Well
WORK-STATUS	
CONSTRUCTION-METHOD	
OWNER-TYPE	Private
COMMENCE-DATE	
COMPLETION-DATE	2010-03-02
FINAL-DEPTH (metres)	7.50
DRILLED-DEPTH (metres)	
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	BARANGAROO DELIVERY AUTHORITY
GWMA	-
GW-ZONE	-
STANDING-WATER-LEVEL	
SALINITY	
YIELD	

### Site Details [\(top\)](#)

REGION	10 - SYDNEY SOUTH COAST
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6251539.00
EASTING	333687.00
LATITUDE	33 51' 48"
LONGITUDE	151 12' 7"
GS-MAP	

AMG-ZONE 56  
COORD-SOURCE  
REMARK

### Form-A [\(top\)](#)

COUNTY CUMBERLAND  
PARISH ST PHILIP  
PORTION-LOT-DP 5//876514

### Licensed [\(top\)](#)

COUNTY CUMBERLAND  
PARISH ST PHILIP  
PORTION-LOT-DP 3 876514

### Water Bearing Zones [\(top\)](#)

no details

### Drillers Log [\(top\)](#)

no details

---

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## Work Requested -- GW113612

### Works Details [\(top\)](#)

GROUNDWATER NUMBER	GW113612
LIC-NUM	10BL604366
AUTHORISED-PURPOSES	MONITORING BORE
INTENDED-PURPOSES	MONITORING BORE
WORK-TYPE	Well
WORK-STATUS	
CONSTRUCTION-METHOD	
OWNER-TYPE	Private
COMMENCE-DATE	
COMPLETION-DATE	2010-03-03
FINAL-DEPTH (metres)	13.00
DRILLED-DEPTH (metres)	
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	BARANGAROO DELIVERY AUTHORITY
GWMA	-
GW-ZONE	-
STANDING-WATER-LEVEL	
SALINITY	
YIELD	

### Site Details [\(top\)](#)

REGION	10 - SYDNEY SOUTH COAST
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6251585.00
EASTING	333710.00
LATITUDE	33 51' 47"
LONGITUDE	151 12' 8"
GS-MAP	

AMG-ZONE 56  
COORD-SOURCE  
REMARK

### Form-A [\(top\)](#)

COUNTY CUMBERLAND  
PARISH ST PHILIP  
PORTION-LOT-DP 5//876514

### Licensed [\(top\)](#)

COUNTY CUMBERLAND  
PARISH ST PHILIP  
PORTION-LOT-DP 3 876514

### Water Bearing Zones [\(top\)](#)

no details

### Drillers Log [\(top\)](#)

no details

---

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## **Appendix B Structural Concept Design Report (TTW 2014)**





Walsh Bay Arts Precinct  
Concept Structural Design Report

for Bates Smart

26<sup>th</sup> February 2014

Job No. 131646

Taylor Thomson Whitting (NSW) Pty Ltd. Consulting Engineers ACN 113 578 377  
48 Chandos Street St Leonards NSW 2065 PO Box 738 Crows Nest 1585  
T 61 2 9439 7288 F 61 2 9439 3146 ttwsyd@ttw.com.au www.ttw.com.au

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APPENDIX A

APPENDIX B

1.0 BACKGROUND

The existing structures in the Walsh Bay Arts Precinct, namely Pier 2/3, Pier 4/5 and the Shore Sheds are all timber structures originally constructed in the 1920's as cargo wharfs and storage sheds. The original structures have undergone various alterations, upgrades and repairs.

The original two-level structures were built entirely from hardwood timber. They consist of a sub-structure of piles, headstocks and girders supporting a concrete deck around the perimeter of the Piers and a timber deck inside the building, and a superstructure consisting of floor trusses and roof trusses.

2.0 STRUCTURAL ASSESSMENT & MAINTENANCE

Detailed condition surveys and structural assessments of both Pier 2/3 and Wharf 4/5 have been carried over the last decade. This work has been carried out for NSW Public Works with TTW acting as their consultant for Pier 2/3 and GHD for Wharf 4/5. TTW issued their final "Preliminary Structural Assessment" report for Pier 2/3 on 24<sup>th</sup> November 2010. For both Pier 2/3 and Wharf 4/5 the results of the condition surveys of the sub-structure and super-structure has been used to carry out a structural analysis of the piers for gravity and lateral loads (wind and earthquake) for compliance with current Australian Standards. The results of the analysis and design checks has enabled repair work to be specified and prioritised. Technical Specifications have been prepared by TTW for Pier 2/3 (issued May 2013) and by GHD for Wharf 4/5 (issued November 2010).

The condition surveys consist of visual surveys plus termite monitoring and inspections. From 2011 until now detailed surveys of all of the piles, headstocks and storey posts have been carried out. Structural Maintenance specifications have been prepared for Pier 2/3 and Wharf 4/5 which detail the requirements for pile repair & replacement for piles, headstocks, girders, storey posts and other miscellaneous items.

The structural maintenance work required for the piers has been documented by TTW and GHD including priorities on the importance of the repair work. A 10 year maintenance program is now in place which has both preventative and planned maintenance items. Preventative items include ongoing condition surveys (including pile surveys) every 4 years and termite control. Planned maintenance is the repair/replacement work documented by TTW and GHD. The majority of this work is the repair of timber piles and the replacement of timber piles with jack-up piles in cases where the pile has degraded beyond the point of being repairable. Other maintenance items in the 10 year program consist of repair/replacement of non-structural items such as drainage, doors & windows and weatherboards.

3.0 SUB-STRUCTURE

The original timber piles are set out on a 10ft by 10ft grid in the Piers. In the upgrades and repairs carried out on the Piers many of the piles have been regarded as redundant and not repaired as the live load for the recent use of the Piers is much less than the loads required for its original function as a cargo wharf. The opportunity now exists to add jack-up piles to in these redundant pile locations to provide extra footing capacity to support the additional loads intended for Pier 2/3 as described below.

The proposed new lifts in Pier 2/3 will require pits below deck level. There may also be new water storage tanks located under the deck. Both the lift pits and water tanks could be reinforced concrete structures supported on the timber piles. If required the base of the pits

and tanks could be below the water level.

4.0 PIER 2/3 LEVEL 1 & 3

The new mezzanine floor structures will need to be of lightweight construction to minimise the additional load applied to the existing columns and piles. The new mezzanine construction could be similar to those added to the Shore Sheds about 10 years ago which consisted of steel floor beams, steel joists and a topping slab. The drawings of the Shore Sheds mezzanine structure are enclosed in Appendix B.

5.0 PIER 2/3 LEVEL 2 PERFORMANCE SPACES

Acoustic requirements for the performance spaces will require new concrete jack-up slabs to be constructed over the existing L2 floor structure. The additional load from these concrete slabs will require additional jack-up piles to be installed. In addition where new mezzanines floors are being added resulting in increased column loads, additional jack-up piles will be required.

The existing central row of columns in Pier 2/3 supporting the roof trusses will need to be removed in the performance spaces. The plans enclosed in Appendix A show the locations of the columns to be removed. For both the Bell Rehearsal space and ACO Auditorium it is proposed to retain the existing timber trusses. A new steel supporting beam will be provided above the Bell Rehearsal space and a new steel truss above the ACO Auditorium.

6.0 WHARF 4/5 BANGARRA SPACE

For Studio 2 it is proposed to remove an existing column at Ground level. A new steel beam and jack-up piles will be required as shown on the drawings in Appendix A.

7.0 INFORMATION PROVIDED FOR THE FINAL BUSINESS CASE

Information has been provided for costing of the structural items in the Final Business Case. This included advice regarding pile replacement; new mezzanine floor structure; performance space floor slab to achieve acoustic performance; typical truss design where columns are to be removed; and typical structure for waterfront square.

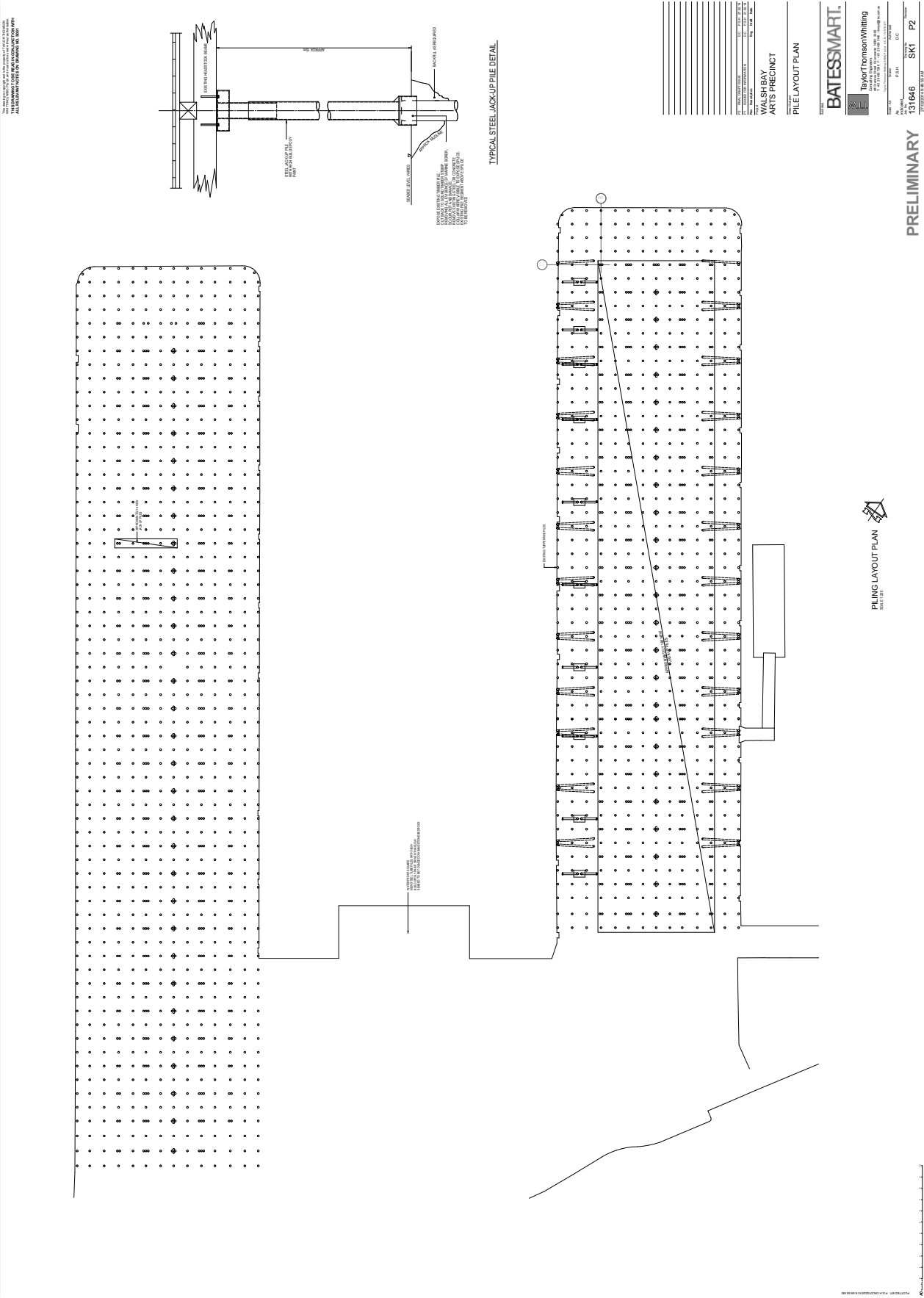
Authorised by:  
TAYLOR THOMSON WHITTING (NSW) PTY LTD

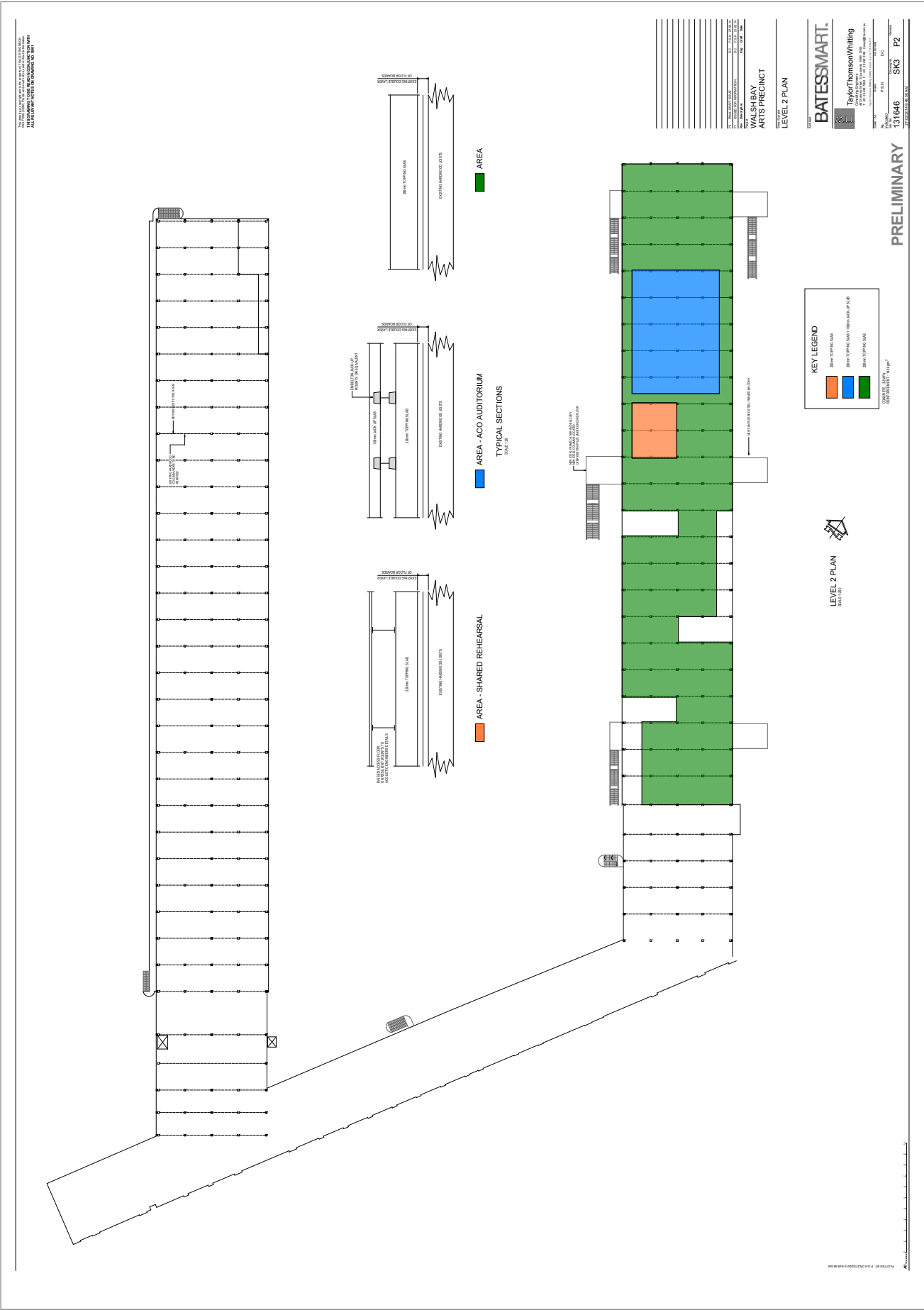
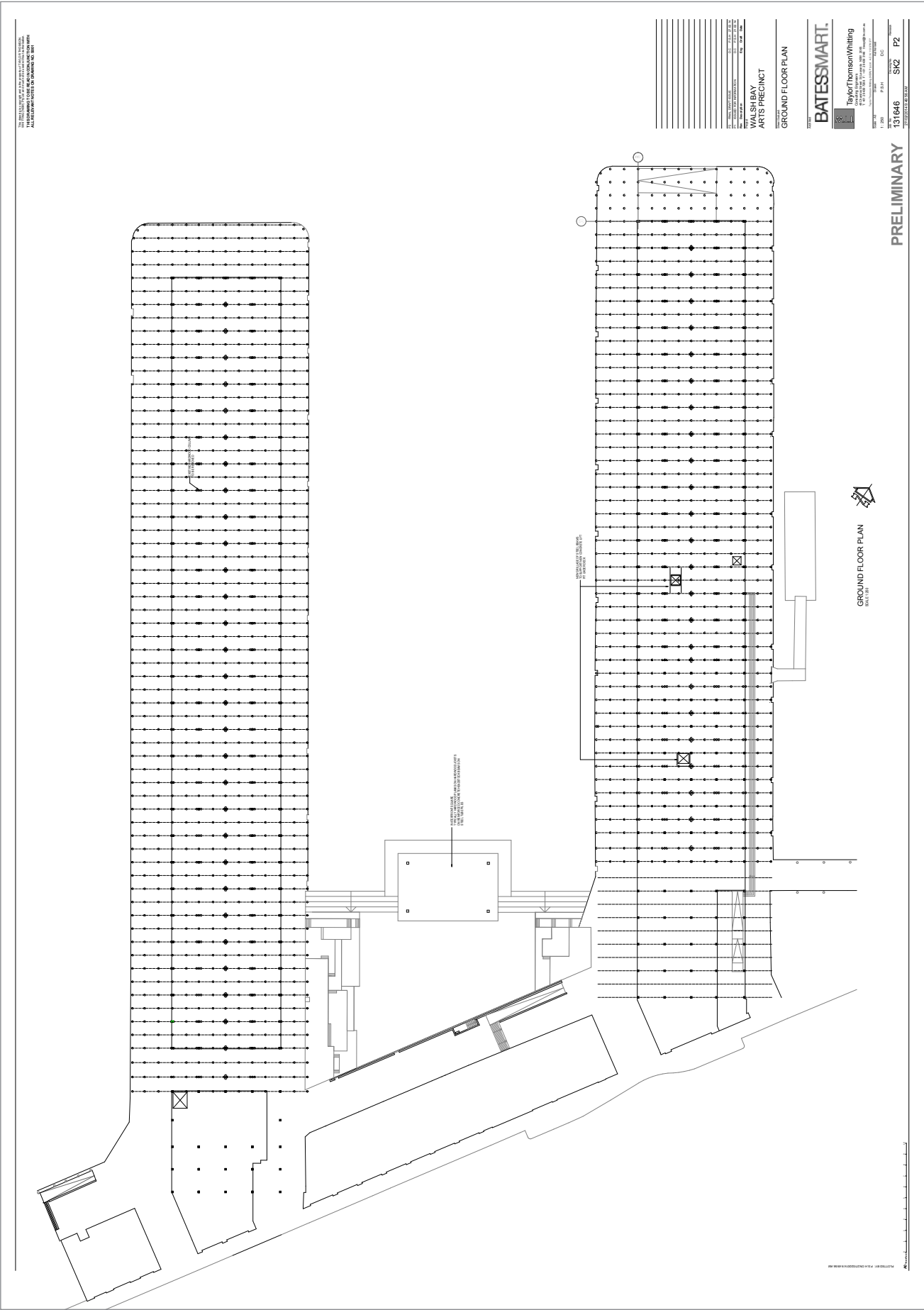


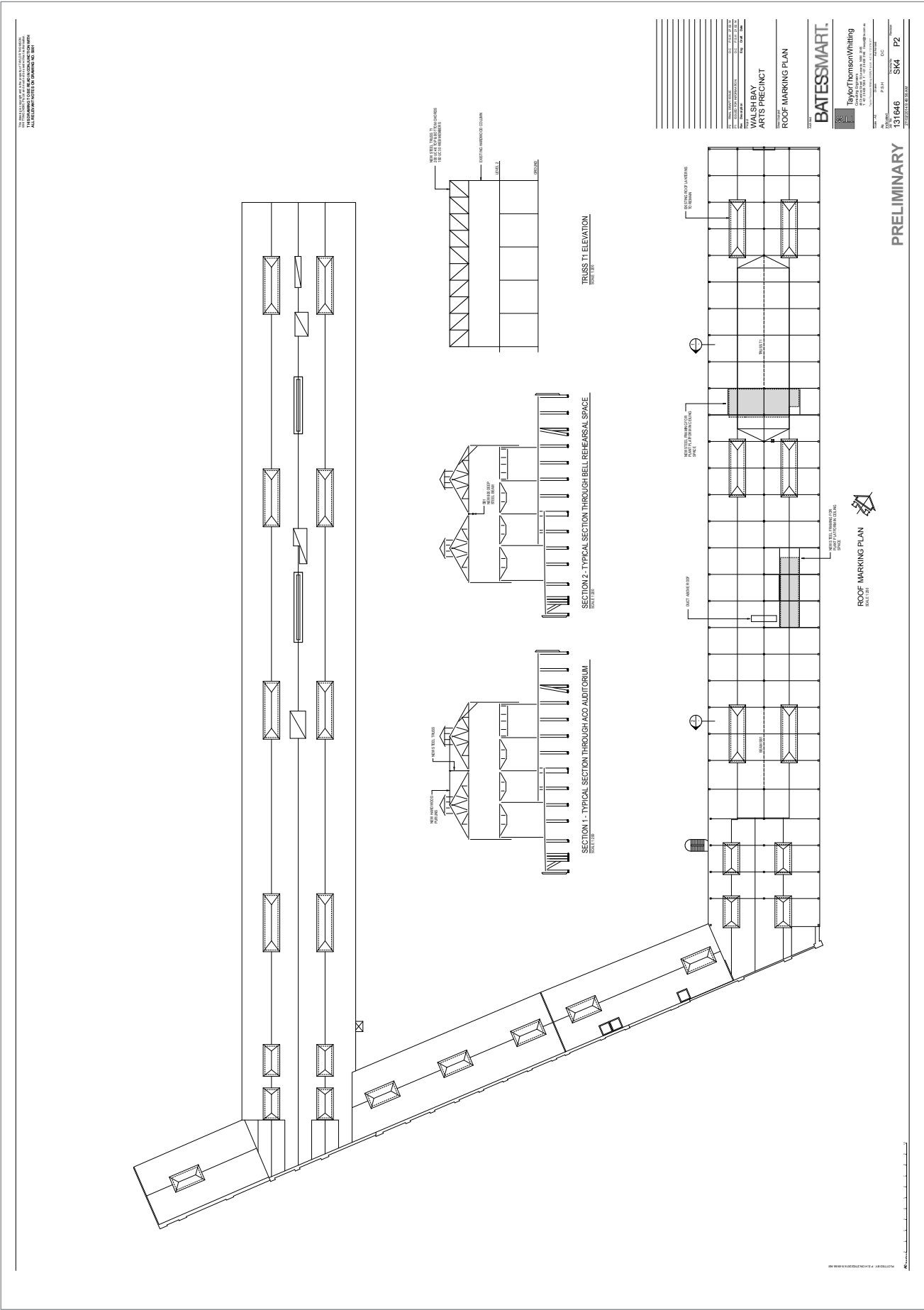
David Carolan  
Director

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Appendix A  
Structure Plans



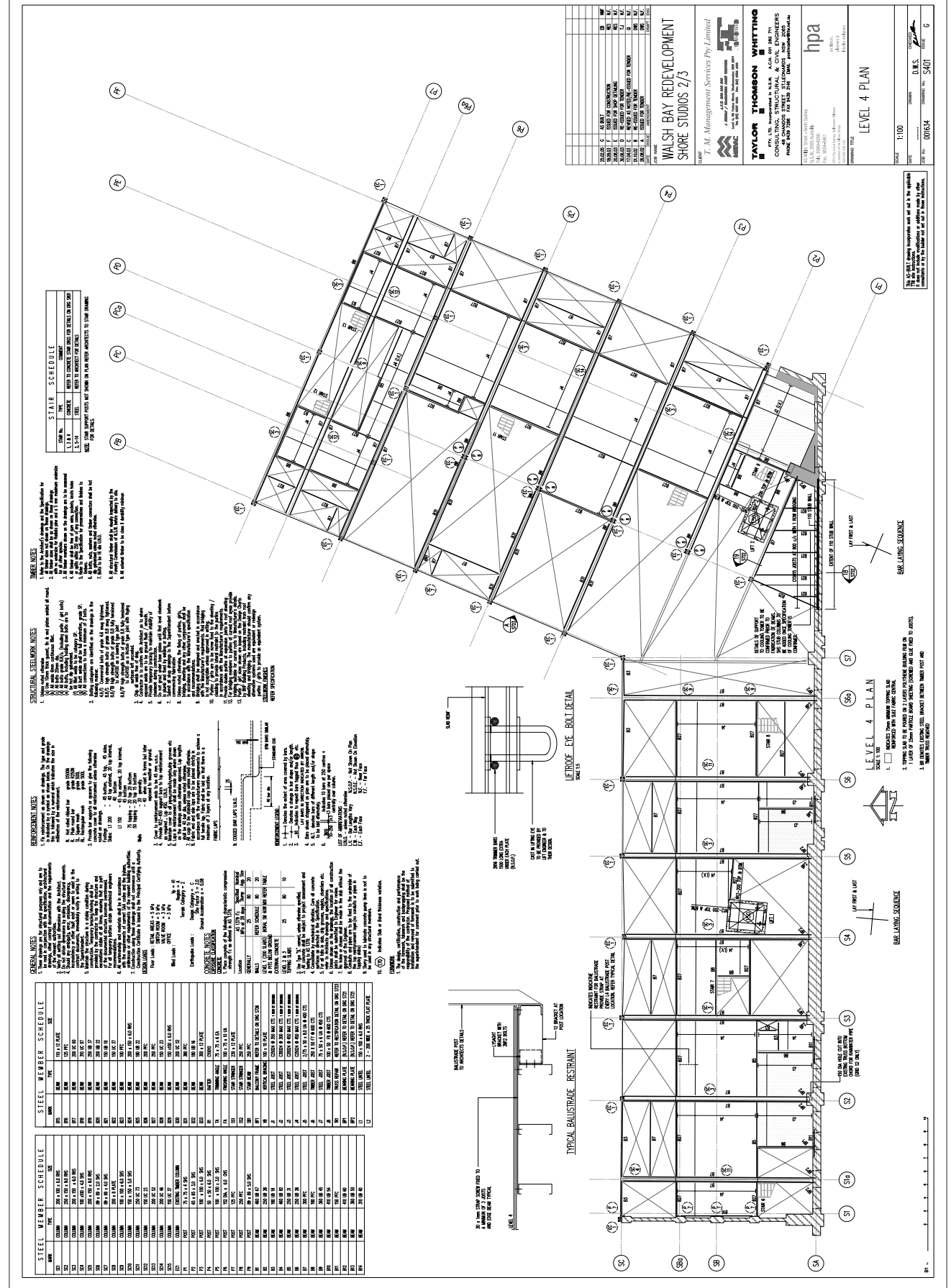


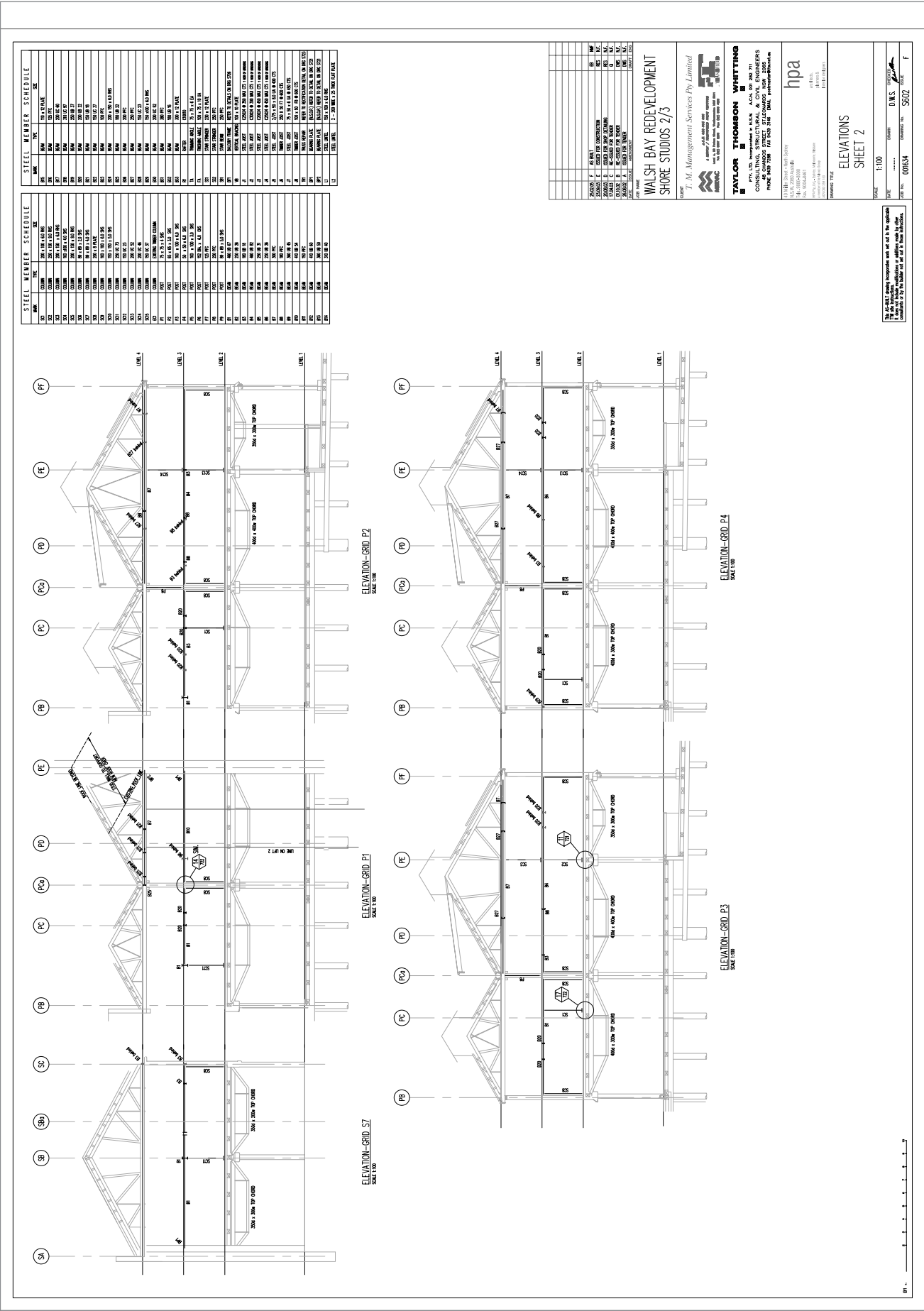
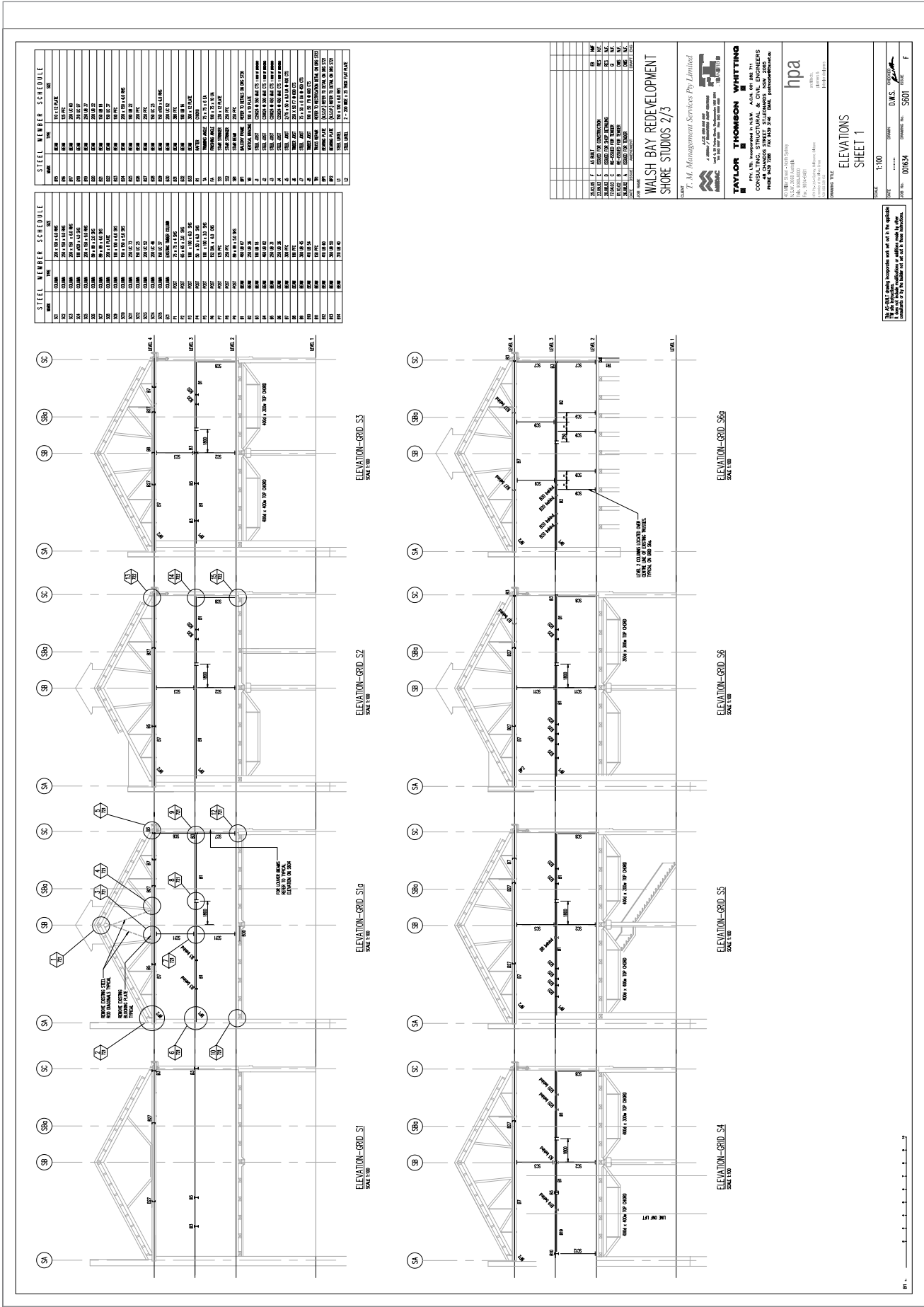


## Appendix B Information for FBC

### Existing Shore Shed mezzanine drawings













## **Appendix C   Historical Aerial Images**



Source: Base Image - © Department of Lands

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0 25 50 100 m			
Scale: 1:2,500			
Datum: GDA 1994 MGA Zone 56 - AHD			
A4			
0	Original Issue - Aerials	LL	26-02-2014
Rev	Description	Drm.	Date:

Legend:

Approximate Site Boundary

**JBS&G** Figure: Walsh Bay - 1930

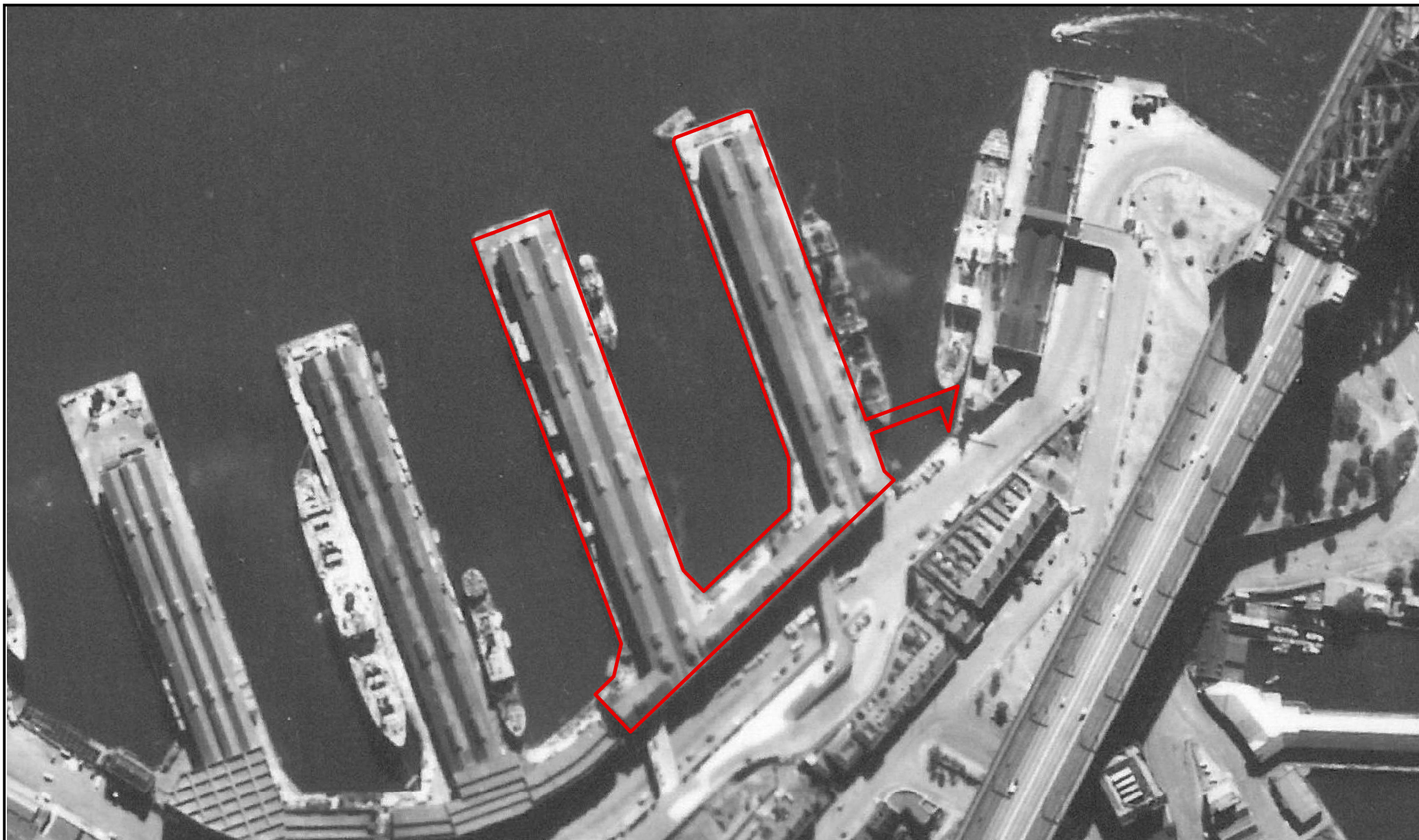
Client: ARTS NSW

Project: Walsh Bay Preliminary Site Assessment

Job No: 43329

File Name: 43329\_1930





Source: Base Image - © Department of Lands

© 2014 JBS&G

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Scale: 1:2,500			
Datum: GDA 1994 MGA Zone 56 - AHD			
A4			
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Rev	Description	Drm.	Date:

Legend:

Approximate Site Boundary

**JBS&G** Figure: Walsh Bay - 1951

Client: ARTS NSW

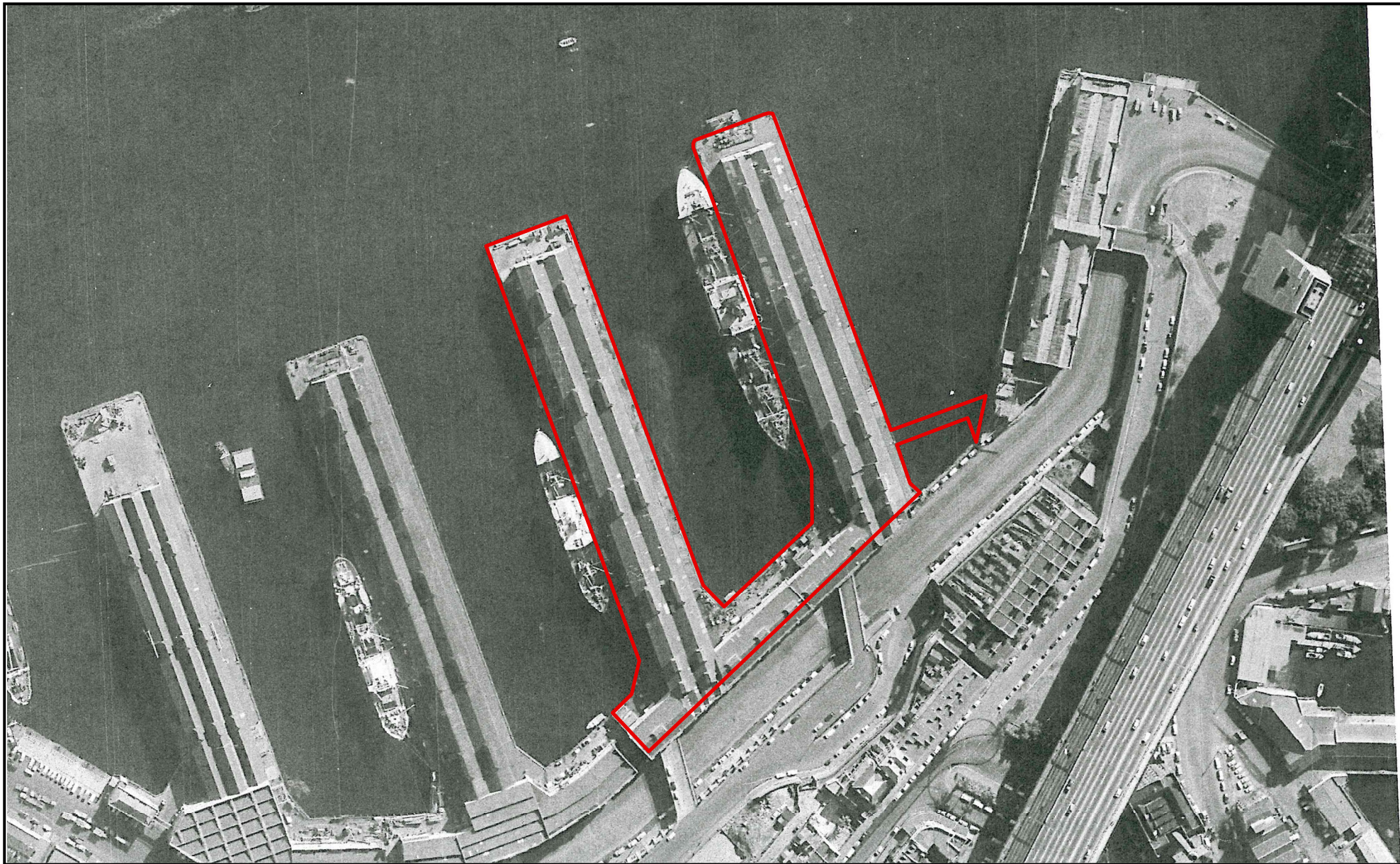
Project: Walsh Bay Preliminary Site Assessment

Job No: 43329

File Name: 43329\_1951







Source: Base Image - © Department of Lands

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m

Scale: 1:2,500

Datum: GDA 1994 MGA Zone 56 - AHD

A4			
0	Original Issue - Aerials	LL	26-02-2014
Rev	Description	Drm.	Date:

Legend:

Approximate Site Boundary

**JBS&G** Figure: Walsh Bay - 1961

Client: ARTS NSW

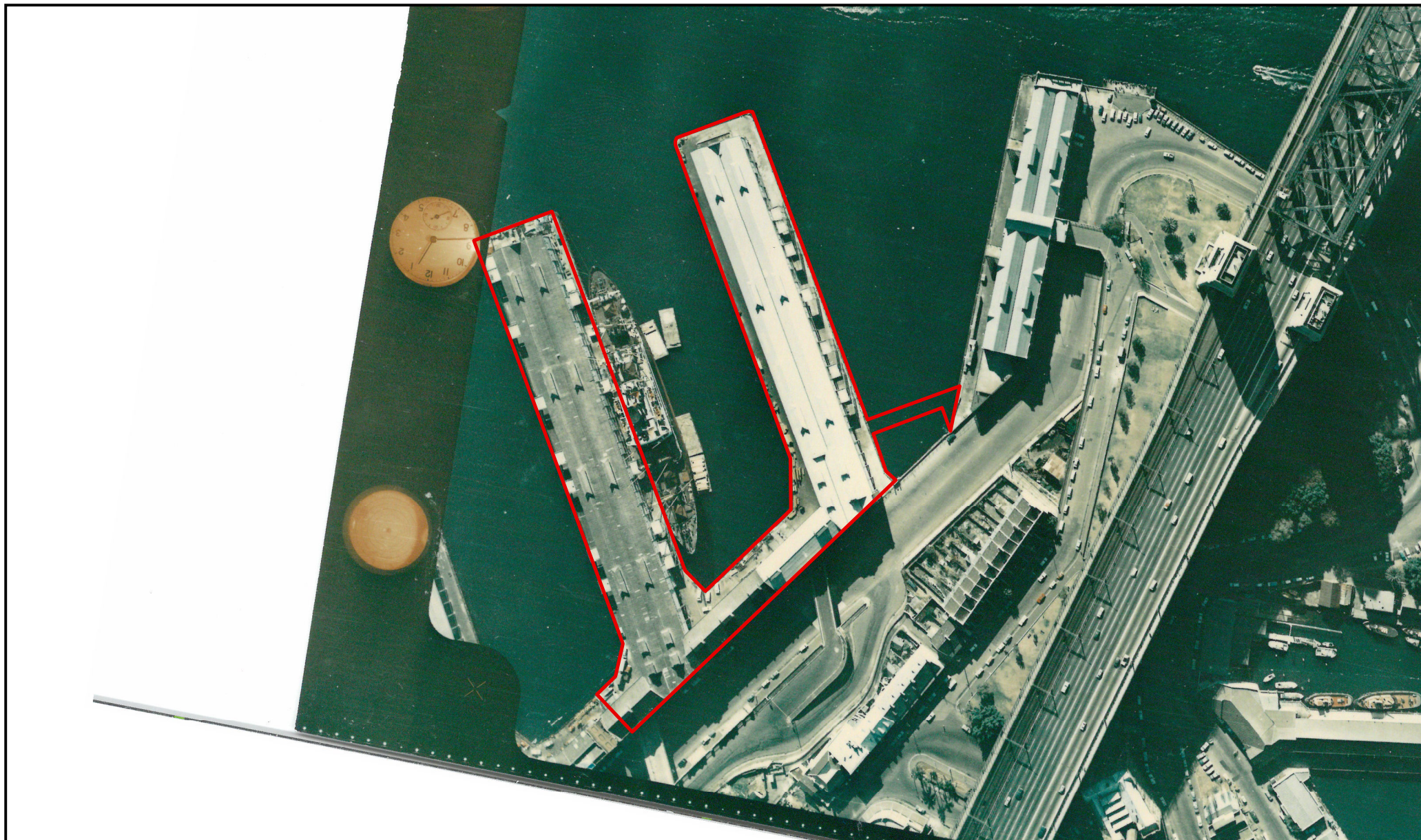
Project: Walsh Bay Preliminary Site Assessment

Job No: 43329

File Name: 43329\_1961







Source: Base Image - © Department of Lands

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Scale: 1:2,500			
Datum: GDA 1994 MGA Zone 56 - AHD			
A4			
0	Original Issue - Aerials	LL	26-02-2014
Rev	Description	Drm.	Date:

Legend:

Approximate Site Boundary

**JBS&G** Figure: Walsh Bay - 1970

Client: ARTS NSW

Project: Walsh Bay Preliminary Site Assessment

Job No: 43329

File Name: 43329\_1970







Source: Base Image - © Department of Lands

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0 25 50 100 m			
Scale: 1:2,500			
Datum: GDA 1994 MGA Zone 56 - AHD			
A4			
0	Original Issue - Aerials	LL	26-02-2014
Rev	Description	Drm.	Date:

Legend:

Approximate Site Boundary

**JBS&G** Figure: Walsh Bay - 1986

Client: ARTS NSW

Project: Walsh Bay Preliminary Site Assessment

Job No: 43329

File Name: 43329\_1986







Source: Base Image - © Department of Lands

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0 25 50 100 m			
Scale: 1:2,500			
Datum: GDA 1994 MGA Zone 56 - AHD			
A4			
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Rev	Description	Drm.	Date:

Legend:

Approximate Site Boundary

**JBS&G** Figure: Walsh Bay - 1999

Client: ARTS NSW

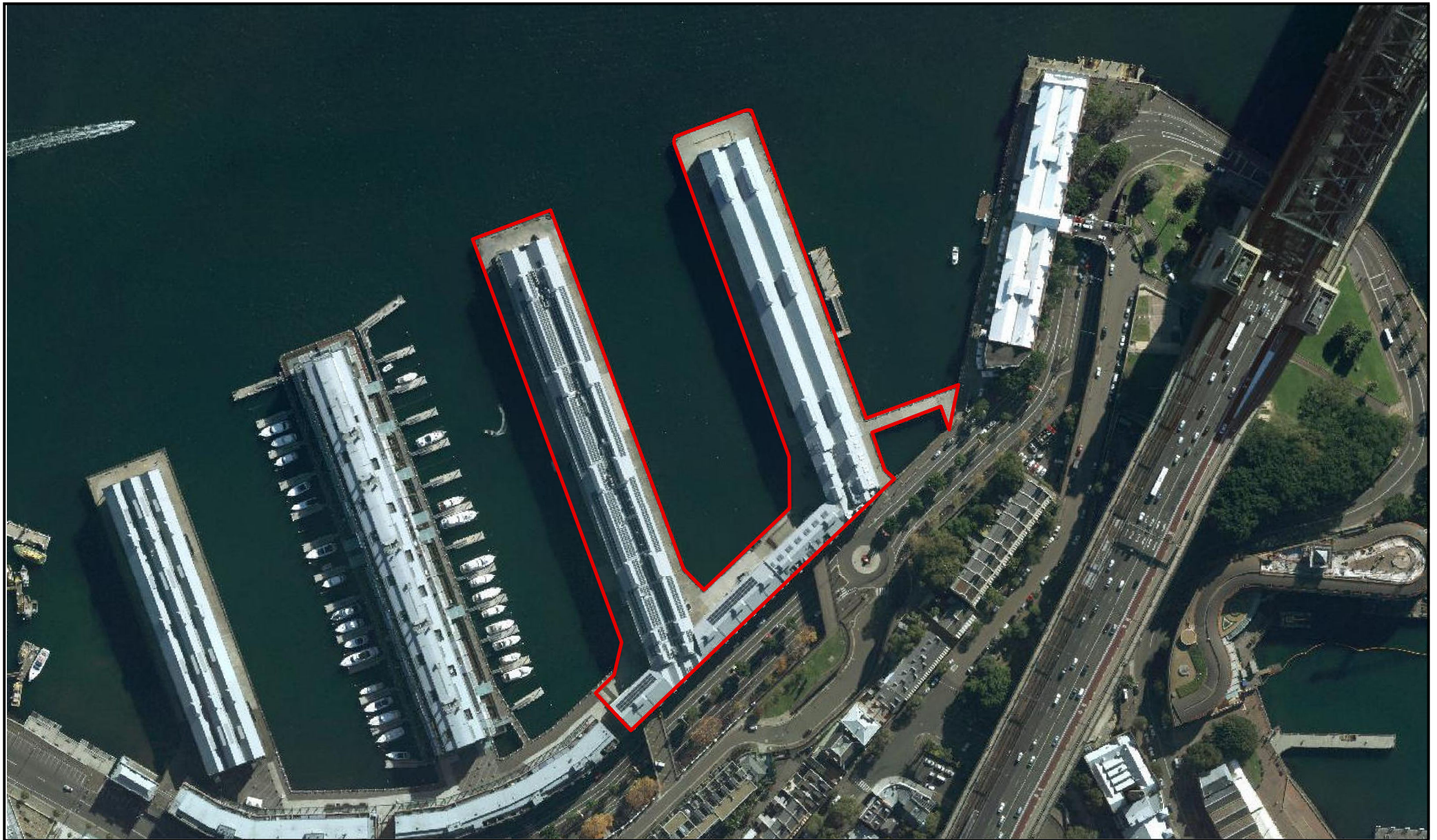
Project: Walsh Bay Preliminary Site Assessment

Job No: 43329

File Name: 43329\_1999







Source: Base Image - © SIX Maps www.maps.six.nsw.gov.au, Imagery Date: 13/04/2011, Accessed: 26/02/2014

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0 25 50 100  
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Scale: 1:2,500

Datum: GDA 1994 MGA Zone 56 - AHD

A4			
0	Original Issue - Aerials	LL	26-02-2014
Rev	Description	Drm.	Date:

Legend:

Approximate Site Boundary

**JBS&G** Figure: Walsh Bay - 2011

Client: ARTS NSW

Project: Walsh Bay Preliminary Site Assessment

Job No: 43329

File Name: 43329\_2011





## **Appendix D NSW EPA Public Register Search Results**



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## Search results

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<u>Number</u>	<u>Name</u>	<u>Location</u>	<u>Type</u>	<u>Status</u>	<u>Issued date</u>		
<a href="#">3142</a>	AUSTRALIAN RAIL TRACK CORPORATION LIMITED	GPO BOX 14, SYDNEY, NSW 2001	POEO licence	Issued	20 Dec 2000		
<a href="#">1011934</a>	AUSTRALIAN RAIL TRACK CORPORATION LIMITED	GPO BOX 14, SYDNEY, NSW 2001	s.58 Licence Variation	Issued	05 Oct 2001		
<a href="#">1015602</a>	AUSTRALIAN RAIL TRACK CORPORATION LIMITED	GPO BOX 14, SYDNEY, NSW 2001	s.58 Licence Variation	Issued	01 May 2002		
<a href="#">1023724</a>	AUSTRALIAN RAIL TRACK CORPORATION LIMITED	GPO BOX 14, SYDNEY, NSW 2001	s.58 Licence Variation	Issued	19 Dec 2002		
<a href="#">1028108</a>	AUSTRALIAN RAIL TRACK CORPORATION LIMITED	GPO BOX 14, SYDNEY, NSW 2001	s.58 Licence Variation	Issued	01 Jul 2003		
<a href="#">1029702</a>	AUSTRALIAN RAIL TRACK CORPORATION LIMITED	GPO BOX 14, SYDNEY, NSW 2001	s.58 Licence Variation	Issued	01 Aug 2003		
<a href="#">1030573</a>	AUSTRALIAN RAIL TRACK CORPORATION LIMITED	GPO BOX 14, SYDNEY, NSW 2001	s.58 Licence Variation	Issued	31 Oct 2003		
<a href="#">1032289</a>	AUSTRALIAN RAIL TRACK CORPORATION LIMITED	GPO BOX 14, SYDNEY, NSW 2001	s.58 Licence Variation	Issued	09 Dec 2003		
<a href="#">1033638</a>	AUSTRALIAN RAIL TRACK CORPORATION LIMITED	GPO BOX 14, SYDNEY, NSW 2001	s.58 Licence Variation	Issued	31 Dec 2003		
<a href="#">1040462</a>	AUSTRALIAN RAIL TRACK CORPORATION LIMITED	GPO BOX 14, SYDNEY, NSW 2001	s.58 Licence Variation	Issued	06 Sep 2004	Connect	Fee
<a href="#">1052119</a>	AUSTRALIAN RAIL TRACK CORPORATION LIMITED	GPO BOX 14, SYDNEY, NSW 2001	s.58 Licence Variation	Issued	22 Sep 2005		
<a href="#">1092348</a>	AUSTRALIAN RAIL TRACK CORPORATION LIMITED	GPO BOX 14, SYDNEY, NSW 2001	s.58 Licence Variation	Issued	30 Sep 2008		Wet Pub
<a href="#">1093829</a>	AUSTRALIAN RAIL TRACK CORPORATION LIMITED	GPO BOX 14, SYDNEY, NSW 2001	s.58 Licence Variation	Issued	14 Nov 2008		
<a href="#">1110207</a>	AUSTRALIAN RAIL TRACK CORPORATION LIMITED	GPO BOX 14, SYDNEY, NSW 2001	s.58 Licence Variation	Issued	23 Dec 2009		
<a href="#">1121864</a>	AUSTRALIAN RAIL TRACK CORPORATION LIMITED	GPO BOX 14, SYDNEY, NSW 2001	s.58 Licence Variation	Issued	05 Jan 2011		
<a href="#">1123526</a>	AUSTRALIAN RAIL TRACK CORPORATION LIMITED	GPO BOX 14, SYDNEY, NSW 2001	s.58 Licence Variation	Issued	07 Jan 2011		
<a href="#">1123725</a>	AUSTRALIAN RAIL TRACK CORPORATION LIMITED	GPO BOX 14, SYDNEY, NSW 2001	s.58 Licence Variation	Issued	14 Jan 2011		
<a href="#">1123791</a>	AUSTRALIAN RAIL TRACK CORPORATION LIMITED	GPO BOX 14, SYDNEY, NSW 2001	s.58 Licence Variation	Issued	19 Jan 2011		
<a href="#">1123916</a>	AUSTRALIAN RAIL TRACK CORPORATION LIMITED	GPO BOX 14, SYDNEY, NSW 2001	s.58 Licence Variation	Issued	01 Apr 2011		
<a href="#">1501777</a>	AUSTRALIAN RAIL TRACK CORPORATION LIMITED	GPO BOX 14, SYDNEY, NSW 2001	s.58 Licence Variation	Issued	28 Sep 2011		

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<u>Number</u>	<u>Name</u>	<u>Location</u>	<u>Type</u>	<u>Status</u>	<u>Issued date</u>		
<a href="#">1503705</a>	AUSTRALIAN RAIL TRACK CORPORATION LIMITED	GPO BOX 14, SYDNEY, NSW 2001	s.58 Licence Variation	Issued	13 Jan 2012		
<a href="#">1508511</a>	AUSTRALIAN RAIL TRACK CORPORATION LIMITED	GPO BOX 14, SYDNEY, NSW 2001	s.58 Licence Variation	Issued	30 Aug 2012		
<a href="#">1509294</a>	AUSTRALIAN RAIL TRACK CORPORATION LIMITED	GPO BOX 14, SYDNEY, NSW 2001	s.58 Licence Variation	Issued	09 Oct 2012		
<a href="#">1513680</a>	AUSTRALIAN RAIL TRACK CORPORATION LIMITED	GPO BOX 14, SYDNEY, NSW 2001	Compliance Audit	Complete	22 Apr 2013		
<a href="#">1514367</a>	AUSTRALIAN RAIL TRACK CORPORATION LIMITED	GPO BOX 14, SYDNEY, NSW 2001	s.58 Licence Variation	Issued	28 May 2013		
<a href="#">1519381</a>	AUSTRALIAN RAIL TRACK CORPORATION LIMITED	GPO BOX 14, SYDNEY, NSW 2001	s.58 Licence Variation	Issued	20 Jan 2014		
<a href="#">6847</a>	AUSTRALIAN RED CROSS SOCIETY	153 CLARENCE STREET, SYDNEY, NSW 2000	POEO licence	No longer in force	30 May 2000		
<a href="#">1019130</a>	AUSTRALIAN RED CROSS SOCIETY	153 CLARENCE STREET, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	25 Jul 2002		
<a href="#">1042818</a>	AUSTRALIAN RED CROSS SOCIETY	153 CLARENCE STREET, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	03 Dec 2004	Connect	Fee
<a href="#">1055199</a>	AUSTRALIAN RED CROSS SOCIETY	153 CLARENCE STREET, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	11 Jan 2006		Wet Pub
<a href="#">11804</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	POEO licence	Surrendered	24 Dec 2002		
<a href="#">1025147</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	24 Feb 2003		
<a href="#">1025478</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	07 Mar 2003		
<a href="#">1025596</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	17 Mar 2003		
<a href="#">1026044</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	04 Apr 2003		
<a href="#">1026884</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	16 May 2003		
<a href="#">1027585</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	28 May 2003		
<a href="#">1027906</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	04 Jun 2003		
<a href="#">1027956</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	20 Jun 2003		
<a href="#">1029605</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	06 Aug 2003		

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<u>Number</u>	<u>Name</u>	<u>Location</u>	<u>Type</u>	<u>Status</u>	<u>Issued date</u>
<a href="#">1029978</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	28 Aug 2003
<a href="#">1030731</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	11 Sep 2003
<a href="#">1031044</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	19 Sep 2003
<a href="#">1031358</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	01 Oct 2003
<a href="#">1031595</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	16 Oct 2003
<a href="#">1031939</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	22 Oct 2003
<a href="#">1032103</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	31 Oct 2003
<a href="#">1032913</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	05 Dec 2003
<a href="#">1033145</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	12 Dec 2003
<a href="#">1033349</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	19 Dec 2003
<a href="#">1033988</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	19 Jan 2004
<a href="#">1034134</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	29 Jan 2004
<a href="#">1034422</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	13 Feb 2004
<a href="#">1034629</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	19 Feb 2004
<a href="#">1035021</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	02 Mar 2004
<a href="#">1035389</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	26 Mar 2004
<a href="#">1035821</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	08 Apr 2004
<a href="#">1036225</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	16 Apr 2004
<a href="#">1036631</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	04 May 2004
<a href="#">1037069</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	15 May 2004

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<u>Number</u>	<u>Name</u>	<u>Location</u>	<u>Type</u>	<u>Status</u>	<u>Issued date</u>
<a href="#">1037484</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	27 May 2004
<a href="#">1037689</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	04 Jun 2004
<a href="#">1037887</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	11 Jun 2004
<a href="#">1038254</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	24 Jun 2004
<a href="#">1038434</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	12 Jul 2004
<a href="#">1039534</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	13 Aug 2004
<a href="#">1039940</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	03 Sep 2004
<a href="#">1040577</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	10 Sep 2004
<a href="#">1040663</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	17 Sep 2004
<a href="#">1040918</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	27 Sep 2004
<a href="#">1041494</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	15 Oct 2004
<a href="#">1041731</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	25 Oct 2004
<a href="#">1041890</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	29 Oct 2004
<a href="#">1042459</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	22 Nov 2004
<a href="#">1042474</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	08 Dec 2004
<a href="#">1043143</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	17 Dec 2004
<a href="#">1043584</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	06 Jan 2005
<a href="#">1043836</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	21 Jan 2005
<a href="#">1044361</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	11 Feb 2005
<a href="#">1044772</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	23 Feb 2005

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<u>Number</u>	<u>Name</u>	<u>Location</u>	<u>Type</u>	<u>Status</u>	<u>Issued date</u>
<a href="#">1044862</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	25 Feb 2005
<a href="#">1044898</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	28 Feb 2005
<a href="#">1044953</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	01 Mar 2005
<a href="#">1045026</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	03 Mar 2005
<a href="#">1045386</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	14 Mar 2005
<a href="#">1045454</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	15 Mar 2005
<a href="#">1045543</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	18 Mar 2005
<a href="#">1046027</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	01 Apr 2005
<a href="#">1046188</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	08 Apr 2005
<a href="#">1046440</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	12 Apr 2005
<a href="#">1046466</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	15 Apr 2005
<a href="#">1046583</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	18 Apr 2005
<a href="#">1046924</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	21 Apr 2005
<a href="#">1047498</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	11 May 2005
<a href="#">1047630</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	25 May 2005
<a href="#">1048418</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	16 Jun 2005
<a href="#">1050424</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	04 Aug 2005
<a href="#">1050625</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	19 Aug 2005
<a href="#">1056208</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	17 Feb 2006
<a href="#">1057565</a>	BILFINGER BERGER AG	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	17 Mar 2006

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<u>Number</u>	<u>Name</u>	<u>Location</u>	<u>Type</u>	<u>Status</u>	<u>Issued date</u>		
<a href="#">1521</a>	CARLTON & UNITED BREWERIES (N S W) PTY LTD	26-98 BROADWAY, SYDNEY, NSW 2000	POEO licence	Surrendered	24 Mar 2000		
<a href="#">1012149</a>	CARLTON & UNITED BREWERIES (N S W) PTY LTD	26-98 BROADWAY, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	23 Nov 2001		
<a href="#">4310</a>	CEMENT AUSTRALIA HOLDINGS PTY LTD	SOMMERVILLE ROAD, SYDNEY, NSW 2000	POEO licence	Issued	29 Aug 2000		
<a href="#">1008194</a>	CEMENT AUSTRALIA HOLDINGS PTY LTD	SOMMERVILLE ROAD, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	11 Sep 2001		
<a href="#">1105088</a>	CEMENT AUSTRALIA HOLDINGS PTY LTD	SOMMERVILLE ROAD, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	02 Oct 2009		
<a href="#">3085763872</a>	JOHN HOLLAND PTY LTD	SYDNEY, NSW 2000	Penalty Notice	Withdrawn			
<a href="#">20079</a>	JOHN HOLLAND PTY LTD	SYDNEY, NSW 2000	POEO licence	Issued	02 Mar 2012		
<a href="#">1504855</a>	JOHN HOLLAND PTY LTD	SYDNEY, NSW 2000	s.58 Licence Variation	Issued	13 Mar 2012	Connect	Fee
<a href="#">1507027</a>	JOHN HOLLAND PTY LTD	SYDNEY, NSW 2000	s.58 Licence Variation	Issued	28 Jun 2012		Wet Pub
<a href="#">3085764606</a>	JOHN HOLLAND PTY LTD	SYDNEY, NSW 2000	Penalty Notice	Issued	03 Jul 2012		
<a href="#">4653</a>	LUHRMANN ENVIRONMENT MANAGEMENT PTY LTD	-, SYDNEY, NSW 2000	POEO licence	Issued	06 Sep 2000		
<a href="#">1021590</a>	LUHRMANN ENVIRONMENT MANAGEMENT PTY LTD	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	22 Nov 2002		
<a href="#">7180</a>	PATRICK STEVEDORES OPERATIONS PTY LIMITED	GATE 5 HICKSON ROAD, SYDNEY, NSW 2000	POEO licence	Surrendered	25 Feb 2000		
<a href="#">1028037</a>	PATRICK STEVEDORES OPERATIONS PTY LIMITED	GATE 5 HICKSON ROAD, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	27 Jun 2003		
<a href="#">4838</a>	ROBERT ORCHARD	-, SYDNEY, NSW 2000	POEO licence	Surrendered	07 Sep 2000		
<a href="#">1009568</a>	ROBERT ORCHARD	-, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	17 Sep 2001		
<a href="#">6193</a>	ROYAL BOTANIC GARDENS AND DOMAIN TRUST	MRS MACQUARIES ROAD, SYDNEY, NSW 2000	POEO licence	No longer in force	04 Aug 2000		
<a href="#">1006659</a>	ROYAL BOTANIC GARDENS AND DOMAIN TRUST	MRS MACQUARIES ROAD, SYDNEY, NSW 2000	s.96 Prevention Notice	Issued	24 Jun 2003		
<a href="#">1047181</a>	ROYAL BOTANIC GARDENS AND DOMAIN TRUST	MRS MACQUARIES ROAD, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	10 May 2005		
<a href="#">1066372</a>	ROYAL BOTANIC GARDENS AND DOMAIN TRUST	MRS MACQUARIES ROAD, SYDNEY, NSW 2000	s.110 Variation of Prevention Notice	Issued	30 Oct 2006		

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<a href="#">1096585</a>	ROYAL BOTANIC GARDENS AND DOMAIN TRUST	MRS MACQUARIES ROAD, SYDNEY, NSW 2000	s.110 Variation of Prevention Notice	Issued	05 Feb 2009		
<a href="#">1511045</a>	ROYAL BOTANIC GARDENS AND DOMAIN TRUST	MRS MACQUARIES ROAD, SYDNEY, NSW 2000	s.110 Variation of Prevention Notice	Issued	21 Dec 2012		
<a href="#">7370</a>	SOUTH EASTERN SYDNEY AND ILLAWARRA AREA HEALTH SERVICE	8 MACQUARIE STREET, SYDNEY, NSW 2000	POEO licence	No longer in force	30 May 2000		
<a href="#">1018977</a>	SOUTH EASTERN SYDNEY AND ILLAWARRA AREA HEALTH SERVICE	8 MACQUARIE STREET, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	25 Jul 2002		
<a href="#">1041473</a>	SOUTH EASTERN SYDNEY AND ILLAWARRA AREA HEALTH SERVICE	8 MACQUARIE STREET, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	13 Oct 2004		
<a href="#">4091</a>	SYDNEY OPERA HOUSE TRUST	BENNELONG POINT, SYDNEY, NSW 2000	POEO licence	Surrendered	10 Jan 2002		
<a href="#">11517</a>	SYDNEY SHIP REPAIR & ENGINEERING PTY LTD	Goat Island, SYDNEY, NSW 2000	POEO licence	Issued	09 Nov 2001	Connect	Fee
<a href="#">1014577</a>	SYDNEY SHIP REPAIR & ENGINEERING PTY LTD	Goat Island, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	06 Feb 2002		Wet Pub
<a href="#">1041143</a>	SYDNEY SHIP REPAIR & ENGINEERING PTY LTD	Goat Island, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	26 Apr 2005		
<a href="#">1050231</a>	SYDNEY SHIP REPAIR & ENGINEERING PTY LTD	Goat Island, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	31 Aug 2005		
<a href="#">1065958</a>	SYDNEY SHIP REPAIR & ENGINEERING PTY LTD	Goat Island, SYDNEY, NSW 2000	s.91 Clean Up Notice	Issued	12 Dec 2006		
<a href="#">1067925</a>	SYDNEY SHIP REPAIR & ENGINEERING PTY LTD	Goat Island, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	04 Jul 2007		
<a href="#">1095725</a>	SYDNEY SHIP REPAIR & ENGINEERING PTY LTD	Goat Island, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	16 Sep 2009		
<a href="#">1114245</a>	SYDNEY SHIP REPAIR & ENGINEERING PTY LTD	Goat Island, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	26 Jul 2010		
<a href="#">1509194</a>	SYDNEY SHIP REPAIR & ENGINEERING PTY LTD	Goat Island, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	22 Nov 2012		
<a href="#">10420</a>	THE HOSPITALS CONTRIBUTION FUND OF AUSTRALIA LTD	403 George Street, SYDNEY, NSW 2000	POEO licence	No longer in force	08 Feb 2000		
<a href="#">1034575</a>	THE HOSPITALS CONTRIBUTION FUND OF AUSTRALIA LTD	403 George Street, SYDNEY, NSW 2000	s.58 Licence Variation	Issued	17 Feb 2004		

[1234567](#)

14 February 2014





Healthy Environment, Healthy Community, Healthy Business

You are here: [Home](#) > [Contaminated land](#) > [Record of notices](#)

## Search results

Your search for: LGA: Sydney City Council

Matched 31 notices  
relating to 17 sites.

[Search Again](#)

[Refine Search](#)

Suburb	Address	Site Name	Notices related to this site
Alexandria	Off Huntley Street	<a href="#">Alexandra Canal</a>	2 current
Alexandria	10-24 Ralph Street	<a href="#">Australia Post, Alexandria</a>	1 current
Alexandria	49-59 O'Riordan Street	<a href="#">Cadbury Schweppes Site</a>	1 former
Alexandria	2 Doody Street	<a href="#">Land adjacent to Australia Post, Alexandria</a>	1 current
Eveleigh	Off Burren Street	<a href="#">Macdonaldtown Triangle</a>	2 former
Millers Point	36 Hickson Road	<a href="#">Millers Point Gasworks</a>	2 former
Millers Point	Wharves 5 and 7, Hickson Road	<a href="#">Millers Point Gasworks</a>	2 current and 2 former
Millers Point	Hickson Road	<a href="#">Millers Point Gasworks</a>	2 current and 2 former
Newtown	81 Wilson Street	<a href="#">MBL Service Station</a>	4 former
Newtown	79 Wilson Street	<a href="#">Property Adjacent to MBL Service Station</a>	3 former
Paddington	59 Oxford Street	<a href="#">7 Eleven Service Station, Paddington</a>	1 current
Pymont	Pymont Road	<a href="#">Pymont Power Station</a>	7 former
Waterloo	903-921 Bourke Street	<a href="#">Affected by Lawrence Dry Cleaners</a>	4 current and 2 former
Waterloo	901 Bourke Street	<a href="#">Affected by Lawrence Dry Cleaners</a>	4 current and 2 former
Waterloo	895-899 Bourke Street	<a href="#">Affected by Lawrence Dry Cleaners</a>	4 current and 2 former
Waterloo	207-229 Young Street	<a href="#">Affected by Lawrence Dry Cleaners</a>	4 current and 2 former
Waterloo	887-893 Bourke Street	<a href="#">Lawrence Dry Cleaners</a>	4 current and 2 former

Connect

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Page 1 of 1

14 February 2014

## **Appendix E   Historical Deeds Title Search**

## Service First Registration Pty Ltd

ACN: 108 037 029  
Ph: 02 9233 1314  
Fax: 9233 2878

Suite 102, Level 1, 64 Castlereagh Street  
Sydney 2000  
PO Box 1539 Sydney 2000  
DX 189 Sydney

### Summary of Owners Report

LPMA

Sydney

Address: - 13A, 13 & 15 Hickson Road, Dawes Point

Description: - Lot 11 in DP1138931 (pier 2/3) Lot 24 in DP 1071597 (Pier 2/3 shore sheds) and Lot 65 in DP 1048377 (wharf 4/5)

The land subject of this investigation were comprised within the Sydney Harbour and foreshores title (Volume 5018 Folio 1)

This title comprises approximately 180 pages and has not been investigated.

In view of this information the subject lands have remained in the ownership of Maritime Authority of New South Wales and their predecessors from on or around 1900.

We note that numerous leases have been registered over the subject land which we have not investigated.

Note:- for easements affecting see current Folio Identifiers.

Further Note:- Lot 24 DP 1071597 is affected by Leasehold Estate created by the registration of Strata Plan 73989.

Yours truly,  
Drew Fallon  
18.02.2014

Email: grolly1@bigpond.net.au

## Reverse Street Address Inquiry

Provides street address details for a title.

Street Address associated with title reference: **11/1138931**

**Address:**

**13A HICKSON RD DAWES POINT 2000**

Client Reference:

Date of Service: 13-Feb-2014 14:14:15

This information is provided as a searching aid only.  
The Registrar General does not guarantee the information provided.

Please forward any feedback or data quality issues to [feedback@lands.nsw.gov.au](mailto:feedback@lands.nsw.gov.au)



# Title Search

**InfoTrack**  
An Approved LPI NSW  
Information Broker

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH  
-----

FOLIO: 11/1138931  
-----

SEARCH DATE	TIME	EDITION NO	DATE
-----	----	-----	----
17/2/2014	12:32 PM	2	4/3/2011

LAND  
-----

LOT 11 IN DEPOSITED PLAN 1138931  
AT WALSH BAY  
LOCAL GOVERNMENT AREA SYDNEY  
PARISH OF ST PHILIP COUNTY OF CUMBERLAND  
TITLE DIAGRAM DP1138931

FIRST SCHEDULE  
-----

MARITIME AUTHORITY OF NSW

SECOND SCHEDULE (46 NOTIFICATIONS)  
-----

- 1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
- 2 DP812925 EASEMENT FOR SUPPORT 0.5 METRE(S) WIDE APPURTENANT  
TO THE LAND ABOVE DESCRIBED
- 3 THE LAND ABOVE DESCRIBED IS LIMITED IN STRATUM IN THE MANNER  
DESCRIBED IN DP1071597
- 4 ATTENTION IS DIRECTED TO THE STRATA MANAGEMENT STATEMENT FILED  
WITH SP73989  
AE42080 AMENDMENT TO THE STRATA MANAGEMENT STATEMENT
- 5 EASEMENT FOR SUBJACENT AND LATERAL SUPPORT AND EASEMENT FOR  
SHELTER IMPLIED BY SECTION 8AA STRATA SCHEMES (FREEHOLD  
DEVELOPMENT) ACT 1973. SEE SP73989
- 6 DP812925 RIGHT OF CARRIAGEWAY 8.2 METRE(S) WIDE APPURTENANT  
TO THE LAND ABOVE DESCRIBED
- 7 DP1018716 EASEMENT FOR RAKER PILES VARIABLE WIDTH APPURTENANT  
TO THE LAND ABOVE DESCRIBED
- 8 DP1018716 RIGHT OF ACCESS VARIABLE WIDTH "A" APPURTENANT TO THE  
LAND ABOVE DESCRIBED
- 9 DP1018716 EASEMENT FOR SERVICES 2 METRE(S) WIDE APPURTENANT TO  
THE LAND ABOVE DESCRIBED
- 10 DP1018716 EASEMENT FOR MAINTENANCE 1.05, 2.2 AND 2.5 METRE(S)  
WIDE AND VARIABLE APPURTENANT TO THE LAND ABOVE  
DESCRIBED
- 11 DP1018716 EASEMENT FOR ENCROACHMENT 0.3 AND 0.8 METRE(S) WIDE  
APPURTENANT TO THE LAND ABOVE DESCRIBED
- 12 DP1018716 EASEMENT FOR OVERHANGING STRUCTURE 2.4 METRE(S) WIDE  
APPURTENANT TO THE LAND ABOVE DESCRIBED
- 13 DP1018716 EASEMENT FOR CONSTRUCTION 3.55 METRE(S) WIDE  
APPURTENANT TO THE LAND ABOVE DESCRIBED
- 14 DP1018716 EASEMENT FOR ACCESS AND ENCROACHMENT 2.2 AND 3.055

END OF PAGE 1 - CONTINUED OVER

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LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH  
-----FOLIO: 11/1138931  
-----

PAGE 2

SECOND SCHEDULE (46 NOTIFICATIONS) (CONTINUED)  
-----

- 15 DP1071597 METRE(S) WIDE APPURTENANT TO THE LAND ABOVE DESCRIBED  
RIGHT OF PUBLIC ACCESS (LIMITED IN STRATUM) AFFECTING  
THE PART(S) SHOWN SO BURDENED IN THE TITLE DIAGRAM
- 16 DP1071597 EASEMENT FOR ACCESS (LIMITED IN STRATUM) AFFECTING  
THE PART(S) SHOWN SO BURDENED IN THE TITLE DIAGRAM
- 17 DP1071597 EASEMENT FOR ACCESS (LIMITED IN STRATUM) APPURTENANT  
TO THE PART SHOWN SO BENEFITED IN THE TITLE DIAGRAM
- 18 DP1071597 EASEMENT FOR SUPPORT AND SHELTER AFFECTING THE  
PART(S) SHOWN SO BURDENED IN THE TITLE DIAGRAM
- 19 DP1071597 EASEMENT FOR SUPPORT AND SHELTER APPURTENANT TO THE  
PART SHOWN SO BENEFITED IN THE TITLE DIAGRAM
- 20 DP1071597 EASEMENT FOR SERVICES (LIMITED IN STRATUM)  
APPURTENANT TO THE PART SHOWN SO BENEFITED IN THE  
TITLE DIAGRAM
- 21 DP1071597 EASEMENT FOR EXISTING SERVICES (LIMITED IN STRATUM)  
AFFECTING THE PART(S) SHOWN SO BURDENED IN THE TITLE  
DIAGRAM
- 22 DP1071597 EASEMENT FOR EXISTING SERVICES (LIMITED IN STRATUM)  
APPURTENANT TO THE PART SHOWN SO BENEFITED IN THE  
TITLE DIAGRAM
- 23 DP1071597 POSITIVE COVENANT REFERRED TO AND NUMBERED (10) IN  
THE S.88B INSTRUMENT AFFECTING THE PART SHOWN SO  
BURDENED IN THE TITLE DIAGRAM
- 24 SP73989 EASEMENT FOR WATER SERVICE AFFECTING THE PART SHOWN  
SO BURDENED IN THE TITLE DIAGRAM
- 25 SP73989 EASEMENT FOR WATER SERVICE APPURTENANT TO THE PART  
SHOWN SO BENEFITED IN THE TITLE DIAGRAM
- 26 SP73989 EASEMENT FOR SEWERAGE SERVICE AFFECTING THE PART  
SHOWN SO BURDENED IN THE TITLE DIAGRAM
- 27 SP73989 EASEMENT FOR SEWERAGE SERVICE APPURTENANT TO THE  
PART SHOWN SO BENEFITED IN THE TITLE DIAGRAM
- 28 SP73989 EASEMENT FOR DRAINAGE SERVICE AFFECTING THE PART  
SHOWN SO BURDENED IN THE TITLE DIAGRAM
- 29 SP73989 EASEMENT FOR DRAINAGE SERVICE APPURTENANT TO THE  
PART SHOWN SO BENEFITED IN THE TITLE DIAGRAM
- 30 SP73989 EASEMENT FOR GAS SERVICE AFFECTING THE PART SHOWN  
SO BURDENED IN THE TITLE DIAGRAM
- 31 SP73989 EASEMENT FOR GAS SERVICE APPURTENANT TO THE PART  
SHOWN SO BENEFITED IN THE TITLE DIAGRAM
- 32 SP73989 EASEMENT FOR ELECTRICITY SERVICE AFFECTING THE PART  
SHOWN SO BURDENED IN THE TITLE DIAGRAM
- 33 SP73989 EASEMENT FOR ELECTRICITY SERVICE APPURTENANT TO THE  
PART SHOWN SO BENEFITED IN THE TITLE DIAGRAM
- 34 SP73989 EASEMENT FOR GARBAGE SERVICE AFFECTING THE PART  
SHOWN SO BURDENED IN THE TITLE DIAGRAM
- 35 SP73989 EASEMENT FOR GARBAGE SERVICE APPURTENANT TO THE

END OF PAGE 2 - CONTINUED OVER

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LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH  
-----FOLIO: 11/1138931  
-----

PAGE 3

SECOND SCHEDULE (46 NOTIFICATIONS) (CONTINUED)  
-----

- 36 SP73989 PART SHOWN SO BENEFITED IN THE TITLE DIAGRAM  
EASEMENT FOR CONDITIONED AIR SERVICE AFFECTING THE  
PART SHOWN SO BURDENED IN THE TITLE DIAGRAM
- 37 SP73989 EASEMENT FOR CONDITIONED AIR SERVICE APPURTENANT TO  
THE PART SHOWN SO BENEFITED IN THE TITLE DIAGRAM
- 38 SP73989 EASEMENT FOR TELEPHONE, TELEVISION OR RADIO  
IMPULSES OR SIGNALS SERVICE AFFECTING THE PART SHOWN  
SO BURDENED IN THE TITLE DIAGRAM
- 39 SP73989 EASEMENT FOR TELEPHONE, TELEVISION OR RADIO  
IMPULSES OR SIGNALS SERVICE APPURTENANT TO THE PART  
SHOWN SO BENEFITED IN THE TITLE DIAGRAM
- 40 SP73989 RIGHT TO USE DISABLED TOILET APPURTENANT TO THE  
PART SHOWN SO BENEFITED IN THE TITLE DIAGRAM
- 41 DP1138931 EASEMENT FOR SUPPORT 0.8 METRE(S) WIDE AFFECTING THE  
PART(S) SHOWN SO BURDENED IN THE TITLE DIAGRAM
- 42 DP1138931 EASEMENT FOR WATER SUPPLY PURPOSES 1.5 METRE(S) WIDE  
AFFECTING THE PART(S) SHOWN SO BURDENED IN THE TITLE  
DIAGRAM
- 43 DP1138931 EASEMENT FOR ELECTRICITY PURPOSES OVER EXISTING LINE  
OF CABLE AFFECTING THE PART(S) SHOWN SO BURDENED IN  
THE TITLE DIAGRAM
- 44 DP1138931 RIGHT OF PUBLIC ACCESS VARIABLE WIDTH AFFECTING THE  
PART(S) SHOWN SO BURDENED IN THE TITLE DIAGRAM
- 45 DP1138931 RESTRICTION(S) ON THE USE OF LAND
- 46 AG100405 LEASE TO COMMUNITIES NSW EXPIRES: 30/11/2109.

NOTATIONS  
-----

UNREGISTERED DEALINGS: NIL

\*\*\* END OF SEARCH \*\*\*

df

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\* Any entries preceded by an asterisk do not appear on the current edition of the Certificate of Title. Warning: the information appearing under notations has not been formally recorded in the Register. InfoTrack an approved NSW Information Broker hereby certifies that the information contained in this document has been provided electronically by the Registrar General in accordance with Section 96B(2) of the Real Property Act 1900.



LAND AND PROPERTY INFORMATION NEW SOUTH WALES - HISTORICAL SEARCH

SEARCH DATE

18/2/2014 8:36AM

FOLIO: 11/1138931

First Title(s): OLD SYSTEM

Prior Title(s): 23/1071597 2/1120251

Recorded	Number	Type of Instrument	C.T. Issue
31/7/2009	DP1138931	DEPOSITED PLAN	FOLIO CREATED EDITION 1
4/3/2011	AG100405	LEASE	EDITION 2

\*\*\* END OF SEARCH \*\*\*

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - HISTORICAL SEARCH

SEARCH DATE

18/2/2014 8:42AM

FOLIO: 23/1071597

First Title(s): OLD SYSTEM

Prior Title(s): 66/1048377

Recorded -----	Number -----	Type of Instrument -----	C.T. Issue -----
1/12/2004	DP1071597	DEPOSITED PLAN	FOLIO CREATED EDITION 1
9/12/2004	SP73989	STRATA PLAN	
8/2/2008	AD726712	APPLICATION FOR REPLACEMENT CERTIFICATE OF TITLE	EDITION 2
3/3/2008	AD799255	CHANGE OF NAME	EDITION 3
11/9/2008	AE42080	REQUEST	EDITION 4
31/7/2009	DP1138931	DEPOSITED PLAN	FOLIO CANCELLED

\*\*\* END OF SEARCH \*\*\*

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - HISTORICAL SEARCH  
-----

SEARCH DATE  
-----

18/2/2014 8:39AM

FOLIO: 66/1048377  
-----

First Title(s): OLD SYSTEM

Prior Title(s): 1/812925 7/1018716

Recorded -----	Number -----	Type of Instrument -----	C.T. Issue -----
6/2/2003	DP1048377	DEPOSITED PLAN	FOLIO CREATED EDITION 1
1/12/2004	DP1071597	DEPOSITED PLAN	FOLIO CANCELLED

\*\*\* END OF SEARCH \*\*\*

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - HISTORICAL SEARCH

SEARCH DATE

17/2/2014 12:18PM

FOLIO: 1/812925

First Title(s): OLD SYSTEM

Prior Title(s): 11/737193

Recorded	Number	Type of Instrument	C.T. Issue
14/10/1991	DP812925	DEPOSITED PLAN	FOLIO CREATED EDITION 1
17/12/1991	E133561	LEASE	EDITION 2
9/10/1997	3476086	CHANGE OF NAME	EDITION 3
18/4/2000	6549910	SUB-LEASE	
26/7/2001	7806500	DEPARTMENTAL DEALING	
6/9/2001	7918294	CHANGE OF NAME	EDITION 4
26/7/2002	8587729	WITHDRAWN - DETERMINATION OF LEASE	
5/2/2003	9336496	DETERMINATION OF LEASE	
6/2/2003	DP1048377	DEPOSITED PLAN	FOLIO CANCELLED

\*\*\* END OF SEARCH \*\*\*

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - HISTORICAL SEARCH

-----

SEARCH DATE

-----

18/2/2014 12:17PM

FOLIO: 7/1018716

-----

First Title(s): OLD SYSTEM

Prior Title(s): 2/812925

Recorded	Number	Type of Instrument	C.T. Issue
-----	-----	-----	-----
14/2/2001	DP1018716	DEPOSITED PLAN	FOLIO CREATED EDITION 1
6/9/2001	7918294	CHANGE OF NAME	EDITION 2
21/2/2002	8374481	DEPARTMENTAL DEALING	
28/1/2003	9323887	DEPARTMENTAL DEALING	
6/2/2003	DP1048377	DEPOSITED PLAN	FOLIO CANCELLED

\*\*\* END OF SEARCH \*\*\*

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - HISTORICAL SEARCH

SEARCH DATE

17/2/2014 12:21PM

FOLIO: 2/812925

First Title(s): OLD SYSTEM

Prior Title(s): 11/737193

Recorded	Number	Type of Instrument	C.T. Issue
14/10/1991	DP812925	DEPOSITED PLAN	FOLIO CREATED EDITION 1
8/7/1994	U425036	DEPARTMENTAL DEALING	
9/10/1997	3476086	CHANGE OF NAME	EDITION 2
25/5/2000	6807191	DETERMINATION OF LEASE	EDITION 3
23/8/2000	7040191	DEPARTMENTAL DEALING	
4/9/2000	7064896	DEPARTMENTAL DEALING	EDITION 4
14/2/2001	DP1018716	DEPOSITED PLAN	FOLIO CANCELLED

\*\*\* END OF SEARCH \*\*\*



LAND AND PROPERTY INFORMATION NEW SOUTH WALES - HISTORICAL SEARCH

SEARCH DATE

17/2/2014 12:13PM

FOLIO: 11/737193

First Title(s): OLD SYSTEM		VOL 43 FOL 207
VOL 1170 FOL 226		
Prior Title(s):	VOL 655 FOL 214	VOL 1170 FOL 226
	VOL 1216 FOL 138	VOL 1314 FOL 187
	VOL 5018 FOL 1	VOL 7637 FOL 211

Recorded	Number	Type of Instrument	C.T. Issue
-----	-----	-----	-----
20/5/1987	DP737193	DEPOSITED PLAN	FOLIO CREATED EDITION 1
16/2/1988	X389925	DEPARTMENTAL DEALING	
13/7/1988	X698008	DEPARTMENTAL DEALING	EDITION 2
20/4/1989	Y130927	CAVEAT	
23/9/1991	Z939075	WITHDRAWAL OF CAVEAT	
11/10/1991	DP812925	DEPOSITED PLAN	FOLIO CANCELLED

\*\*\* END OF SEARCH \*\*\*



## Reverse Street Address Inquiry

Provides street address details for a title.

Street Address associated with title reference: **cp/sp73989** (<sup>lot</sup>24 DP 1071597)

**Address:**

13 HICKSON RD DAWES POINT 2000

Client Reference:

Date of Service: 18-Feb-2014 13:38:28

This information is provided as a searching aid only.

The Registrar General does not guarantee the information provided.

Please forward any feedback or data quality issues to [feedback@lands.nsw.gov.au](mailto:feedback@lands.nsw.gov.au)



# Title Search

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Information Broker

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH  
-----

FOLIO: 24/1071597  
-----

SEARCH DATE	TIME	EDITION NO	DATE
-----	----	-----	----
17/2/2014	12:35 PM	1	9/12/2004

LAND  
-----

LOT 24 IN DEPOSITED PLAN 1071597  
AT WALSH BAY  
LOCAL GOVERNMENT AREA SYDNEY, UNINCORPORATED AREA  
PARISH OF ST PHILIP COUNTY OF CUMBERLAND  
TITLE DIAGRAM DP1071597

FIRST SCHEDULE  
-----

WATERWAYS AUTHORITY

SECOND SCHEDULE (27 NOTIFICATIONS)  
-----

- 1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
- 2 THE LAND ABOVE DESCRIBED IS LIMITED IN STRATUM IN THE MANNER DESCRIBED IN DP1071597
- 3 DP812925 EASEMENT FOR SUPPORT 0.5 METRE(S) WIDE AFFECTING THE PART(S) SHOWN SO BURDENED IN THE TITLE DIAGRAM
- 4 DP812925 EASEMENT FOR SUPPORT 0.5 METRE(S) WIDE APPURTENANT TO THE LAND ABOVE DESCRIBED
- 5 DP812925 RIGHT OF CARRIAGEWAY 8.2 METRE(S) WIDE APPURTENANT TO THE LAND ABOVE DESCRIBED
- 6 DP1018716 EASEMENT FOR RAKER PILES VARIABLE WIDTH APPURTENANT TO THE LAND ABOVE DESCRIBED
- 7 DP1018716 RIGHT OF ACCESS VARIABLE WIDTH "A" APPURTENANT TO THE LAND ABOVE DESCRIBED
- 8 DP1018716 EASEMENT FOR SERVICES 2 METRE(S) WIDE APPURTENANT TO THE LAND ABOVE DESCRIBED
- 9 DP1018716 EASEMENT FOR MAINTENANCE 1.05, 2.2 AND 2.5 METRE(S) WIDE AND VARIABLE APPURTENANT TO THE LAND ABOVE DESCRIBED
- 10 DP1018716 EASEMENT FOR ENCROACHMENT 0.3 AND 0.8 METRE(S) WIDE APPURTENANT TO THE LAND ABOVE DESCRIBED
- 11 DP1018716 EASEMENT FOR OVERHANGING STRUCTURE 2.4 METRE(S) WIDE APPURTENANT TO THE LAND ABOVE DESCRIBED
- 12 DP1018716 EASEMENT FOR CONSTRUCTION 3.55 METRE(S) WIDE APPURTENANT TO THE LAND ABOVE DESCRIBED
- 13 DP1018716 EASEMENT FOR ACCESS AND ENCROACHMENT 2.2 AND 3.055 METRE(S) WIDE APPURTENANT TO THE LAND ABOVE DESCRIBED
- 14 DP1071597 RIGHT OF PUBLIC ACCESS (LIMITED IN STRATUM) AFFECTING THE PART(S) SHOWN SO BURDENED IN THE TITLE DIAGRAM
- 15 DP1071597 EASEMENT FOR ACCESS (LIMITED IN STRATUM) AFFECTING

END OF PAGE 1 - CONTINUED OVER

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LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH  
-----FOLIO: 24/1071597  
-----

PAGE 2

SECOND SCHEDULE (27 NOTIFICATIONS) (CONTINUED)  
-----

- THE PART(S) SHOWN SO BURDENED IN THE TITLE DIAGRAM
- 16 DP1071597 EASEMENT FOR ACCESS (LIMITED IN STRATUM) APPURTENANT TO THE LAND ABOVE DESCRIBED
- 17 DP1071597 EASEMENT FOR SUPPORT AND SHELTER AFFECTING THE PART(S) SHOWN SO BURDENED IN THE TITLE DIAGRAM
- 18 DP1071597 EASEMENT FOR SUPPORT AND SHELTER APPURTENANT TO THE LAND ABOVE DESCRIBED
- 19 DP1071597 EASEMENT FOR SERVICES (LIMITED IN STRATUM) AFFECTING THE PART(S) SHOWN SO BURDENED IN THE TITLE DIAGRAM
- 20 DP1071597 EASEMENT FOR SUPPORT 1 METRE(S) WIDE AFFECTING THE PART(S) SHOWN SO BURDENED IN THE TITLE DIAGRAM
- 21 DP1071597 POSITIVE COVENANT REFERRED TO AND NUMBERED (6) IN THE S.88B INSTRUMENT
- 22 DP1071597 EASEMENT TO DRAIN SEWERAGE OVER EXISTING LINE OF PIPES (LIMITED IN STRATUM) AFFECTING THE PART(S) SHOWN SO BURDENED IN THE TITLE DIAGRAM
- 23 DP1071597 RIGHT OF FOOTWAY (LIMITED IN STRATUM) AFFECTING THE PART(S) SHOWN SO BURDENED IN THE TITLE DIAGRAM
- 24 DP1071597 EASEMENT FOR EXISTING SERVICES (LIMITED IN STRATUM) AFFECTING THE PART(S) SHOWN SO BURDENED IN THE TITLE DIAGRAM
- 25 DP1071597 EASEMENT FOR EXISTING SERVICES (LIMITED IN STRATUM) APPURTENANT TO THE LAND ABOVE DESCRIBED
- 26 DP1071597 POSITIVE COVENANT REFERRED TO AND NUMBERED (10) IN THE S.88B INSTRUMENT
- 27 SP73989 LEASEHOLD ESTATES CREATED UPON REGISTRATION OF SP73989 AND LEASES AB104345 TO AB104367 INCLUSIVE. LEASEHOLD TITLES HAVE ISSUED FOR CP/SP73989 AND LOTS 1-22 IN SP73989. FOR EXPIRY SEE LEASES.

NOTATIONS  
-----

UNREGISTERED DEALINGS: NIL

\*\*\* END OF SEARCH \*\*\*

df

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\* Any entries preceded by an asterisk do not appear on the current edition of the Certificate of Title. Warning: the information appearing under notations has not been formally recorded in the Register. InfoTrack an approved NSW Information Broker hereby certifies that the information contained in this document has been provided electronically by the Registrar General in accordance with Section 96B(2) of the Real Property Act 1900.

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - HISTORICAL SEARCH

SEARCH DATE

18/2/2014 8:36AM

FOLIO: 24/1071597

First Title(s): OLD SYSTEM

Prior Title(s): 66/1048377

Recorded	Number	Type of Instrument	C.T. Issue
1/12/2004	DP1071597	DEPOSITED PLAN	FOLIO CREATED CT NOT ISSUED
9/12/2004	SP73989	STRATA PLAN	EDITION 1
9/12/2004	AB104345	LEASE	
9/12/2004	AB104346	LEASE	
9/12/2004	AB104347	LEASE	
9/12/2004	AB104348	LEASE	
9/12/2004	AB104349	LEASE	
9/12/2004	AB104350	LEASE	
9/12/2004	AB104351	LEASE	
9/12/2004	AB104352	LEASE	
9/12/2004	AB104353	LEASE	
9/12/2004	AB104354	LEASE	
9/12/2004	AB104355	LEASE	
9/12/2004	AB104356	LEASE	
9/12/2004	AB104357	LEASE	
9/12/2004	AB104358	LEASE	
9/12/2004	AB104359	LEASE	
9/12/2004	AB104360	LEASE	
9/12/2004	AB104361	LEASE	
9/12/2004	AB104362	LEASE	
9/12/2004	AB104363	LEASE	
9/12/2004	AB104364	LEASE	
9/12/2004	AB104365	LEASE	
9/12/2004	AB104366	LEASE	
9/12/2004	AB104367	LEASE	

\*\*\* END OF SEARCH \*\*\*

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - HISTORICAL SEARCH  
-----

SEARCH DATE  
-----

18/2/2014 8:39AM

FOLIO: 66/1048377  
-----

First Title(s): OLD SYSTEM

Prior Title(s): 1/812925 7/1018716

Recorded -----	Number -----	Type of Instrument -----	C.T. Issue -----
6/2/2003	DP1048377	DEPOSITED PLAN	FOLIO CREATED EDITION 1
1/12/2004	DP1071597	DEPOSITED PLAN	FOLIO CANCELLED

\*\*\* END OF SEARCH \*\*\*

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - HISTORICAL SEARCH

SEARCH DATE

17/2/2014 12:18PM

FOLIO: 1/812925

First Title(s): OLD SYSTEM

Prior Title(s): 11/737193

Recorded	Number	Type of Instrument	C.T. Issue
14/10/1991	DP812925	DEPOSITED PLAN	FOLIO CREATED EDITION 1
17/12/1991	E133561	LEASE	EDITION 2
9/10/1997	3476086	CHANGE OF NAME	EDITION 3
18/4/2000	6549910	SUB-LEASE	
26/7/2001	7806500	DEPARTMENTAL DEALING	
6/9/2001	7918294	CHANGE OF NAME	EDITION 4
26/7/2002	8587729	WITHDRAWN - DETERMINATION OF LEASE	
5/2/2003	9336496	DETERMINATION OF LEASE	
6/2/2003	DP1048377	DEPOSITED PLAN	FOLIO CANCELLED

\*\*\* END OF SEARCH \*\*\*



LAND AND PROPERTY INFORMATION NEW SOUTH WALES - HISTORICAL SEARCH

-----

SEARCH DATE

-----

18/2/2014 12:17PM

FOLIO: 7/1018716

-----

First Title(s): OLD SYSTEM

Prior Title(s): 2/812925

Recorded -----	Number -----	Type of Instrument -----	C.T. Issue -----
14/2/2001	DP1018716	DEPOSITED PLAN	FOLIO CREATED EDITION 1
6/9/2001	7918294	CHANGE OF NAME	EDITION 2
21/2/2002	8374481	DEPARTMENTAL DEALING	
28/1/2003	9323887	DEPARTMENTAL DEALING	
6/2/2003	DP1048377	DEPOSITED PLAN	FOLIO CANCELLED

\*\*\* END OF SEARCH \*\*\*



LAND AND PROPERTY INFORMATION NEW SOUTH WALES - HISTORICAL SEARCH

SEARCH DATE

17/2/2014 12:21PM

FOLIO: 2/812925

First Title(s): OLD SYSTEM

Prior Title(s): 11/737193

Recorded -----	Number -----	Type of Instrument -----	C.T. Issue -----
14/10/1991	DP812925	DEPOSITED PLAN	FOLIO CREATED EDITION 1
8/7/1994	U425036	DEPARTMENTAL DEALING	
9/10/1997	3476086	CHANGE OF NAME	EDITION 2
25/5/2000	6807191	DETERMINATION OF LEASE	EDITION 3
23/8/2000	7040191	DEPARTMENTAL DEALING	
4/9/2000	7064896	DEPARTMENTAL DEALING	EDITION 4
14/2/2001	DP1018716	DEPOSITED PLAN	FOLIO CANCELLED

\*\*\* END OF SEARCH \*\*\*

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - HISTORICAL SEARCH

-----

SEARCH DATE

-----

17/2/2014 12:13PM

FOLIO: 11/737193

-----

First Title(s): OLD SYSTEM      VOL 43 FOL 207  
   VOL 1170 FOL 226  
Prior Title(s): VOL 655 FOL 214    VOL 1170 FOL 226  
   VOL 1216 FOL 138    VOL 1314 FOL 187  
   VOL 5018 FOL 1      VOL 7637 FOL 211

Recorded -----	Number -----	Type of Instrument -----	C.T. Issue -----
20/5/1987	DP737193	DEPOSITED PLAN	FOLIO CREATED EDITION 1
16/2/1988	X389925	DEPARTMENTAL DEALING	
13/7/1988	X698008	DEPARTMENTAL DEALING	EDITION 2
20/4/1989	Y130927	CAVEAT	
23/9/1991	Z939075	WITHDRAWAL OF CAVEAT	
11/10/1991	DP812925	DEPOSITED PLAN	FOLIO CANCELLED

\*\*\* END OF SEARCH \*\*\*

## Reverse Street Address Inquiry

Provides street address details for a title.

Street Address associated with title reference: **65/1048377**

**Address:**

**15 HICKSON RD DAWES POINT 2000**

Client Reference:

Date of Service: 18-Feb-2014 13:38:58

This information is provided as a searching aid only.  
The Registrar General does not guarantee the information provided.

Please forward any feedback or data quality issues to [feedback@lands.nsw.gov.au](mailto:feedback@lands.nsw.gov.au)



# Title Search

**InfoTrack**  
An Approved LPI NSW  
Information Broker

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH

FOLIO: 65/1048377

SEARCH DATE	TIME	EDITION NO	DATE
17/2/2014	12:35 PM	1	6/2/2003

## LAND

LOT 65 IN DEPOSITED PLAN 1048377  
AT MILLERS POINT  
LOCAL GOVERNMENT AREA SYDNEY, UNINCORPORATED AREA  
PARISH OF ST PHILIP COUNTY OF CUMBERLAND  
TITLE DIAGRAM DP1048377

## FIRST SCHEDULE

WATERWAYS AUTHORITY

## SECOND SCHEDULE (8 NOTIFICATIONS)

- 1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
- 2 E133561 LEASE TO THE MINISTER FOR THE ARTS, FOR & ON BEHALF  
OF HER MAJESTY QUEEN ELIZABETH 11 EXPIRES  
30/6/2075.(SEE PARTIAL SURRENDER 9336496)
- \* AD48843 TRANSFER OF LEASE AD48842 LESSEE NOW JOHN  
DENNIS FILDISSIS, DIONYSIOS JOHN FILDISSIS &  
ANTHONY JAMES JOHN FILDISSIS
- \* AD48844 VARIATION OF LEASE AD48842
- \* AD50423 LEASE OF LEASE E133561 TO BANGARRA DANCE  
THEATRE AUSTRALIA LIMITED OF THE AREAS SHOWN  
HATCHED IN PLANS WITH AD50423. EXPIRES: 30/6/2017.
- \* AD716326 LEASE OF LEASE E133561 TO THE AUSTRALIAN THEATRE  
FOR YOUNG PEOPLE BEING PART OF GROUND FLOOR SHOWN  
HATCHED IN PLAN WITH AD716326. EXPIRES:  
31/12/2015.
- \* AD767273 LEASE OF LEASE E133561 TO AUSTRALIAN DANCE  
COUNCIL - AUDANCE NSW INC BEING PART LEVEL 2,  
PIER 4/5 HICKSON RD, WALSH BAY, SHOWN CROSS  
HATCHED IN PLAN WITH AD767273. EXPIRES: 30/6/2010.
- \* AG779589 VARIATION OF LEASE AC369393 EXPIRY DATE NOW  
30/6/2012.
- \* AH96676 VARIATION OF LEASE AC369393 EXPIRY DATE NOW  
31/8/2012.
- \* AH260079 VARIATION OF LEASE AC369393 EXPIRY DATE NOW  
31/12/2012.
- \* AH625694 VARIATION OF LEASE AC369393 EXPIRY DATE NOW  
31/3/2013.
- \* AH649944 VARIATION OF LEASE AC369393 EXPIRY DATE NOW  
30/4/2013.

END OF PAGE 1 - CONTINUED OVER

df

PRINTED ON 17/2/2014

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH  
-----FOLIO: 65/1048377  
-----

PAGE 2

SECOND SCHEDULE (8 NOTIFICATIONS) (CONTINUED)  
-----

- \* AH764330 LEASE OF LEASE E133561 TO SYDNEY THEATRE COMPANY LIMITED OF THE PARTS SHOWN CROSS-HATCHED IN PLANS MARKED 'C', 'D', 'E' & 'F' WITH AH764330 BEING PART OF THE BUILDINGS AT WHARF 4/5 HICKSON RD, WALSH BAY. EXPIRES: 30/4/2058.
- 3 DP812925 EASEMENT FOR SUPPORT 0.5 METRE(S) WIDE AFFECTING THE PART(S) SHOWN SO BURDENED IN THE TITLE DIAGRAM
- 4 DP812925 EASEMENT FOR SUPPORT 0.5 METRE(S) WIDE APPURTENANT TO THE LAND ABOVE DESCRIBED
- \* 5 DP1071597 EASEMENT TO DRAIN SEWERAGE OVER EXISTING LINE OF PIPES (LIMITED IN STRATUM) APPURTENANT TO THE LAND ABOVE DESCRIBED
- \* 6 DP1071601 EASEMENT FOR SERVICES (3C) (LIMITED IN STRATUM) VARIABLE WIDTH APPURTENANT TO THE LAND ABOVE DESCRIBED
- \* 7 DP1071601 EASEMENT FOR TELCOMMUNICATION CABLES OVER EXISTING LINE OF CABLES (3F) (APPROXIMATE POSITION) APPURTENANT TO THE LAND ABOVE DESCRIBED
- \* 8 SP73991 EASEMENT FOR FUTURE SERVICES APPURTENANT TO THE LAND ABOVE DESCRIBED

NOTATIONS  
-----

NOTE: THE CERTIFICATE OF TITLE FOR THIS FOLIO OF THE REGISTER DOES NOT INCLUDE SECURITY FEATURES INCLUDED ON COMPUTERISED CERTIFICATES OF TITLE ISSUED FROM 4TH JANUARY, 2004. IT IS RECOMMENDED THAT STRINGENT PROCESSES ARE ADOPTED IN VERIFYING THE IDENTITY OF THE PERSON(S) CLAIMING A RIGHT TO DEAL WITH THE LAND COMPRISED IN THIS FOLIO.

UNREGISTERED DEALINGS: NIL

\*\*\* END OF SEARCH \*\*\*

df

PRINTED ON 17/2/2014

\* Any entries preceded by an asterisk do not appear on the current edition of the Certificate of Title. Warning: the information appearing under notations has not been formally recorded in the Register. InfoTrack an approved NSW Information Broker hereby certifies that the information contained in this document has been provided electronically by the Registrar General in accordance with Section 96B(2) of the Real Property Act 1900.

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - HISTORICAL SEARCH

SEARCH DATE

18/2/2014 8:37AM

FOLIO: 65/1048377

First Title(s): OLD SYSTEM

VOL 657 FOL 161

Prior Title(s): 1/812925

Recorded	Number	Type of Instrument	C.T. Issue
6/2/2003	DP1048377	DEPOSITED PLAN	FOLIO CREATED EDITION 1
1/12/2004	DP1071597	DEPOSITED PLAN	
2/12/2004	DP1071601	DEPOSITED PLAN	
9/12/2004	SP73991	STRATA PLAN	
22/2/2005	AB303576	DEPARTMENTAL DEALING	
7/2/2006	AC45177	SUB-LEASE	
11/7/2006	AC238545	SUB-LEASE	
11/7/2006	AC369391	SUB-LEASE	
11/7/2006	AC369392	SUB-LEASE	
11/7/2006	AC369393	SUB-LEASE	
13/12/2006	AC806478	DEPARTMENTAL DEALING	
3/5/2007	AD48842	SUB-LEASE	
3/5/2007	AD48843	TRANSFER OF LEASE	
3/5/2007	AD48844	VARIATION OF LEASE	
3/5/2007	AD50423	SUB-LEASE	
3/12/2007	AD458955	SUB-LEASE	
17/12/2007	AD613826	SUB-LEASE	
26/9/2008	AD716326	SUB-LEASE	
26/9/2008	AD767273	SUB-LEASE	
1/2/2012	AG779589	VARIATION OF LEASE	
6/7/2012	AH96676	VARIATION OF LEASE	
25/9/2012	AH260079	VARIATION OF LEASE	
22/3/2013	AH625694	VARIATION OF LEASE	

END OF PAGE 1 - CONTINUED OVER

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PRINTED ON 18/2/2014

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - HISTORICAL SEARCH

SEARCH DATE

18/2/2014 8:37AM

FOLIO: 65/1048377

PAGE 2

Recorded	Number	Type of Instrument	C.T. Issue
9/5/2013	AH649944	VARIATION OF LEASE	
21/5/2013	AH730086	DEPARTMENTAL DEALING	
19/8/2013	AH764330	SUB-LEASE	

\*\*\* END OF SEARCH \*\*\*

df

PRINTED ON 18/2/2014



LAND AND PROPERTY INFORMATION NEW SOUTH WALES - HISTORICAL SEARCH

SEARCH DATE

17/2/2014 12:18PM

FOLIO: 1/812925

First Title(s): OLD SYSTEM

Prior Title(s): 11/737193

Recorded	Number	Type of Instrument	C.T. Issue
14/10/1991	DP812925	DEPOSITED PLAN	FOLIO CREATED EDITION 1
17/12/1991	E133561	LEASE	EDITION 2
9/10/1997	3476086	CHANGE OF NAME	EDITION 3
18/4/2000	6549910	SUB-LEASE	
26/7/2001	7806500	DEPARTMENTAL DEALING	
6/9/2001	7918294	CHANGE OF NAME	EDITION 4
26/7/2002	8587729	WITHDRAWN - DETERMINATION OF LEASE	
5/2/2003	9336496	DETERMINATION OF LEASE	
6/2/2003	DP1048377	DEPOSITED PLAN	FOLIO CANCELLED

\*\*\* END OF SEARCH \*\*\*

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - HISTORICAL SEARCH

SEARCH DATE

17/2/2014 12:13PM

FOLIO: 11/737193

First Title(s): OLD SYSTEM VOL 43 FOL 207  
VOL 1170 FOL 226  
Prior Title(s): VOL 655 FOL 214 VOL 1170 FOL 226  
VOL 1216 FOL 138 VOL 1314 FOL 187  
VOL 5018 FOL 1 VOL 7637 FOL 211

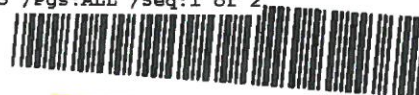
Recorded	Number	Type of Instrument	C.T. Issue
20/5/1987	DP737193	DEPOSITED PLAN	FOLIO CREATED EDITION 1
16/2/1988	X389925	DEPARTMENTAL DEALING	
13/7/1988	X698008	DEPARTMENTAL DEALING	EDITION 2
20/4/1989	Y130927	CAVEAT	
23/9/1991	Z939075	WITHDRAWAL OF CAVEAT	
11/10/1991	DP812925	DEPOSITED PLAN	FOLIO CANCELLED

\*\*\* END OF SEARCH \*\*\*

Form: 10CN  
Licence: 03-08-162  
Licensee: Frechills

## CHANGE OF NAME

New South Wales  
Real Property Act 1900



AD799255C

**PRIVACY NOTE:** Section 31B of the Real Property Act 1900 (RP Act) authorises the Registrar General to collect the information required by this form for the establishment and maintenance of the Real Property Act Register. Section 96B RP Act requires that the Register is made available to any person for search upon payment of a fee, if any.

(A) LAND	Torrens Title 23/DP1071597; 25/DP1071597; 6/DP1071601; 1/DP1071601		
(B) REGISTERED DEALING	Number	Torrens Title	
(C) LODGED BY	Delivery Box 898S	Name, Address or DX and Telephone LLPN: 123648F CORPS CHAMBERS WESTGARTH 1 LARRIER PLACE SYDNEY NSW 2000 Tel (02) 9210 6500	Code CN
(D) REGISTERED PROPRIETOR	Reference (optional): MC-AA-34D 9029812 N. Ruck Whose name is to be changed; show the name as it currently appears on the Torrens Title WATERWAYS AUTHORITY		
(E) NEW NAME	Of the above registered proprietor in full MARITIME AUTHORITY OF NSW		

(F) I, the registered proprietor referred to above, apply to have my new name recorded in the Register in respect of the above land.

### (G) STATUTORY DECLARATION BY THE APPLICANT \*

I [new name] solemnly and sincerely declare that

1. I am identical with the registered proprietor referred to above;
2. on ..... at .....  
in the State of ..... I married .....
3. See Annexure A

~~I make this solemn declaration conscientiously believing the same to be true and by virtue of the Oaths Act 1900, and I certify this application to be correct for the purposes of the Real Property Act 1900.~~

Made and subscribed at Sydney..... in the state of New South Wales  
on ..... in the presence of-

Signature of witness:

Signature of applicant:

Name of witness:

Address of witness:

Qualification of witness:

see annexure A

\* As the Department of Lands may not be able to provide the services of a justice of the peace or other qualified witness, the statutory declaration should be signed and witnessed prior to lodgement of the form at Land and Property Information Division.

---

## Annexure A

### Waterways Authority to Maritime Authority of NSW

Dated: -

---

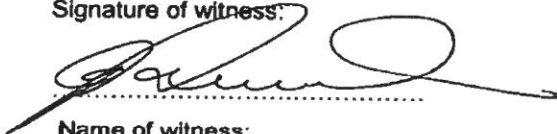
I, Steve Dunn, Deputy Chief Executive of Maritime Authority of NSW do solemnly and sincerely declare that:

- (a) The Marine Ministerial Holding Corporation (MMHC) was abolished in June 2000 by statute (section 4 of the *Statute Law (Miscellaneous Provisions) Act 2000*). Under section 40A of the *Ports and Maritime Administration Act 1995*, the assets, rights and liabilities of the MMHC were transferred to the Waterways Authority.
- (b) The Waterways Authority changed its name in 2006 to the Maritime Authority of NSW under the *Statute Law (Miscellaneous Provisions) Act 2006*.

I make this solemn declaration conscientiously believing that same to be true by virtue of the Oaths Act 1900, and I certify this application to be correct for the purposes of the Real Property Act 1900.

Made and subscribed at Sydney, in the State of NSW on 6th February 2008 in the presence of:

Signature of witness:



Name of witness:

ANTHONY MORRISON

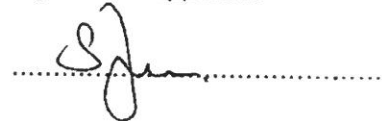
Address of witness:

LEVEL 11 207 KENT ST SYDNEY

Qualification of witness:

SOLICITOR

Signature of applicant:





97-100N

LTO Licence No.  
27C/0051/95

## Application to Record CHANGE OF NAME

Real Property Act 1900  
Crown Lands Consolidation Act 1900  
Western Lands Act 1901



3476086 B

(A) **LAND**

Show no more than 20 References to Title.

1. 1/812925	4. 2/737193	7. 13/737191
2. 2/812925	5. 3/737193	8. 15/737191
3. 1/737193	6. 10/737193	9. 16/737191

(B) **REGISTERED DEALING**

If applicable.

(C) **LODGED BY**

L.T.O. Box	1. Name, Address or DX and Telephone
27c	<b>FREEHILL HOLLINGDALE &amp; PAGE</b> MLC Centre Phone (02) 9225 5000 Martin Place DX 361 SYDNEY SYDNEY NSW 2000 REFERENCE (max. 15 characters): SJP:EDC:31G

(D) **REGISTERED PROPRIETOR**

whose name is to be changed.

THE MARITIME SERVICES BOARD OF NEW SOUTH WALES.

(E) **NEW NAME**

In full.

CN	MARINE MINISTERIAL HOLDING COMPANY CORPORATION
----	--


(F) I, the Registered Proprietor, apply to have my New Name recorded in the Register in respect of the above Land/Registered Dealing.

(G) **STATUTORY DECLARATION BY THE APPLICANT**

See attached Statutory Declaration

THE COMMON SEAL of  
**MARINE MINISTERIAL HOLDING  
CORPORATION**

(successor of the Maritime Services Board)  
was affixed to this document  
under delegation from the Minister for Ports before me:

  
General Counsel  
A. P. MORRISON SOLICITOR  
Name (PLEASE PRINT)



INSTRUCTIONS FOR FILLING OUT THIS FORM ARE GIVEN AT THE BACK

CHECKED BY (office use only)


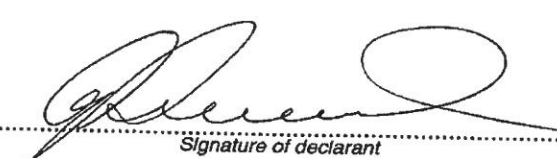
# STATUTORY DECLARATION

NEW SOUTH WALES

I, **ANTHONY MORRISON** of Level 11, 207 Kent Street, Sydney, do solemnly and sincerely declare that:

- 1 I am an officer of the Office of Marine Administration which administers the Marine Ministerial Holding Corporation and as such am authorised to make this declaration on its behalf and have personal knowledge of the facts set out below.
- 2 The Maritime Services Board of New South Wales ("MSB") is the Registered Proprietor of Lots 1 and 2 in Deposited Plan 812925, Lots 1, 2, 3 and 10 in Deposited Plan 737193 and Lots 13, 15 and 16 in Deposited Plan 737191 ("the Properties").
- 3 Clause 29 of the *Ports Corporatisation and Waterways Management Act* 1995 ("the Act") constituted the Marine Ministerial Holding Corporation as a statutory body representing the Crown and the successor of the MSB.
- 4 Section 32 of the Act provides that rights, assets and liabilities of the MSB which remain after the dissolution of the MSB and its subsidiaries are to be transferred to the Marine Ministerial Holding Corporation.
- 5 Title to the Properties has been transferred to the Marine Ministerial Holding Corporation in accordance with Section 32 of the Act.

And I make this solemn declaration conscientiously believing it to be true, and in accordance with the Oaths Act 1900.

Declared at Sydney on .....25th..... September 1997 before me:	
 ..... Signature of person administering the declaration	 ..... Signature of declarant
GEOFFREY K. SMITH. ..... Full name and qualification of the person administering the declaration	

# CHANGE OF NAME

New South Wales  
Real Property Act 1900



7918294J

(A) LAND

Torrens Title  
7/1018716; 1/812925; 1/737193; 2/737193; 3/737193; 10/737193; 12/737191; 13/737191;  
14/737191; 15/737191; 16/737191

(B) REGISTERED DEALING

Number

Torrens Title

(C) LODGED BY

LTO Box

27C

Name, Address or DX and Telephone

Freehills  
Level 32, MLC Centre  
Martin Place  
Sydney NSW 2000  
Reference (optional): 25G

CODE

CN

(D) REGISTERED PROPRIETOR

Whose name is to be changed; show the name as it currently appears on the Torrens Title  
MARINE MINISTERIAL HOLDING CORPORATION

(E) NEW NAME

Of the above registered proprietor in full  
WATERWAYS AUTHORITY

(F) I, the registered proprietor referred to above, apply to have my new name recorded in the Register in respect of the above land/  
registered dealing.

(G) STATUTORY DECLARATION BY THE APPLICANT

I [new name] Zeron Michnie wcz as delegate of the Waterways Authority solemnly and sincerely declare that-  
1. Waterways Authority is  
I am identical with the registered proprietor referred to above;

2. on at  
in the State of I married

3. that the Marine Ministerial Holding Corporation changed its name to Waterways Authority,  
a body corporate constituted under the Ports Corporatisation and Waterways Management Act 1995.

I make this solemn declaration conscientiously believing the same to be true and by virtue of the Oaths Act 1900, and I certify this application to be correct for the purposes of the Real Property Act 1900.

Made and subscribed at Sydney in the state of New South Wales  
on 5th September 2001 in the presence of-

Signature of witness

K.B. STURDAY

Name of witness

11/207 Kent St Sydney

Address of witness

Manager Ports & Projects  
Qualification of witness Waterways Authority

ANTHONY MORRISON

11/207 KENT ST SYDNEY

SOLICITOR

Signature of applicant

SIGNATURE OF APPLICANT

Freehills



97-10CN-2 (9901)

## Change of Name form 97-10CN: Instructions for Completion

1. Use dense blank ink. Do not use an eraser or correction fluid to make alterations: rule through rejected material and initial the left-hand margin.
2. If the space provided at any point is insufficient, insert "See Annexure" at that point and include the required material on sheets of white A4 paper at least 80 gsm (ordinary copier paper satisfies these requirements) using one side only. Insert a heading beginning "Annexure to ..." and specifying the type of form, the date and the parties to the transaction. Identify the material included, where possible by referred to the relevant marginal heading on the form. In the case of signatures which could not be fitted in the space provided, reproduce the text and layout used on the form. Number all pages in sequence with the form using the format "Pages...of..."; the number must be placed at the foot of each page and must be centred. The first and last pages must be signed by the parties and any witness. Securely attach the additional pages to the upper left-hand corner of the form: a Nalclip is preferred; stapling should be avoided.
3. Insert the total number of pages, including any additional pages (see above), in the space provided at the foot of the form.
4. Lodge the completed form by hand at the Land Titles Office, Queens Square, Sydney (adjacent to Hyde Park Barracks). The relevant certificate of title must also be lodged except in the case of a change of name of a registered lessee, mortgagee or charge, in which case lodgement of the certificate of title is optional.
5. The following instructions relate to the marginal letters on the form.

### (A) LAND

If the name to be changed is that of the registered proprietor of land, insert the number of the relevant folio of the Register; otherwise leave this panel blank.

### (B) REGISTERED DEALING

If the name to be changed is that of a registered lessee, mortgagee or chargee, insert the registration number only of the lease, mortgage or charge below "Number", and the number of the relevant folio of the Register below "Torrens Title"; otherwise leave this panel blank.

### (C) LODGED BY

This section must be completed by the person or firm lodging the form at the Land Titles Office. If the party lodging does not have a Land Titles Office delivery box, leave this panel blank. Provision of a reference is optional.

### (D) REGISTERED PROPRIETOR

Insert the full name of the person or corporation whose name is to be changed as it currently appears on the certificate of title. Address and occupation are not required. In the case of a corporation the ACN or ARBN is required.

### (E) NEW NAME

Insert in full the new name of the person or corporation whose name is to be changed. Address and occupation are not required. In the case of a corporation the ACN or ARBN is required.

### (F) LAND/REGISTERED DEALING

Rule through "land" or "registered dealing", whichever does not apply.

### (G) STATUTORY DECLARATION

The applicant must be the person whose name is to be changed, that person's attorney or solicitor, or an authorised officer in the case of a corporation.

Insert the full name of the declarant and, where appropriate, the capacity; in the case of an attorney add the registration number of the power of attorney. Insert the place and date of the declaration. The witness must be a justice of the peace, practising solicitor, notary public, commissioner of the court for taking affidavits or a person otherwise authorised to administer an oath. If signed outside New South Wales, rule through "Oaths Act 1900" and substitute the local Act; the witness must be a person qualified by that Act to administer an Oath.

Complete clause 2 where the change of name is the result of marriage; rule through clause 3.

Complete clause 3 where the change of name is the result of other than marriage; rule through clause 2. In the case of a change of name-

*By use and repute where a deed of change of name has been registered* include the registration number of the deed and a statement that the person named in the deed is identical with the registered proprietor;

*By use and repute where a deed of change of name has not been registered* set out the details of the change of name;

*By naturalisation* attach a copy of the naturalisation certificate;

*Of a corporation* either include a statement that the change was made in accordance with the relevant legislation (specify the legislation), or attach a copy of the certificate of incorporation of change of name certified by a solicitor to be a true copy or produce an office copy of the certificate.

*If you have any questions, please call Land Titles Office Services on 9228 6713.*



**Requested Parcel** : Lot 65 DP 1048377

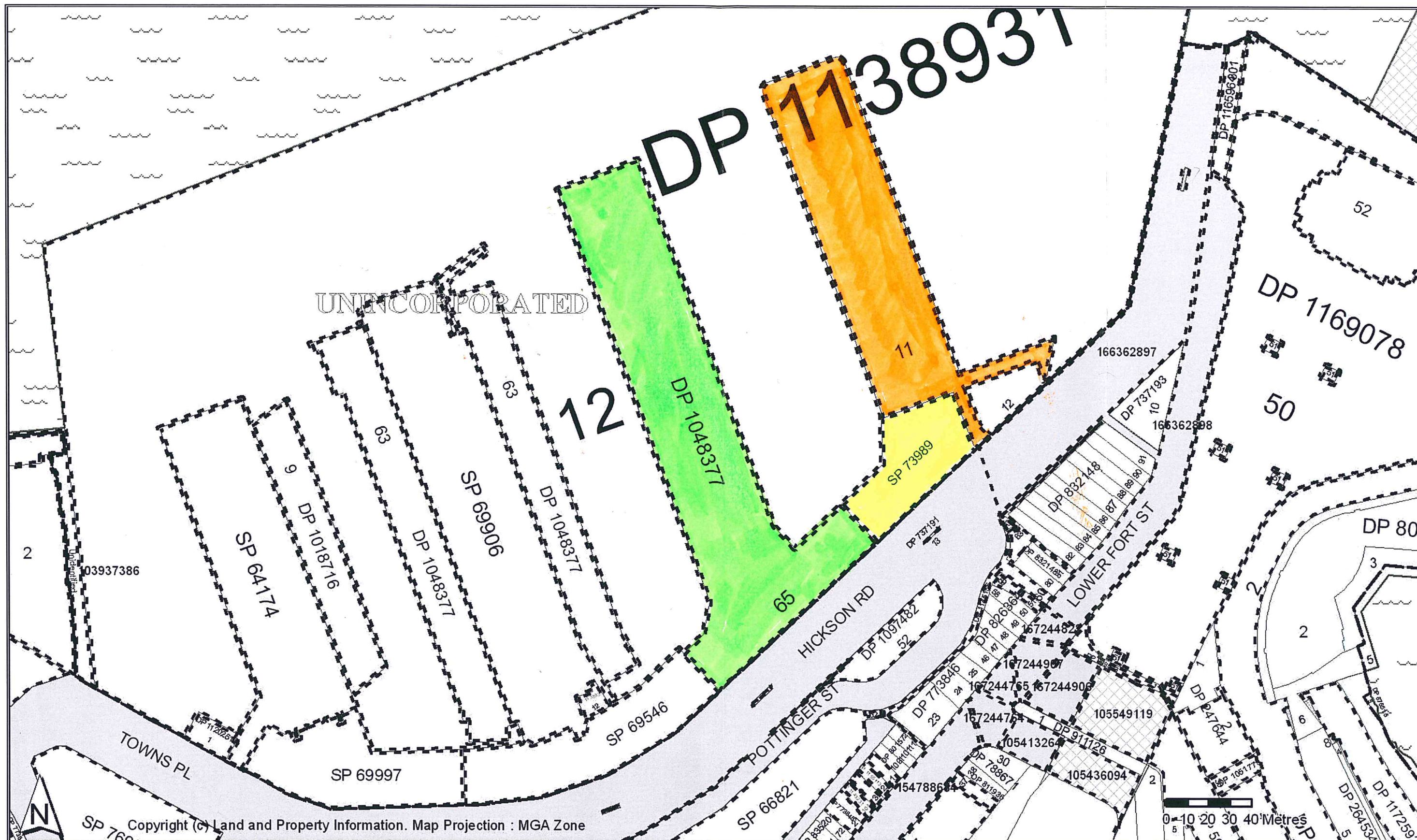
LGA : UNINCORPORATED

**Parish :** null

**Identified Parcel** : Lot 65 DP 1048377

**County : CUMBERLAND**

**Ref :** surv:scim-fallond





## SIGNATURES, AND SEALS ONLY

SIGNED by me ZENON MICHALCZAK  
as Delegate of THE WATERWAYS AUTHORITY  
and I hereby certify that I have  
no notice as to revocation of  
such delegation

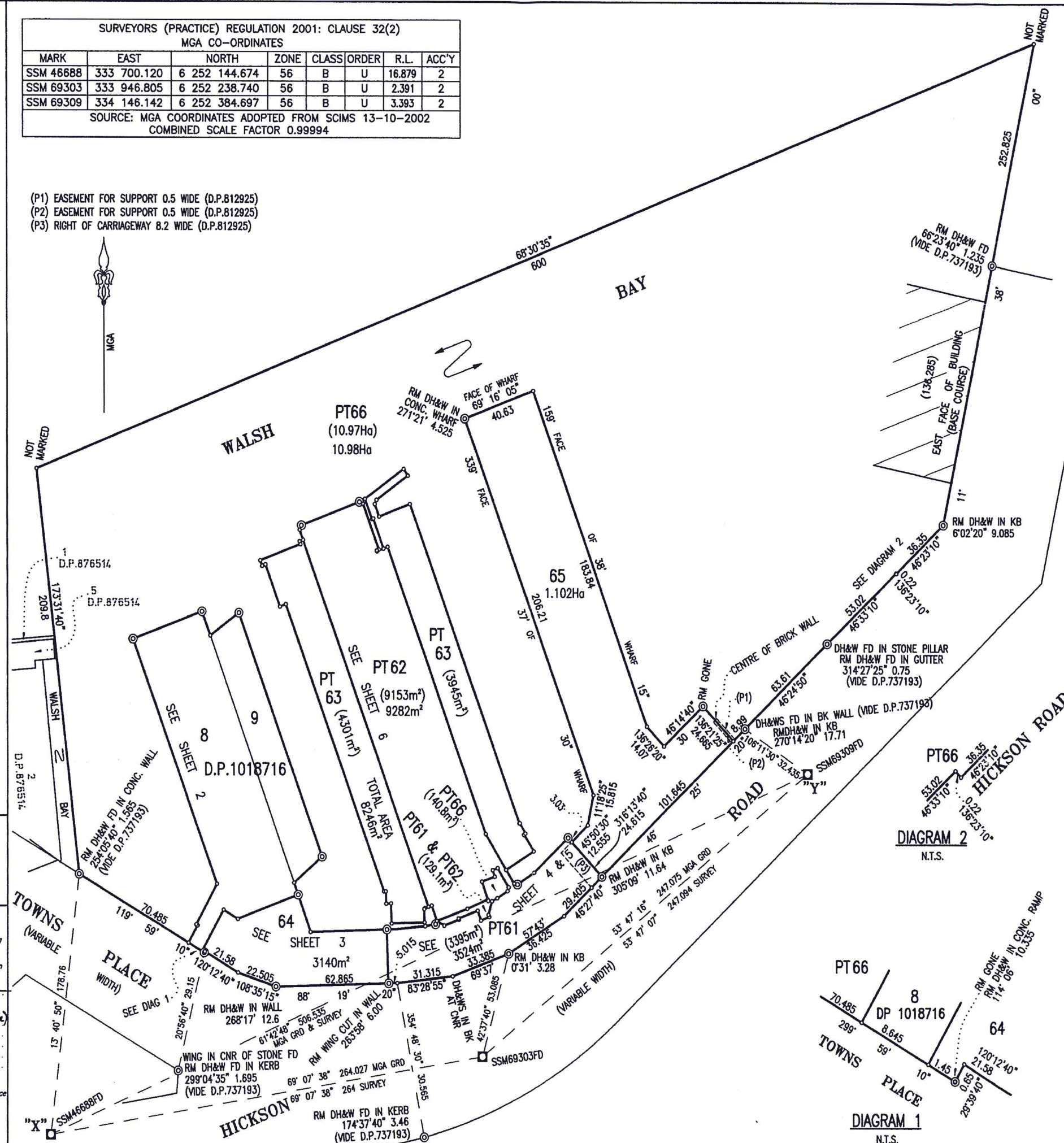
Signed for SYDNEY WATER CORPORATION  
by its Attorneys

WARREN FREDERICK  
JEFFREY FRANCIS  
who hereby state at the time of executing this instrument have  
no notice of the revocation of the Power of Attorney Registered  
No. 87 Book 100 under Authority of which this instrument  
has been executed.

Witness  
Witness  
WITNESS

SURVEYORS (PRACTICE) REGULATION 2001: CLAUSE 32(2)							
MGA CO-ORDINATES							
MARK	EAST	NORTH	ZONE	CLASS	ORDER	R.L.	ACC'Y
SSM 46688	333 700.120	6 252 144.674	56	B	U	16.879	2
SSM 69303	333 946.805	6 252 238.740	56	B	U	2.391	2
SSM 69309	334 146.142	6 252 384.697	56	B	U	3.393	2
SOURCE: MGA COORDINATES ADOPTED FROM SCIMS 13-10-2002							
COMBINED SCALE FACTOR 0.99994							

- (P1) EASEMENT FOR SUPPORT 0.5 WIDE (D.P.812925)  
(P2) EASEMENT FOR SUPPORT 0.5 WIDE (D.P.812925)  
(P3) RIGHT OF CARRIAGEWAY 8.2 WIDE (D.P.812925)



DP1048377

Registered: 15-2-2003

CA: \_\_\_\_\_

Title System: TORRENS

Purpose: SUBDIVISION

Ref Map: U 1845-111, 1121, 1122  
U 1852-73

Last Plan: DP1018716, DP812925

PLAN OF SUBDIVISION OF LOT  
7 IN D.P.1018716 & LOT 1 IN  
D.P.812925

Lengths are in metres. Reduction Ratio 1:1500

LGA SYDNEY

Locality: MILLERS POINT

Parish: ST PHILIP

County: CUMBERLAND

This is sheet 1 of my plan in 8 sheets  
(Delete if inapplicable).

Surveyors (Practice) Regulation 2001

PATRICK JOHN WALSH  
of LEVEL 5, 17 RANDLE STREET  
SURRY HILLS NSW 2010  
a surveyor registered under the Surveyors  
Act 1929, certify that the survey  
represented in this plan is accurate, has  
been made in accordance with the  
Surveyors (Practice) Regulation 2001 and  
was completed on 11/11/02.  
The survey relates to:

(specify the land actually surveyed or  
specify any land shown in the plan that is  
not the subject of the survey)

Signature: Patrick Walsh

Dated: 11/11/02

Surveyor registered under the Surveyor Act 1929

Datum Line: 'X'-'Y'

Type: Urban/Rural

Plans used in preparation of survey/compilation

D.P. 812925

D.P. 737193

D.P. 876514

PANEL FOR USE ONLY for statements of  
intention to dedicate public roads, to create  
public reserves, drainage reserves, easements,  
restrictions on the use of land or positive  
covenants

PURSUANT TO SEC. 88B OF THE CONVEYANCING  
ACT 1919 IT IS INTENDED TO CREATE:

1. EASEMENT FOR SERVICES
2. RIGHT OF ACCESS (Z)
3. RIGHT OF PUBLIC ACCESS (A)  
(LIMITED IN DEPTH)
4. RIGHT OF PUBLIC ACCESS (B)
5. EASEMENT FOR SUPPORT AND SHELTER
6. RIGHT OF ACCESS (X)
7. RIGHT OF ACCESS (Y)
8. EASEMENT FOR STORMWATER DRAINAGE  
PURPOSES (W3)
9. EASEMENT FOR SEWERAGE PURPOSES  
OVER EXISTING LINE OF PIPES (G)
10. EASEMENT FOR EMERGENCY OVERFLOW  
DRAINAGE (D)
11. PUBLIC POSITIVE COVENANT
12. EASEMENT FOR STORMWATER  
DRAINAGE PURPOSES (W1)
13. EASEMENT FOR STORMWATER  
DRAINAGE PURPOSES (W2)

CONTINUED ON SHEET 2

Crown Lands Office Approval

PLAN APPROVED: \_\_\_\_\_

Land District: \_\_\_\_\_

Paper No.: \_\_\_\_\_

Field Book: \_\_\_\_\_

Subdivision Certificate

I certify that the provisions of s.108 of the Environmental Planning  
and Assessment Act 1979 have been satisfied in relation to the  
proposed

Subdivision

\* (Insert 'subdivision' or 'new road' set out herein)

\* Authorised Person/General Manager/Authorised Officer

Consent Authority: Minister for Planning (delegate)

Date of endorsement: 23/11/2003

Accreditation no: \_\_\_\_\_

Subdivision Certificate no: M235-07-00

File no: 500/01140 P44

Note:  
When the plan is to be lodged electronically in the Land Titles Office  
it should include a signature in an electronic or digital format  
approved by the Registrar-General

\* Delete if inapplicable.

SURVEYOR'S REFERENCE: 000122 SUB

"CHECKLIST"

WARNING: CREASING OR FOLDING WILL LEAD TO REJECTION

X:\97JOBS\970606\_WALSH-BAY\000122-PIER\_6-7\SHEET-1.DWG



WALSH

BAY

DP1048377

Registered: 15-2-2003

This is sheet 2 of my plan in 8 sheets  
dated 7/01/03

Patrick Walsh

Surveyor registered under Surveyors Act 1929

This is sheet 2 of the plan of 8 sheets  
covered by subdivision certificate No. 235-07-00  
of 23.1.03

Authorised Person/General Manager/Ascredited Geomatic

For use where space is insufficient in any panel on Plan  
Form 2.

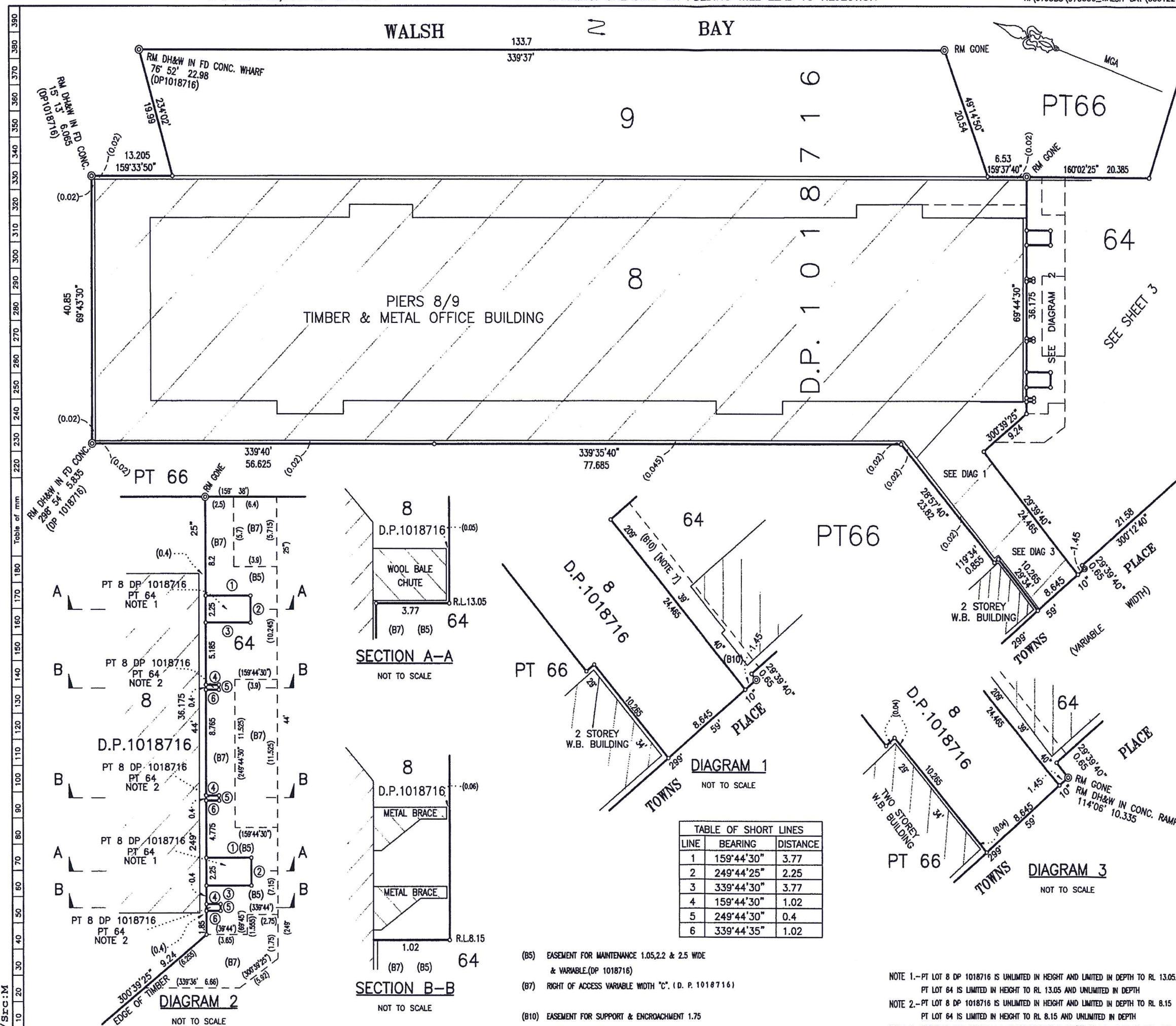
CONTINUED FROM SHEET 1

14. PUBLIC POSITIVE COVENANT
15. EASEMENT TO SECURE VESSELS 0.5 WIDE (S)
16. EASEMENT FOR STORMWATER DRAINAGE PURPOSES (W4)
17. PUBLIC POSITIVE COVENANT
18. EASEMENT FOR SUPPORT OF STORMWATER WORKS (W2)
19. EASEMENT FOR SUPPORT OF STORMWATER WORKS (W4)
20. EASEMENT FOR SUPPORT (H)
21. PUBLIC POSITIVE COVENANT

Reduction Ratio 1: 400

SURVEYOR'S REFERENCE: 000122 SUB

Req:R987793 /Doc:DP 1048377 P /Rev:27-Mar-2003 /Sts:SC.OK /Prt:13-Feb-2014 14:25 /Pgs:ALL /Seq:2 of 8  
 Ref:df /Src:M



Plan Drawing only to appear in this space



DP1048377

Registered: 15-2-2003

This is sheet 3 of my plan in 8 sheets  
dated 7/01/03

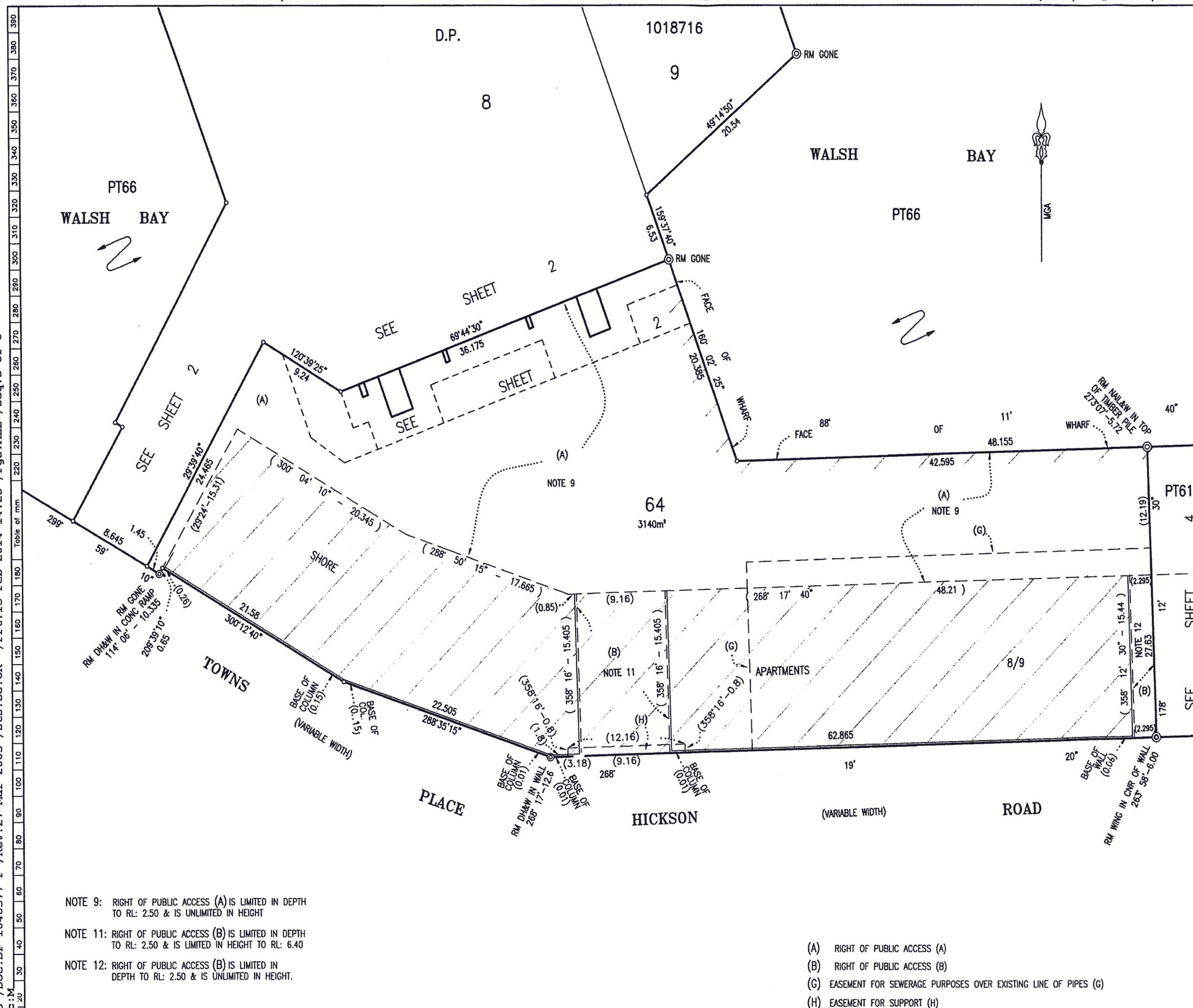
*Patrick Walsh*  
Surveyor registered under Surveyors Act 1929

This is sheet 3 of the plan of 8 sheets  
covered by subdivision certificate No. 215.07.03  
of 22.1.03

*[Signature]*  
Authorised Person/General Manager/Accredited Certifier

For use where space is insufficient in any panel on Plan  
Form 2.

Req:R987793 /Doc:DP 1048377 P /Rev:27-Mar-2003 /Sts:SC:OK /Drt:13-Feb-2014 14:25 /Pgs:ALL /Seq:3 of 8  
Ref:df /Src:M





DP1048377

Registered: 15-2-2003

This is sheet 4 of my plan in 8 sheets  
dated 7/01/03

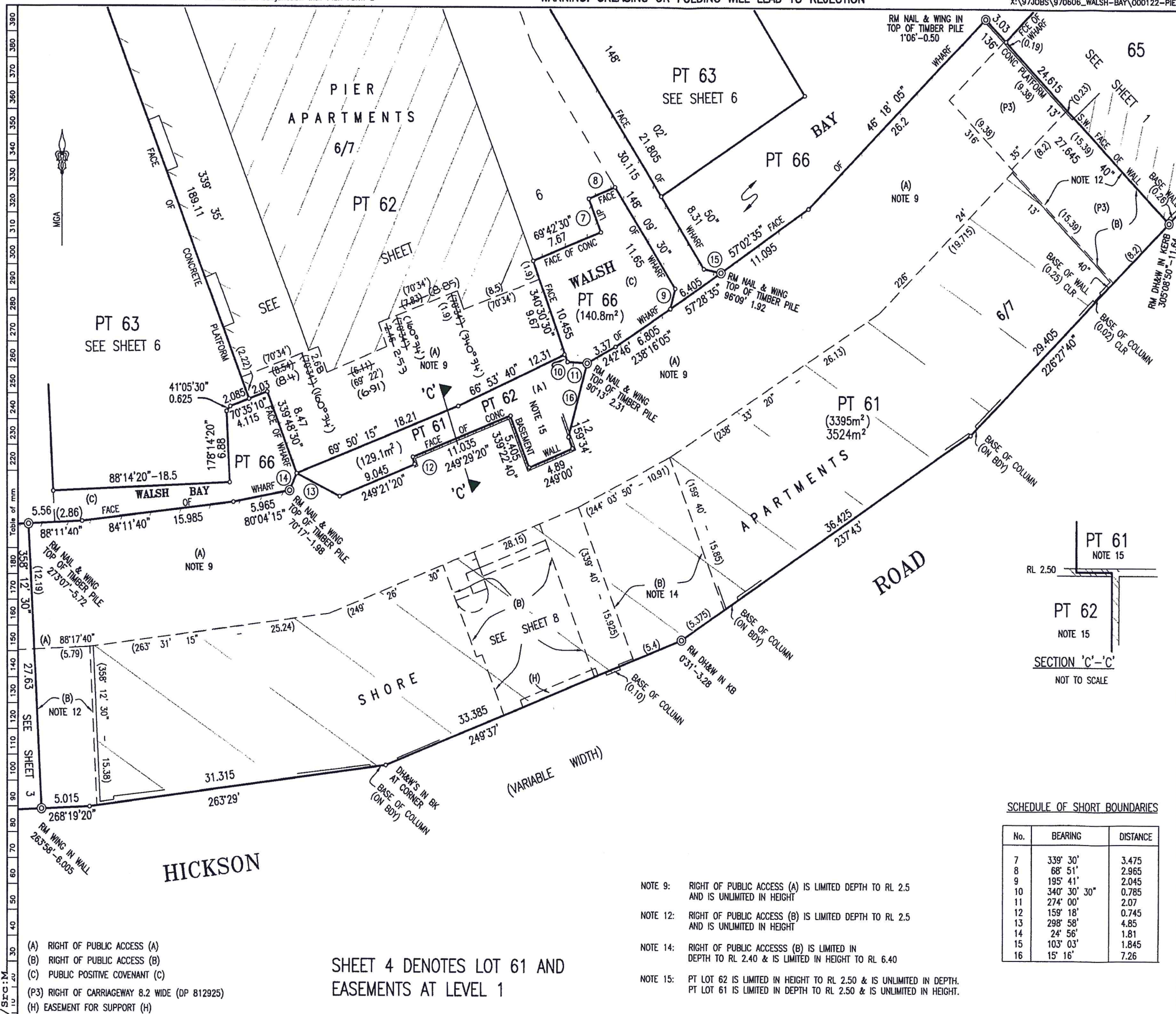
*Patrich Walsh*  
Surveyor registered under Surveyors Act 1929

This is sheet 4 of the plan of 8 sheets  
covered by subdivision certificate No. 235-07-00  
of 25-1-03

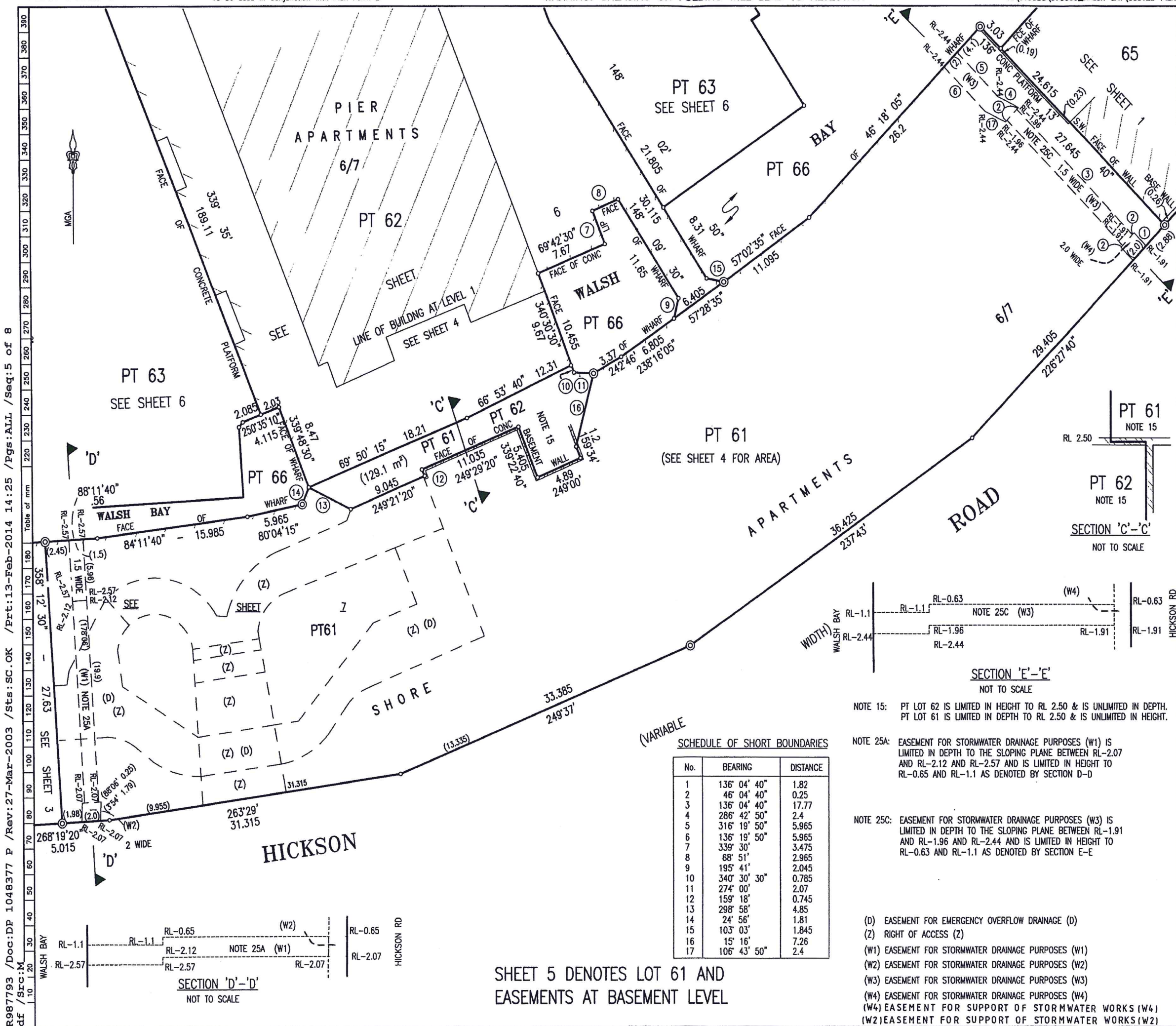
*[Signature]*  
Authorised Person/General Manager/Accredited Certifier

For use where space is insufficient in any panel on Plan  
Form 2.

Req:R987793 /Doc:DP 1048377 P /Rev:27-Mar-2003 /Sts:SC.OK /Prt:13-Feb-2014 14:25 /Pgs:ALL /Seq:4 of 8  
Ref:df /Src:M







DP1048377

Registered:  45-2-2003

This is sheet 5 of my plan in 8 sheets  
dated. 7/01/03

*Patrick Walsh*  
Surveyor registered under Surveyors Act 1929

This is sheet 5 of the plan of 8 sheets covered by subdivision certificate No. 235-07-00 of 27.107.

Authorised Person/General Manager/Accredited Certifier

For use where space is insufficient in any panel on Plan Form 2.

Reduction Ratio 1: 250

— SURVEYOR'S REFERENCE: 000122 SUB

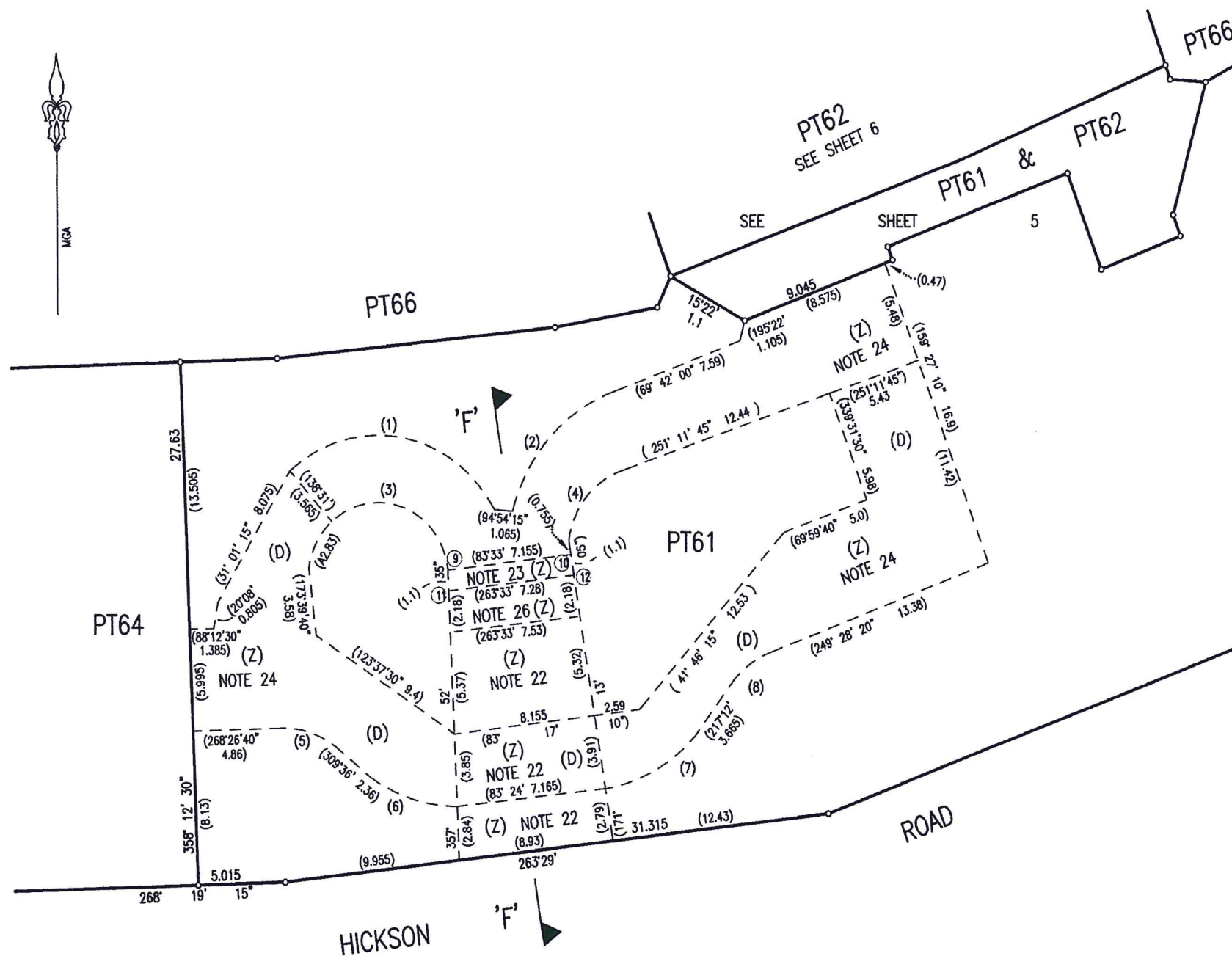


For use where space is insufficient in any panel on Plan Form 2.



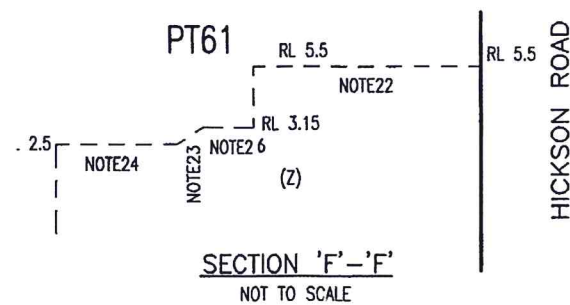
AMENDMENTS MADE IN LPI/NSW AT SURVEYORS REQUEST VIDE 2003/600  26.3.2003

Reg: R987793 / Doc: DP 1048377 P / Rev: 27-Mar-2003 / Sts: SC OK / Prt: 13-Feb-2014 14:25 / Pgs: ALL / Seq: 7 of 8  
 Ref: df / Src: M



- NOTE 22: RIGHT OF ACCESS DENOTED (Z) IS UNLIMITED IN DEPTH  
& IS LIMITED IN HEIGHT TO RL5.50
- NOTE 23: RIGHT OF ACCESS DENOTED (Z) IS UNLIMITED IN DEPTH  
& IS LIMITED IN HEIGHT TO THE INCLINED PLANE PASSING  
THROUGH THE NUMBERED POINTS ⑨⑩⑪⑫  
AS DENOTED BY SECTION F-F
- NOTE 24: RIGHT OF ACCESS (Z) IS UNLIMITED IN DEPTH  
& IS LIMITED IN HEIGHT TO RL2.50
- NOTE 26: RIGHT OF ACCESS (Z) IS UNLIMITED IN DEPTH  
& IS LIMITED IN HEIGHT TO RL3.15
- (D) EASEMENT FOR EMERGENCY OVERFLOW DRAINAGE (D)  
(Z) RIGHT OF ACCESS (Z)

SHEET 7 DENOTES RIGHT OF ACCESS (Z)  
AT BASEMENT LEVEL



SCHEDULE OF CURVED BOUNDARIES				
No.	CHORD	ARC	RADIUS	
(1)	100'00'45"	11.825	13.55	7.6
(2)	43'16'40"	8.715	9.075	9.22
(3)	270'53'35"	7.905	11.545	3.98
(4)	220'31'30"	4.89	5.17	4.49
(5)	287'44'35"	3.63	3.72	4.86
(6)	287'17'	5.15	5.225	8.78
(7)	241'52'	5.835	5.95	8.78
(8)	235'16'20"	2.66	2.69	5.15

SCHEDULE OF EASEMENT LEVELS	
No.	R.L.
⑨	2.50
⑩	2.50
⑪	3.15
⑫	3.15

DP1048377

Registered: 15-2-2003

This is sheet 7 of my plan in 8 sheets  
dated 7/01/03

Surveyor registered under Surveyors Act 1929

This is sheet 7 of the plan of 8 sheets  
covered by subdivision certificate No. 235-0700  
of 23-1-03

Authorised Person/General Manager/Accredited Certifier

For use where space is insufficient in any panel on Plan  
Form 2.

Reduction Ratio 1: 200

SURVEYOR'S REFERENCE: 000122 SUB

Plan Drawing only to appear in this space



DP1048377

Registered: 15-2-2003

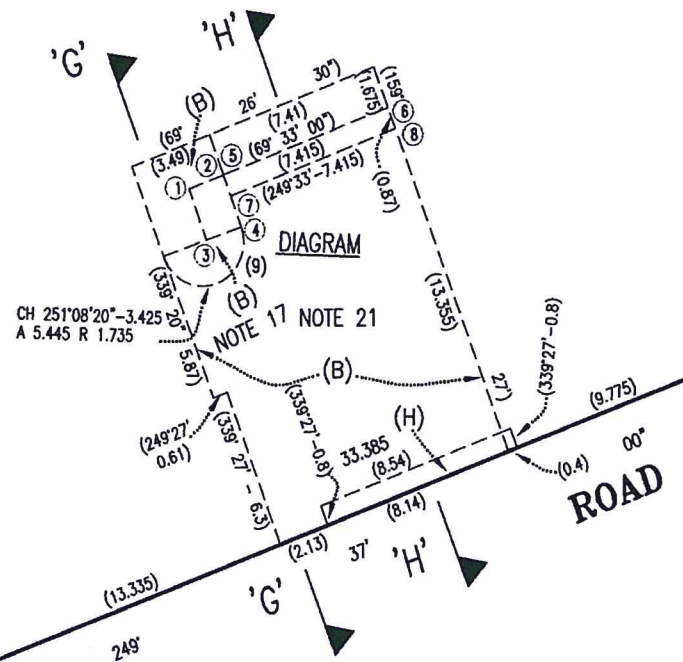
This is sheet 8 of my plan in 8 sheets  
dated 7/01/03

*Patrick Walsh*  
Surveyor registered under Surveyors Act 1929

This is sheet 8 of the plan of 8 sheets  
covered by subdivision certificate No. 235-67-00  
of 23.1.03

*[Signature]*  
Authorised Person/General Manager/Accredited Certifier

For use where space is insufficient in any panel on Plan  
Form 2.



(B) RIGHT OF PUBLIC ACCESS (B)  
(H) EASEMENT FOR SUPPORT (H)

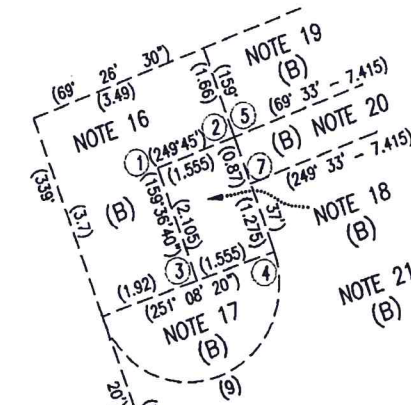
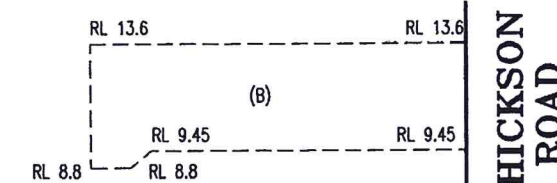
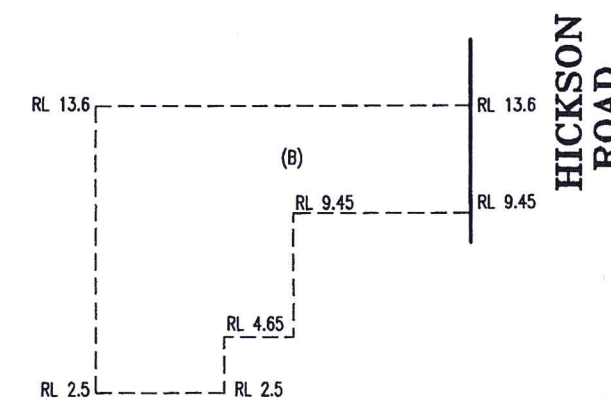


DIAGRAM 1  
N.T.S.



SECTION 'H'-H'  
N.T.S.



SECTION 'G'-G'  
N.T.S.

HICKSON

- NOTE 16: RIGHT OF PUBLIC ACCESS DENOTED (B) IS LIMITED IN DEPTH TO RL2.50 & IS LIMITED IN HEIGHT TO RL13.6
- NOTE 17: RIGHT OF PUBLIC ACCESS DENOTED (B) IS LIMITED IN DEPTH TO RL4.65 & IS LIMITED IN HEIGHT TO RL13.60
- NOTE 18: RIGHT OF PUBLIC ACCESS DENOTED (B) IS LIMITED IN DEPTH TO THE INCLINED PLANE PASSING THROUGH THE NUMBERED POINTS ①②③④ AND IS LIMITED IN HEIGHT TO RL13.60
- NOTE 19: RIGHT OF PUBLIC ACCESS DENOTED (B) IS LIMITED IN DEPTH TO RL8.80 & IS LIMITED IN HEIGHT TO RL13.60
- NOTE 20: RIGHT OF PUBLIC ACCESS DENOTED (B) IS LIMITED IN DEPTH TO THE INCLINED PLANE PASSING THROUGH THE NUMBERED POINTS ⑤⑥⑦⑧ LIMITED IN HEIGHT TO RL13.60
- NOTE 21: RIGHT OF PUBLIC ACCESS DENOTED (B) IS LIMITED IN DEPTH TO RL9.45 & IS LIMITED IN HEIGHT TO RL13.60

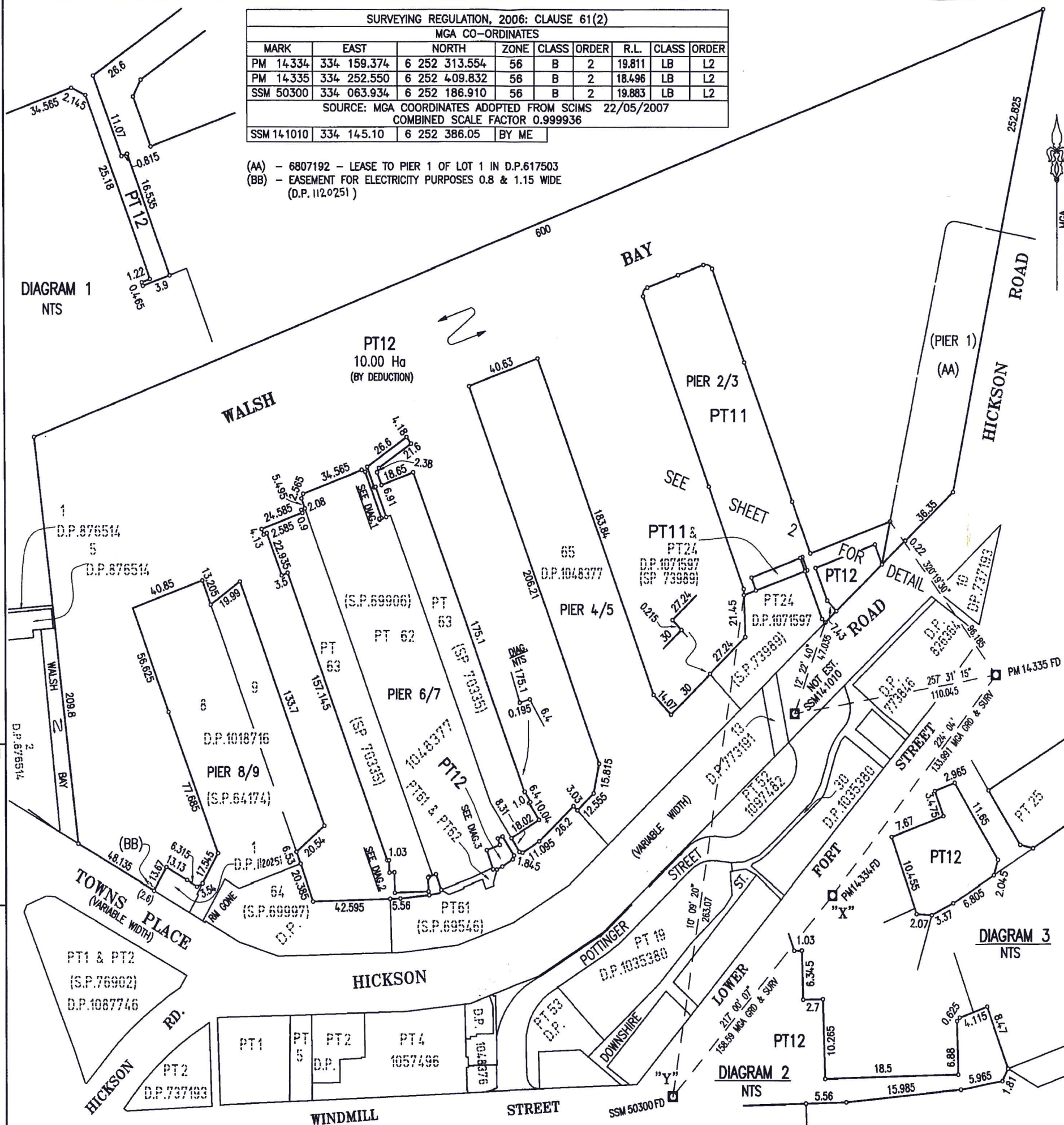
SCHEDULE OF EASEMENT LEVELS	
No.	R.L.
①	6.00
②	6.00
③	4.65
④	4.65
⑤	8.80
⑥	8.80
⑦	9.45
⑧	9.45



SIGNATURES, AND SEALS ONLY

SURVEYING REGULATION, 2006: CLAUSE 61(2)									
MGA CO-ORDINATES									
MARK	EAST	NORTH	ZONE	CLASS	ORDER	R.L.	CLASS	ORDER	
PM 14334	334 159.374	6 252 313.554	56	B	2	19.811	LB	L2	
PM 14335	334 252.550	6 252 409.832	56	B	2	18.496	LB	L2	
SSM 50300	334 063.934	6 252 186.910	56	B	2	19.883	LB	L2	
SOURCE: MGA COORDINATES ADOPTED FROM SCIMS 22/05/2007									
COMBINED SCALE FACTOR 0.999936									
SSM 141010	334 145.10	6 252 386.05	BY ME						

(AA) - 6807192 - LEASE TO PIER 1 OF LOT 1 IN D.P.617503  
(BB) - EASEMENT FOR ELECTRICITY PURPOSES 0.8 & 1.15 WIDE  
(D.P.1120251)

DIAGRAM 1  
NTS

SIGNED by me Paul Robinson  
as Delegate of MARITIME AUTHORITY  
of NSW and I hereby certify that I have no  
notice as to revocation of such delegation

Department of Land and Water Conservation Approval

I, ..... in approving this plan certify  
(Authorised Officer)  
that all necessary approvals in regard to the allocation  
of the land shown hereon have been given.

Signature: .....

Date: .....

File Number: .....

Office: .....

## Subdivision Certificate

I certify that the provisions of s.109j of the Environmental  
Planning and Assessment Act 1979 have been satisfied in  
relation to the proposed

## SUBDIVISION

..... set out herein  
\*(insert 'subdivision' or 'new road')

\* Authorised Person/General Manager/Accredited Certifier  
Consent Authority: CITY OF SYDNEY

Date of endorsement: 21 APRIL 2009

Accreditation no: .....

Subdivision Certificate no: 16/2009

File no: S/2008/59

Note:

When the plan is to be lodged electronically in the Land Titles  
Office, it should include a signature in an electronic or digital  
format approved by the Registrar-General.

\* Delete whichever is inapplicable.



DP1138931 P

Registered: 31-07-2009

C.A.: SEE CERTIFICATE

Title System: TORRENS

Purpose: SUBDIVISION

Ref. Map: U1845-111, U1845-1121  
U1845-1122, U1852-73

Last Plan: DP1071597, DP1120251

PLAN OF SUBDIVISION OF LOT  
23 IN D.P.1071597 & LOT 2  
IN D.P.1120251

Lengths are in metres. Reduction Ratio 1:1500 (A2)

LGA SYDNEY

Locality: WALSH BAY

Parish: ST PHILIP

County: CUMBERLAND

This is sheet 1 of my plan in 2 sheets  
(Delete if inapplicable).

## SURVEYING REGULATION, 2006

I, TASY MORAITIS of DENNY LINKER & Co  
of L5, 17 RANDLE ST, SURRY HILLS, NSW, 2010  
a surveyor registered under the Surveying Act, 2002, certify  
that the survey represented in this plan is accurate, has  
been made in accordance with the Surveying Regulation,  
2006 and was completed on 23/04/2007.  
The survey relates to: LOT 11 ONLY.  
LOT 12 IS COMPILED.

(specify the land actually surveyed or specify any land shown in  
the plan that is not the subject of the survey)

Signature: Tasy Moraitis Dated: 22/05/2007

Surveyor registered under the Surveying Act, 2002

Datum Line: 'X' - 'Y'

Type: Urban / Rural

Plans used in preparation of survey/compilation

D.P. 617503 D.P. 737193

D.P. 1071597 D.P. 1018716

D.P.

PANEL FOR USE ONLY for statements of  
intention to dedicate public roads, to create  
public reserves, drainage reserves, easements,  
restrictions on the use of land or positive  
covenants

PURSUANT TO SEC. 88B OF THE  
CONVEYANCING ACT 1919 IT IS INTENDED  
TO CREATE:

1. EASEMENT FOR SUPPORT 0.8 WIDE.
2. EASEMENT FOR WATER SUPPLY PURPOSES 1.5 WIDE.
3. EASEMENT FOR ELECTRICITY PURPOSES OVER EXISTING LINE OF CABLES.
4. RIGHT OF PUBLIC ACCESS VARIABLE WIDTH
5. RESTRICTION ON THE USE OF LAND



## EASEMENTS:

- (A) - RIGHT OF PUBLIC ACCESS (A) (D.P.1071597)  
 (B) - EASEMENT FOR ACCESS (B) (DP 1071597)  
 (C) - EASEMENT FOR SUPPORT & SHELTER (C) (D.P.1071597)  
 (J) - EASEMENT FOR EXISTING SERVICES (J) (D.P.1071597)  
 (K) - EASEMENT FOR SUPPORT 0.8 WIDE.  
 (L) - EASEMENT FOR WATER SUPPLY PURPOSES 1.5 WIDE.  
 (M) - EASEMENT FOR ELECTRICITY PURPOSES OVER EXISTING LINE OF CABLE.  
 APPROXIMATE POSITION ONLY  
 (N) - RIGHT OF PUBLIC ACCESS VARIABLE WIDTH

ZONE A - THE ONLY PART OF LOT 11 NOT BURDENED BY THE EASEMENTS NOTED IN EASEMENT TABLE 1

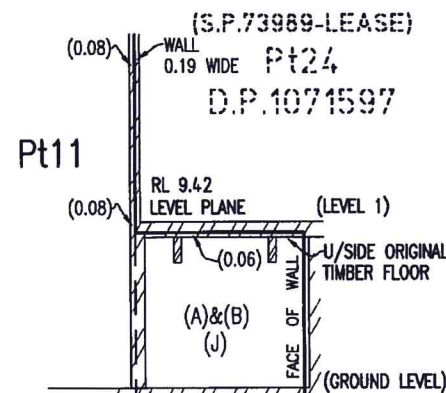
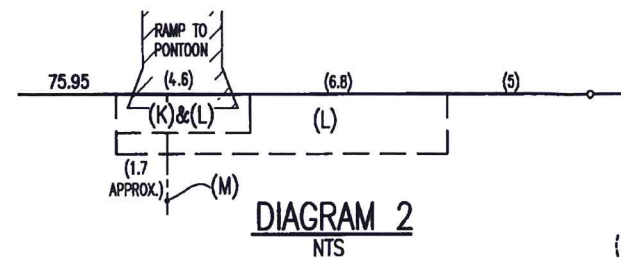
ZONE B - THE ONLY PART OF LOT 12 BURDENED BY THE EASEMENTS NOTED IN EASEMENT TABLE 1

## EASEMENT TABLE 1

EASEMENTS CREATED VIDE S.P.73989

- EASEMENT FOR WATER SERVICE.  
 -EASEMENT FOR SEWERAGE SERVICE.  
 -EASEMENT FOR DRAINAGE SERVICE.  
 -EASEMENT FOR GAS SERVICE.  
 -EASEMENT FOR ELECTRICITY SERVICE.  
 -EASEMENT FOR GARBAGE SERVICE.  
 -EASEMENT FOR CONDITIONED AIR SERVICE  
 -EASEMENT FOR TELEPHONE, TELEVISION OR RADIO IMPULSES OR SIGNALS SERVICE.

NOTE: THE ABOVE EASEMENTS WERE CREATED PURSUANT TO SEC 9(3) OF THE STRATA SCHEMES (LEASEHOLD DEVELOPMENT) ACT 1986. NO SERVICE PIPES EXISTED IN ZONE A OR ZONE B AT THE TIME OF REGISTRATION OF S.P.73989.

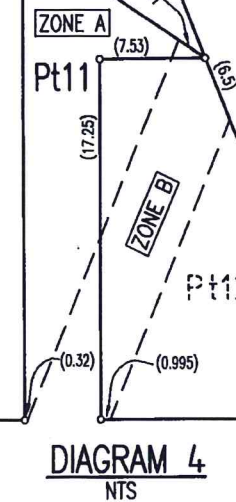


SECTION 'A'-A'  
SCALE 1:200

(X) POSITIVE COVENANT - DP1071597  
 BENEFITED BY EASEMENT FOR ACCESS-DP1071597  
 EASEMENT FOR SUPPORT & SHELTER-DP1071597  
 EASEMENT FOR SERVICES-DP1071597  
 EASEMENT FOR EXISTING SERVICES-DP1071597  
 RIGHT TO USE DISABLED TOILET-SP73989  
 OTHER EASEMENTS SEE "EASEMENT TABLE 1"

PIER 1  
(LEASE-6807192)

LOT 11 IS UNLIMITED IN HEIGHT & DEPTH EXCEPT FOR THOSE PARTS AS SHOWN IN SECTION 'A'-A' & 'B'-B'.



DP1138931

Registered: 31-07-2009

This is sheet 2 of my plan in 2 sheets dated 22/05/2007

*Tammy Makin*  
 Surveyor registered under Surveyors Act 1929

This is sheet 2 of the plan of 2 sheets covered by subdivision certificate No. 16 of 2009

*J. McMahon*  
 Authorised Person/General Manager/Accredited-Certifier

For use where space is insufficient in any panel on Plan Form 2.

SIGNED by me *Paul Robinson*  
 as Delegate of MARITIME AUTHORITY of NSW and I hereby certify that I have no notice as to revocation of such delegation

Reduction Ratio 1: 500

SURVEYOR'S REFERENCE: 031210 LINKBRIDGE

Req:R987790 /Doc:DP 1138931 P /Rev:31-Jul-2009 /Sts:SC.OK /Prt:13-Feb-2014 14:25 /Pgs:ALL /Seq:2 of 2

DIAGRAM NTS

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DIAGRAM NTS


DIAGRAM NTS

DIAGRAM NTS

\* AMENDED BY TASY MORRIS 9-6-2009



DP1071597

Registered:  01.12.2004 \*

C.A.: SEE CERTIFICATE

Title System: TORRENS

Purpose: SUBDIVISION

Ref.Map: 01845-111 01845-1122  
01845-1121 01852-73

Last Plan: DP 1048377

PLAN OF SUBDIVISION OF LOT  
66 IN D.P. 1048377.

Lengths are in metres. Reduction Ratio 1:1500

LGA: SYDNEY  
Locality: WALSH BAY  
Parish: ST PHILIP  
County: CUMBERLAND

This is sheet 1 of my plan in 2 sheets  
(Delete if inapplicable).

**SURVEYING REGULATION, 2001**  
**TASY MORATIS of DENNY LINKER & Co**  
 of L5, 17 RANDLE ST, SURRY HILLS. NSW. 2010  
 a survey registered under the Surveying Act, 2002, certify  
 that the survey represented in this plan is accurate, has  
 been made in accordance with the Surveying Regulation,  
 2001 and was completed on 21-03-2004  
 The survey relates to: **LOTS 25 & 24 ONLY**  
**LOT 25 IS COMPILED**

(specify the land actually surveyed or specify any land shown in the plan that is not the subject of the survey)

Signature: Tamara Dated: 3.08.04  
 Surveyor registered under the Surveying Act, 2002  
 Datum Line: 'X' - 'Y'  
 Type: Urban / Rural:

Plans used in preparation of survey/compilation  
D.P. 1048377 D.P. 812925  
D.P. 737191 D.P. 737193  
D.P. 1018716

PANEL FOR USE ONLY for statements of intention to dedicate public roads, to create public reserves, drainage reserves, easements, restrictions on the use of land or positive covenants

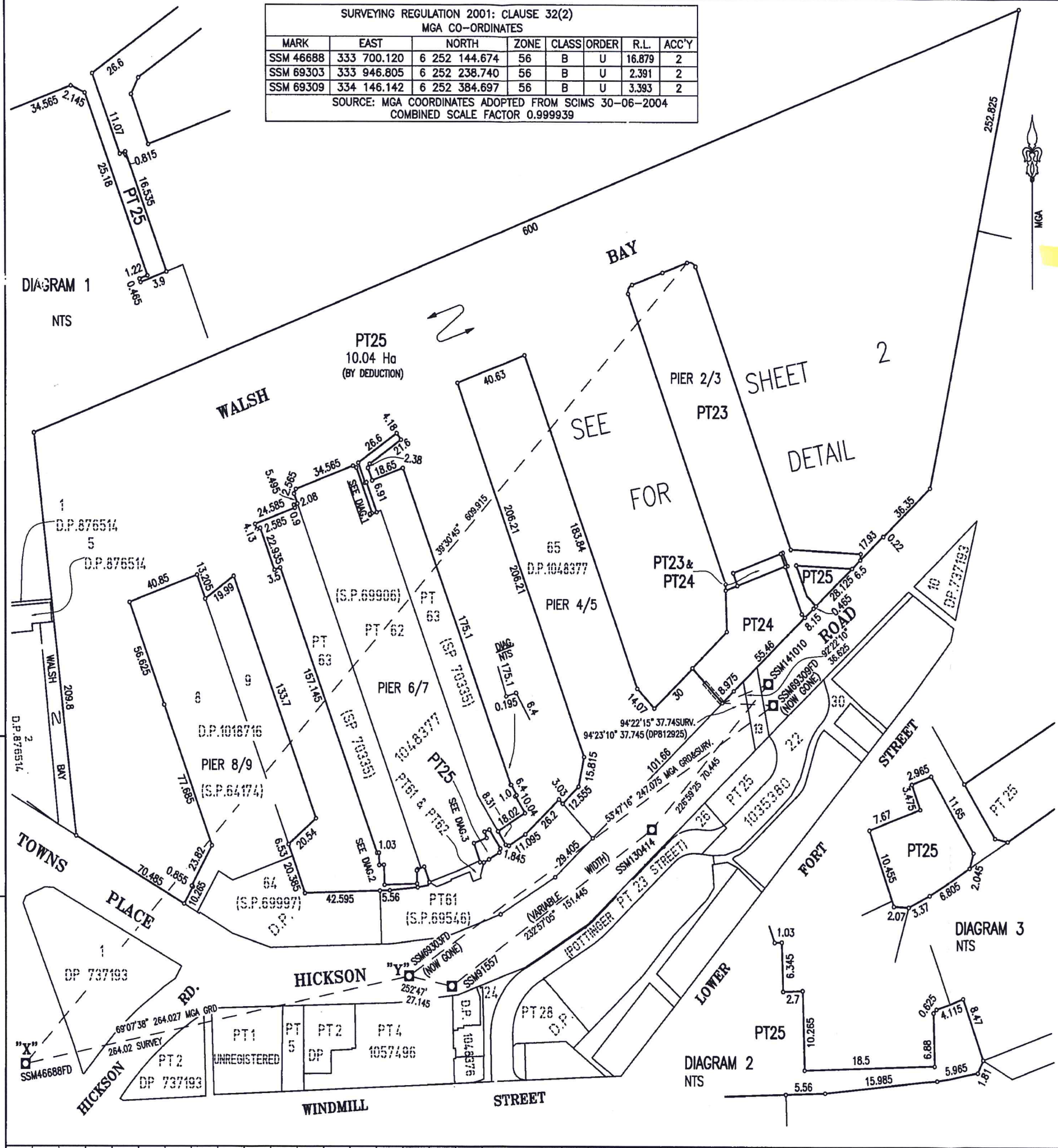
PURSUANT TO SEC. 88B OF THE  
CONVEYANCING ACT 1919 IT IS INTENDED  
TO CREATE:

1. RIGHT OF PUBLIC ACCESS (A)(LIMITED IN STRATUM)
2. EASEMENT FOR ACCESS (B)(LIMITED IN STRATUM)
3. EASEMENT FOR SUPPORT & SHELTER (C)
4. EASEMENT FOR SERVICES (D) (LIMITED IN STRATUM)
5. EASEMENT FOR SUPPORT 1-0 WIDE (F)
6. POSITIVE COVENANT (G)
7. EASEMENT TO DRAIN SEWERAGE OVER EXISTING LINE OF PIPES (H)
8. RIGHT OF FOOTWAY (I) (LIMITED IN STRATUM)
9. EASEMENT FOR EXISTING SERVICES (J) (LIMITED IN STRATUM)
10. POSITIVE COVENANT

signed by me Zenon Michniwicz  
as Delegate of THE WATERWAYS AUTHORITY  
and I hereby certify that I have  
no notice as to revocation of  
such delegation

SURVEYING REGULATION 2001: CLAUSE 32(2)							
MGA CO-ORDINATES							
MARK	EAST	NORTH	ZONE	CLASS	ORDER	R.L.	ACC'
SSM 46688	333 700.120	6 252 144.674	56	B	U	16.879	2
SSM 69303	333 946.805	6 252 238.740	56	B	U	2.391	2
SSM 69309	334 146.142	6 252 384.697	56	B	U	3.393	2

SOURCE: MGA COORDINATES ADOPTED FROM SCIMS 30-06-2004  
COMBINED SCALE FACTOR 0.999939



Sign on  
left hand side

Department of Land and Water Conservation Approval

I ..... in approving this plan certify  
(Authorised Officer)  
that all necessary approvals in regard to the allocation  
of the landshown hereon have been given.

Signature: .....  
Date: .....  
File Number: .....  
Office: .....

## Subdivision Certificate

I certify that the provisions of s.109j of the Environmental Planning and Assessment Act 1979 have been satisfied in relation to the proposed

**SUBDIVISION** set out herein  
 \*( insert 'subdivision' or 'new road' )

\* ~~Authorised Person/General Manager/Accredited Certifier~~  
Consent Authority: **CITY OF SYDNEY**

Date of endorsement: 14 SEPTEMBER 2004

Subdivision Certificate no: 59/2004  
File no: 52004/00040

**Note:**  
When the plan is to be lodged electronically in the Land Titles Office, it should include a signature in an electronic or digital format approved by the Registrar-General.

\* Delete whichever is inapplicable.

**SURVEYOR'S REFERENCE:** 031210 SUB

WARNING: CREASING OR FOLDING WILL LEAD TO REJECTION

X:\97JOBS\970606\_WALSH-BAY\031210 pier2-3\stratum\final dp\031210sl.DWG

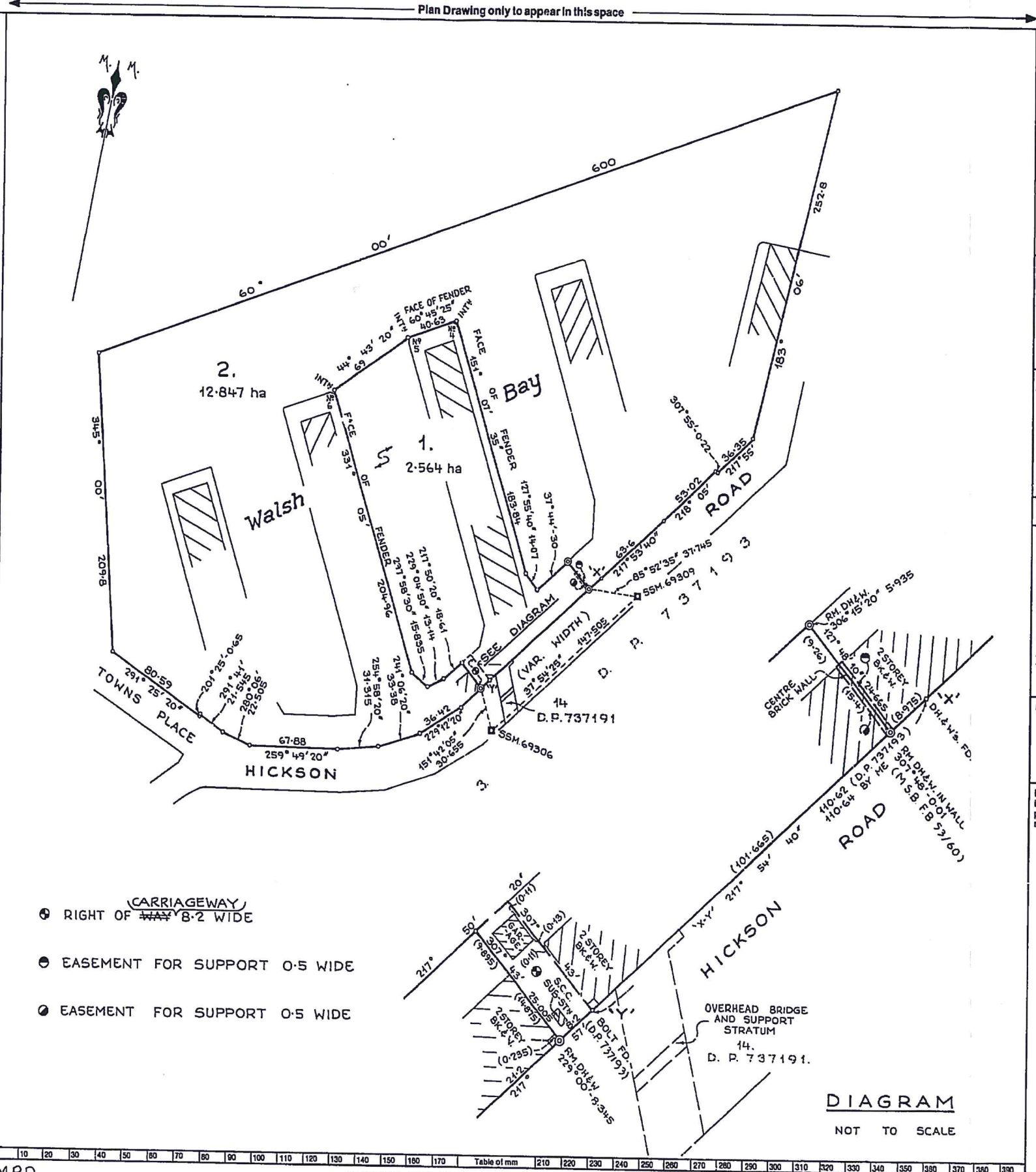


— SURVEYOR'S REFERENCE: 031210 - SUB

Signed by me Zena Michnewicz  
as Delegate of THE WATERWAYS AUTHORITY  
and I hereby certify that I have  
no notice as to revocation of  
such delegation J. Michnewicz

Req:R987792 /Doc:DP 1071597 P /Rev:02-Dec-2004 /sts:SC.OK /Prt:13-Feb-2014 14:25 /Pgs:ALL /Seq:2 of 2  
Ref:df /Src:M



PLAN FORM 2		Plan Drawing only to appear in this space		OFFICE USE ONLY	
SIGNATURE AND SEALS ONLY.				DP 812925	
Registered: 11-10-1991				C.A.:	
Title System: TORRENS				Purpose: SUBDIVISION	
Ref. Map: U1852-73 #				Last Plan: D.P. 737193 #	
PLAN OF SUBDIVISION OF LOT 11 D.P. 737193.				Lengths are in metres Reduction Ratio: 2000	
Municipality: SYDNEY				Locality: WALSH BAY	
Parish: ST PHILIP				County: CUMBERLAND	
This is sheet 1 of my plan in sheets (Delete if inapplicable)				DONALD CHARLES McDONALD Maritime Services Board of NSW. A surveyor registered under the Surveyors Act, 1929 as amended, hereby certifies that the survey represented in this plan is accurate and has been made in accordance with the Survey Practice Regulations 1933 and any special requirements of the Department of Lands, and was completed on 4th JANUARY 1991.	
Plans used in preparation of survey/compilation D.P. 737191 D.P. 737193				PANEL FOR USE ONLY for statements of intention to dedicate public roads or to create public reserves, drainage reserves, easements or restrictions as to user  PURSUANT TO SECTION 88B OF THE CONVEYANCING ACT 1919, IT IS INTENDED TO CREATE:- 1. RIGHT OF WAY, 8.2 WIDE. 2. EASEMENT FOR SUPPORT, 0.5 WIDE. 3. EASEMENT FOR SUPPORT, 0.5 WIDE.	
DRAWN BY: [Signature] EXAMINED: [Signature] CHIEF DRAFTING OFFICER, SURVEY DRAFTING OFFICE, MAGNETIC MERIDIAN FILE: 85/00875-A P.J. 512, PLOT m 512 FIELD BOOK: 551/65-67				Crown Lands Office Approval PLAN APPROVED: [Signature] Land District: [ ] Paper No: [ ] Field Book: [ ]	
SURVEYOR'S REFERENCE: RP 1140		M.P.D.		WARNING: CREASING OR FOLDING WILL LEAD TO REJECTION	
10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290 300 310 320 330 340 350 360 370 380 390		Table of mm		10 20 30 40 50 60 70 80 90 100 110 120 130 140	

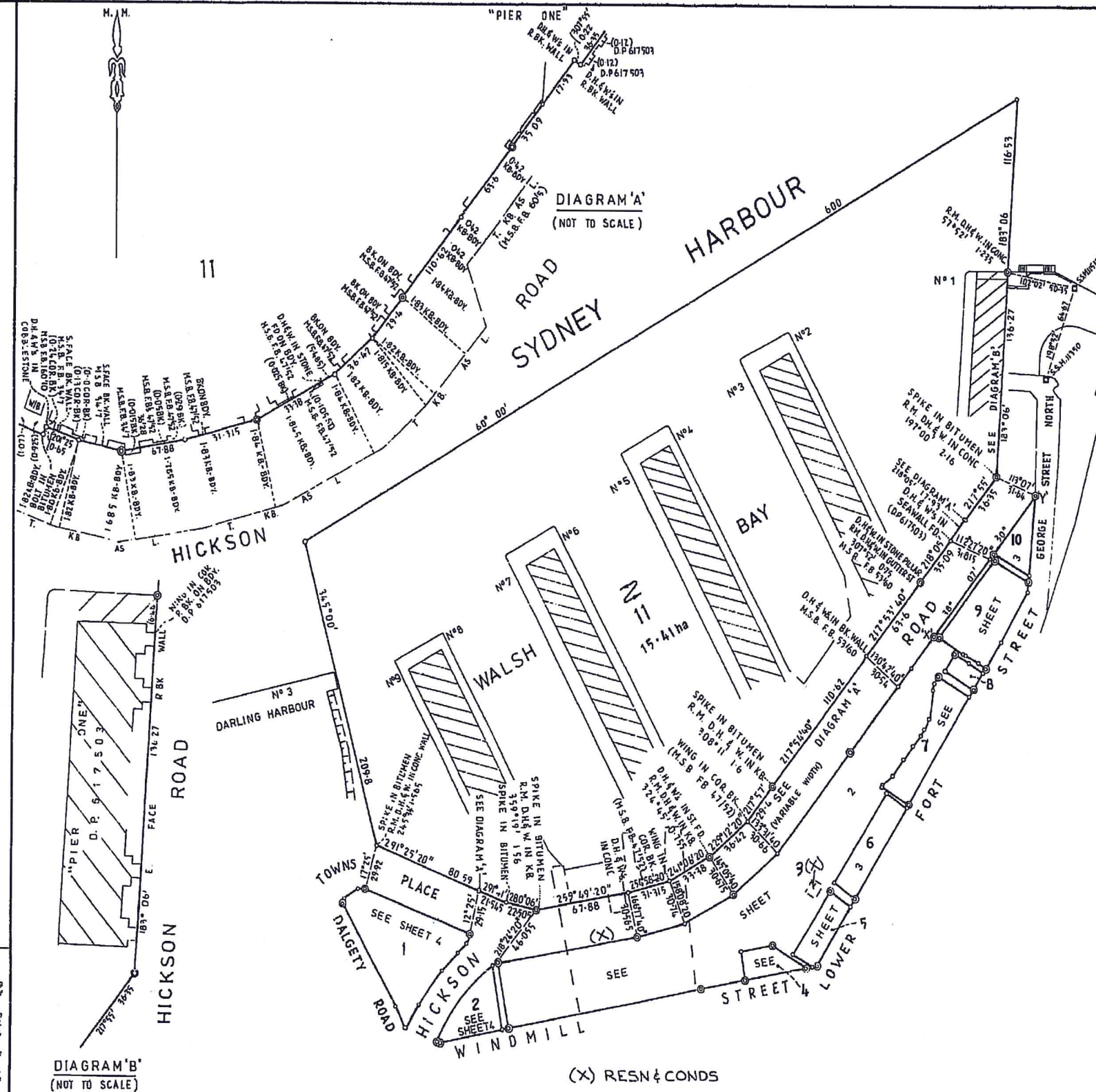
This negative is a photograph made as a permanent record of a document in the custody of the Registrar General this day. 14th October, 1991





Signatures and seals only.

Senior Surveyor  
The Maritime Services Board of N.S.W.



D.P. 737193

Registered: MS 18.5 1987

C.A.:

Title System: TORRENS

Purpose: SUBDIVISION

PARISH: U1852-73

Ref. Map: CITY SEC'S 90, 91, 92

D.P.s 19266, 11282, 54005, 98416, 60198, 59448, 59615, 50447, 193046, 625423, 551202, 109615, 543695, 617503

PLAN OF CONSOLIDATION OF THE LAND  
COMPRISING CERTIFICATES OF TITLE  
VOL. 1 FOL. 163, VOL. 204 FOL. 210, VOL. 280 FOL. 158  
VOL. 172 FOL. 225, VOL. 209 FOL. 136, VOL. 1009 FOL. 19  
1/11282, 2/11282, 3/11282, 4/11282, 5/11282  
AND PART OF THE LAND COMPRISING IN  
CERTIFICATES OF TITLE VOL. 655 FOL. 214,  
VOL. 1170 FOL. 236, VOL. 1181 FOL. 132, VOL. 1216 FOL. 138  
VOL. 1224 FOL. 150, VOL. 1516 FOL. 187, VOL. 5018 FOL. 1  
VOL. 7637 FOL. 211

Reduction Ratio 1:2000

Lengths are in metres.

City: SYDNEY

Locality: WALSH BAY

Parish: ST PHILIP

County: CUMBERLAND

This is sheet 1 of my plan in 4 sheets.  
(Delete if inapplicable).

I, the Surveyor, certify that the plan is

correct and has been made in accordance with the Survey

Regulations, 1933, and was completed on 15th May 88.

Signature: J. Ireland

Surveyor registered under the Surveyors Act, 1920, as amended.

Datum: Mean Sea Level, 1921, as amended.

Panel for use only for statements of intention  
to dedicate public roads or to create public res-  
erves, drainage reserves, easements or restrictions  
as to use.

THE COUNCIL OF THE CITY OF  
SYDNEY HAS APPROVED OF THE  
DEFINITION OF HICKSON RD,  
HICKSON STEPS, LOWER FORT ST,  
TOWNS PLACE, DALGETY RD,  
GEORGE ST NTH, WINDMILL ST,  
WINDMILL STEPS.

Drawn by J. Ireland Examined by J. Ireland  
City Officer-in-Charge, Survey Draftsman  
The Maritime Services Board of N.S.W.  
Field Book 537193-72 Plot m512  
Mag. Meridian P.J. CS1647

## Council Clerk's Certificate

I hereby certify that -

- (a) the requirements of the Local Government Act, 1919  
(other than the requirements for the registration of  
plans), and  
(b) the requirements of section 348 of the Metropolitan  
Water, Sewerage and Drainage Act, 1924, as amended.  
(Hunter District Water, Sewerage, and Drainage Act,  
1936, as amended)

have been complied with by the applicant in relation to the  
proposed  
(Insert "new road", "subdivision" or "consolidated lot") set out herein

Subdivision No. ....

Date .....

(Signature) .....

Council Clerk

\*This part of certificate to be deleted where the application is only  
for a consolidated lot or the opening of a new road or where the land  
to be subdivided is wholly outside the area of operations of the  
Metropolitan Water, Sewerage and Drainage Board and the Hunter  
District Water Board.  
Delete if inapplicable.

M.P.D.

WARNING: CREASING OR FOLDING WILL LEAD TO REJECTION

SURVEYOR'S REFERENCE R.P. 1080 (SH 1)

This negative is a photograph made as a permanent  
record of a document in the custody of the  
Registrar General this day. 19th May, 1987



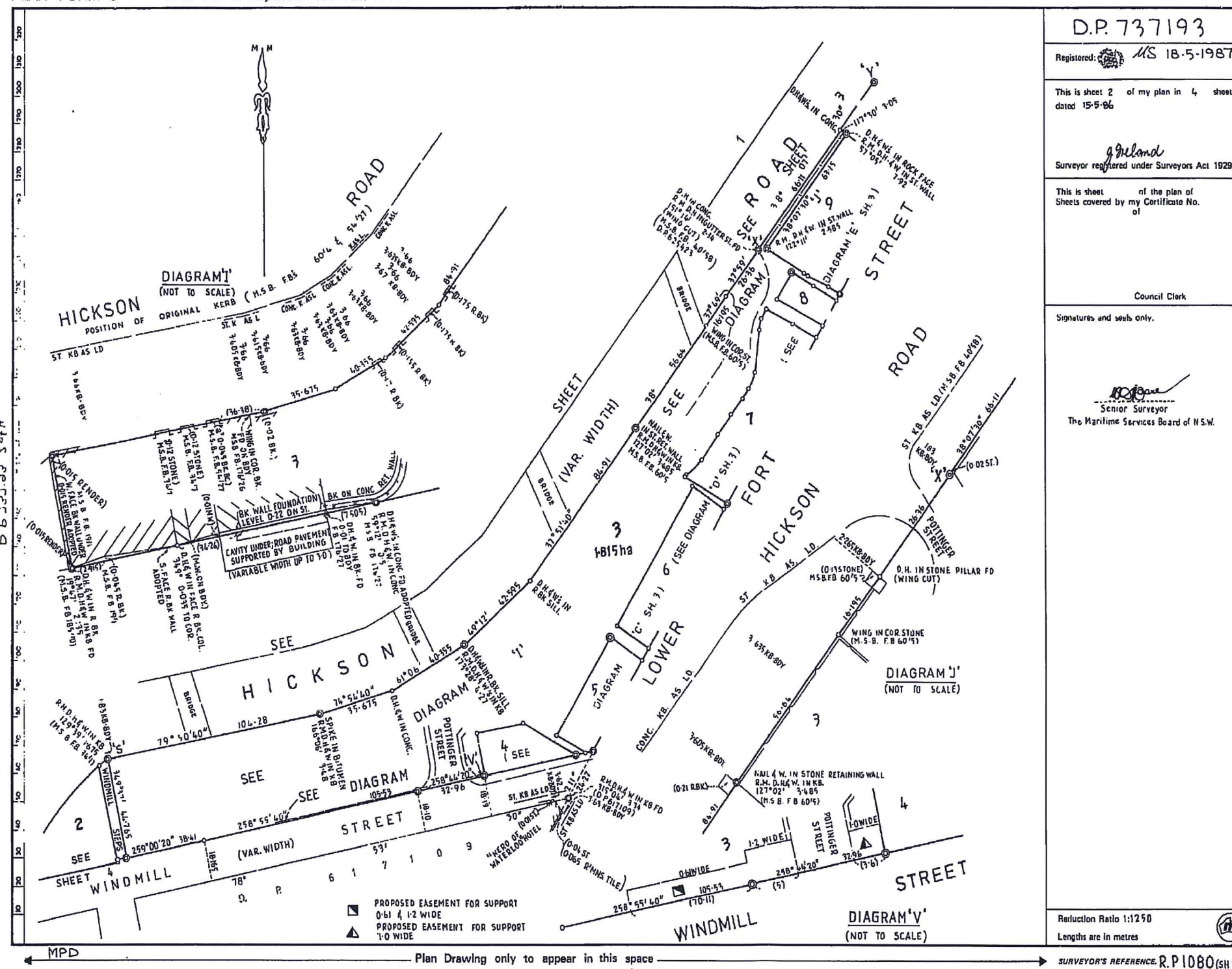


PLAN FORM 3

To be used in conjunction with Plan Form 2

WARNING: CREASING OR FOLDING WILL LEAD TO REJECTION

OFFICE USE ONLY



D.P. 737193

Registered: MS 18-5-1987

This is sheet 2 of my plan in 4 sheets dated 15-5-86

Surveyor registered under Surveyors Act 1929.

This is sheet of the plan of Sheets covered by my Certificate No. of

Council Clerk

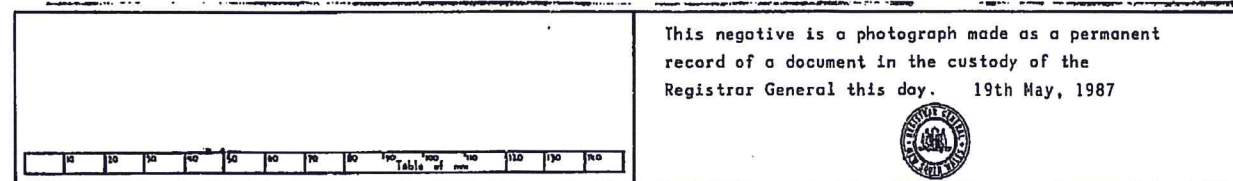
Signatures and seals only.

Senior Surveyor  
The Maritime Services Board of N.S.W.

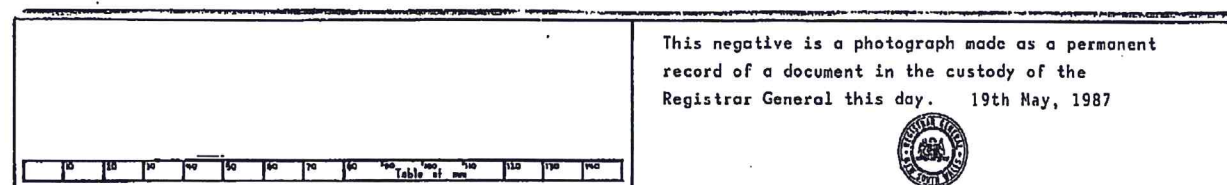
This negative is a photograph made as a permanent record of a document in the custody of the Registrar General this day. 19th May, 1987











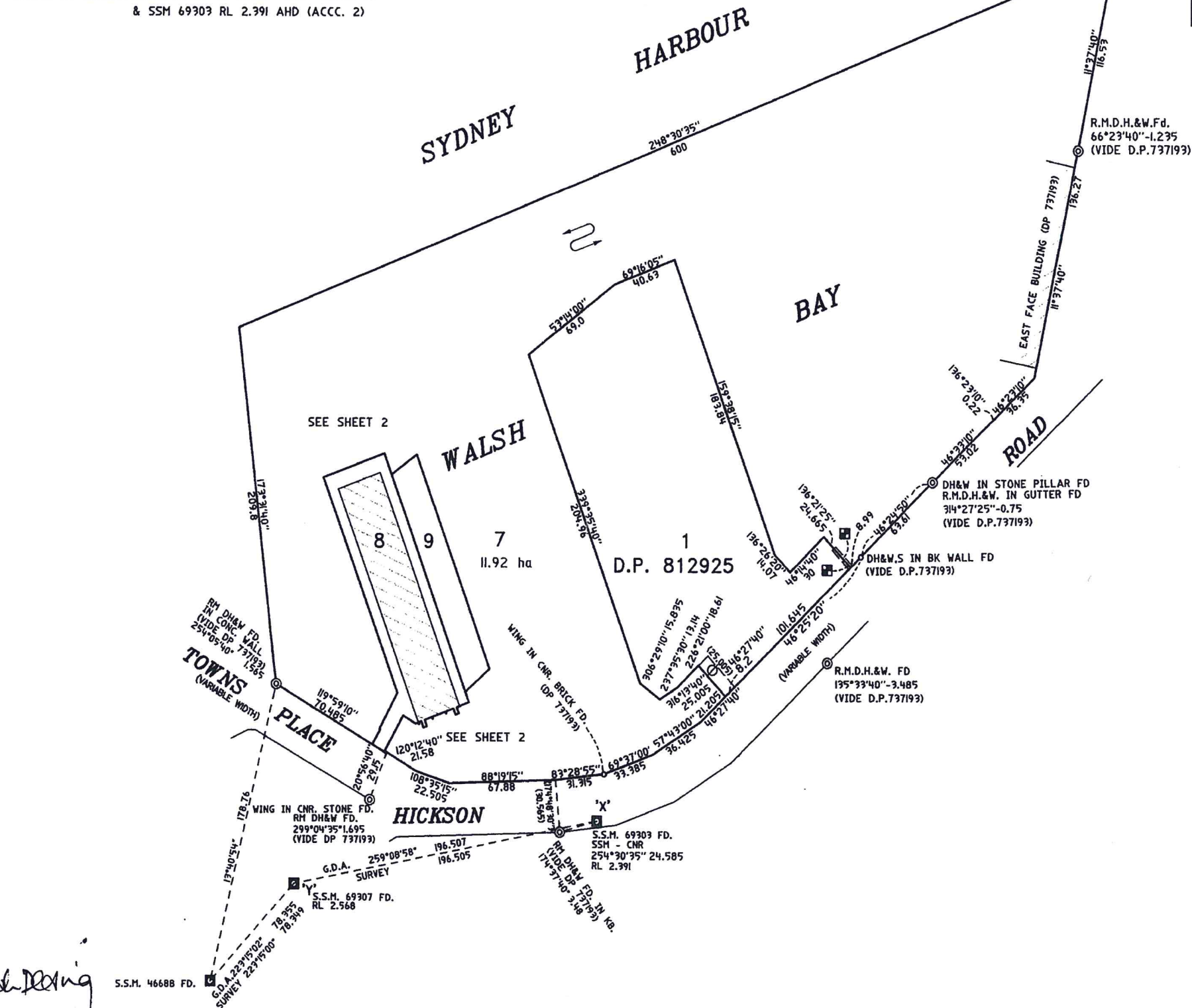


SIGNATURE AND SEALS ONLY

Zeron Michener

SURVEYORS (PRACTICE) REGULATION 1996 CLAUSE 32(2)					
M.G.A. CO-ORDINATES					
MARK	EASTING	NORTHING	ZONE	ACC.	
SSM 46688	333700.121	6252144.674	56	B	
SSM 69303	333946.807	6252238.741	56	B	
SSM 69607	333753.813	6252201.749	56	B	

SOURCE: SCIMS 5.7.2000 COMBINED SCALE FACTOR: 0.99994  
ORIGIN OF LEVELS S.S.M. 69307 RL 2.568 AHD (ACC. 2)  
& SSM 69303 RL 2.391 AHD (ACCC. 2)



M.G.A.



DP1018716

Registered: 4/13-2-2001

C.A: SEE CERTIFICATE

Title System: TORRENS

Purpose: SUBDIVISION

Ref. Map: U1045-111, 112, 1122  
U1052-73

Last Plan: DP812925

PLAN OF SUBDIVISION OF LOT 2  
D.P. 812925

Lengths are in metres. Reduction Ratio 1:2000

L G A SYDNEY

Suburb/Locality: MILLERS POINT

Parish: ST PHILIP

County: CUMBERLAND

This is sheet 1 of my plan in 2 sheets  
(Delete if inapplicable)I, ANDREW P. MASON  
of FRANK M. MASON & CO. PTY LTD  
DX 3511 MILLSON'S POINTa surveyor registered under the Surveyors Act, 1929, hereby  
certify that the survey represented in this plan is accurate, has been  
made in accordance with the Surveyors (Practice) Regulation 1996  
and was completed on 12.01.2001The survey relates to LOTS 8 AND 9 AND  
CONNECTIONS ONLY(here specify the land actually surveyed, or specify any land shown  
in the plan that is not the subject of the survey)

Signature: Andrew P. Mason

Datum Line: X-Y Surveyor registered under  
the Surveyors Act 1929

Plans used in preparation of survey/compilation.

DP 812925  
DP 737193PANEL FOR USE ONLY for statements of  
intention to dedicate public roads or to  
create public reserves, drainage reserves,  
easements, restrictions on the use of land  
or positive covenants.PURSUANT TO SECTION 88B OF THE  
CONVEYANCING ACT 1919  
IT IS INTENDED TO CREATE:

1. EASEMENT FOR RAKER PILES VARIABLE WIDTH
2. RIGHT OF ACCESS VARIABLE WIDTH 'A'
3. RIGHT OF FOOTWAY VARIABLE WIDTH
4. EASEMENT FOR SERVICES 2 WIDE 'B'
5. EASEMENT FOR MAINTAINANCE 1.05, 2.2 & 2.5 WIDE AND VARIABLE.
6. EASEMENT FOR ENCROACHMENT 0.3 & 0.8 WIDE.
7. RIGHT OF ACCESS VARIABLE WIDTH 'C'
8. EASEMENT FOR SERVICES 'D'
9. EASEMENT FOR OVERHANGING STRUCTURE 2.4 WIDE
10. EASEMENT FOR SUPPORT AND ENCROACHMENT 1.75 & 4.5 WIDE
11. RESTRICTION ON USE
12. EASEMENT FOR CONSTRUCTION 3.55 WIDE
13. EASEMENT FOR ACCESS & ENCROACHMENT 2.2 & 3.055 WIDE.

- Ø DENOTES RIGHT OF CARRIAGEWAY 8.2 WIDE (DP 812925)  
■ DENOTES EASEMENT FOR SUPPORT 0.5 WIDE (DP 812925)

Crown Land Office Approval

PLAN APPROVED

Authorised Officer

Land District

Paper No

Field Book

pages

Subdivision Certificate

I certify that the provisions of s.108J of the Environmental Planning  
and Assessment Act 1979 have been satisfied in relation to the  
proposed SUBDIVISION set out herein

(insert 'subdivision' or 'new road')

Authorised Person General Manager/Accredited Certifier

Consent Authority DEPT. OF URBAN AFFAIRS &amp; PLANNING

Date of endorsement 12.01.2001

Accreditation no.

Subdivision Certificate no. 304-08-00

File no. 500/01346

When the plan is to be lodged electronically in the Land Titles  
Office it should include a signature in an electronic or digital  
format approved by the Registrar General.

Delete whichever is inapplicable

SURVEYOR'S REFERENCE: 29235-11

WARNING: CREASING OR FOLDING WILL LEAD TO REJECTION



DP1018716

Registered 113-2-2001

This is sheet 2 of my plan in 2 sheets  
dated 19.12.2000

Andrew Hason

Surveyor registered under Surveyors Act 1929

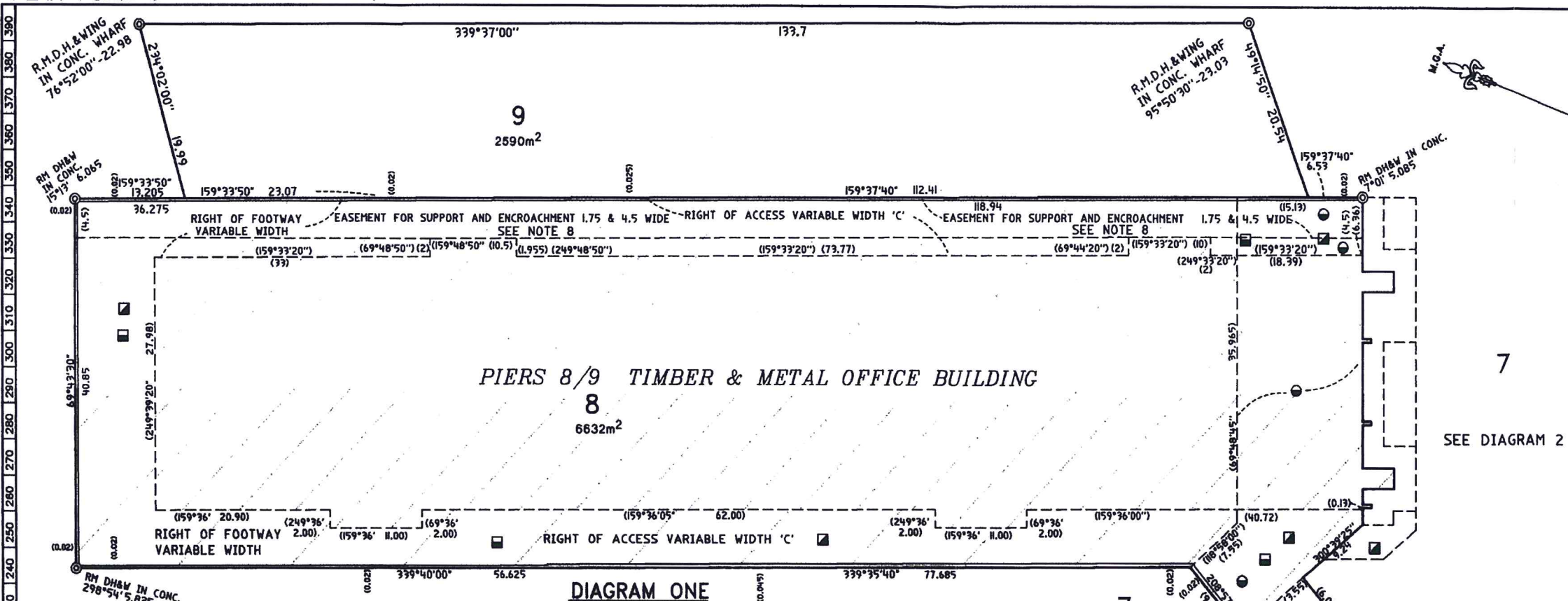
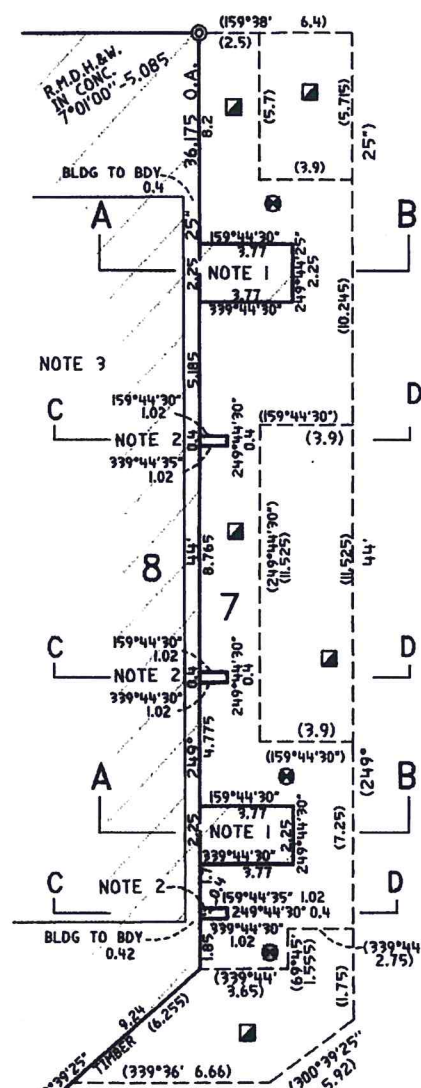
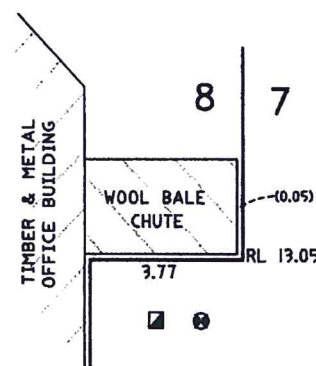
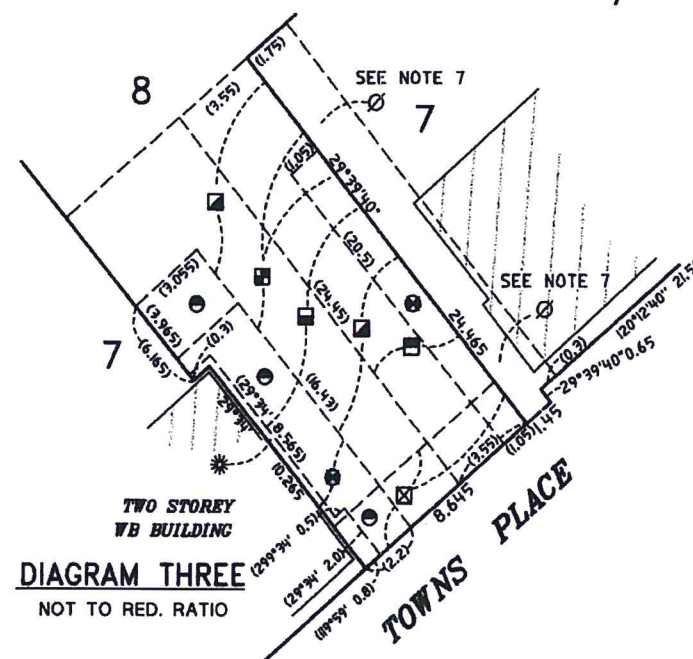
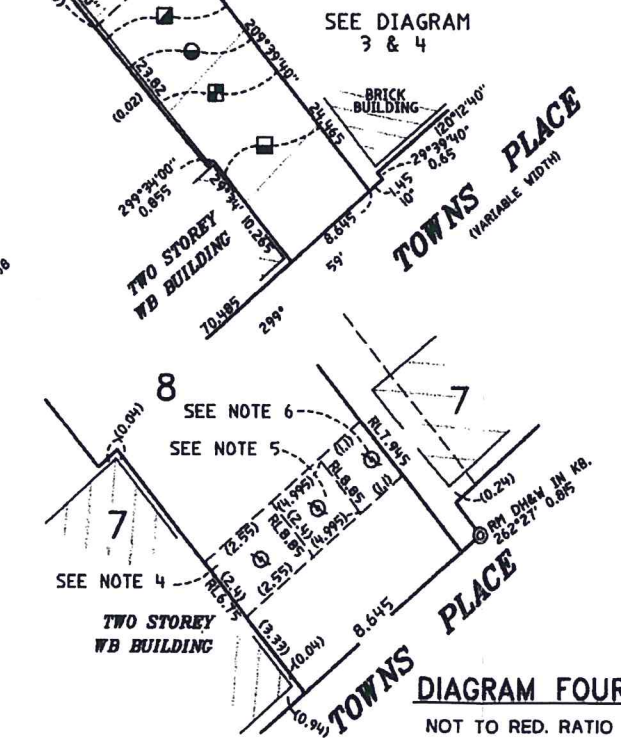
This is sheet 2 of the plan of 2  
sheets covered by my Certificate No.  
304-08-00 of 12.01.2001Deborah Kemp  
Council ClerkFor use where space is insufficient in any panel on Plan  
Form 2Req:R993796 /Doc:DP 1018716 P /Rev:16-Feb-2001 /Sts:SC.OK /Prt:14-Feb-2014 12:12 /Pgs:ALL /Seq:2 of 2  
Ref:df /Src:M

DIAGRAM ONE

SEE DIAGRAM 2

DIAGRAM TWO  
NOT TO RED. RATIOELEVATION C-D  
NOT TO RED. RATIODIAGRAM THREE  
NOT TO RED. RATIODIAGRAM FOUR  
NOT TO RED. RATIO

EASEMENT FOR SERVICES "D" AFFECTS THE WHOLE OF LOT 8.

- NOTE 1. THIS PART OF LOT 8 IS UNLIMITED IN HEIGHT AND LIMITED IN DEPTH TO A HORIZONTAL PLANE AT R.L. 13.05. THIS PART OF LOT 7 IS LIMITED IN HEIGHT TO A HORIZONTAL PLANE AT R.L. 13.05 AND UNLIMITED IN DEPTH.
- NOTE 2. THIS PART OF LOT 8 IS UNLIMITED IN HEIGHT AND LIMITED IN DEPTH TO A HORIZONTAL PLANE AT R.L. 8.15. THIS PART OF LOT 7 IS LIMITED IN HEIGHT TO A HORIZONTAL PLANE AT R.L. 8.15 AND UNLIMITED IN DEPTH.
- NOTE 3. THIS PART OF LOT 8 IS UNLIMITED IN HEIGHT AND DEPTH.
- NOTE 4. THIS PART OF THE EASEMENT FOR OVERHANGING STRUCTURE IS LIMITED IN DEPTH TO AN INCLINED PLANE BETWEEN RL'S 6.75 AND 8.85 AND IS UNLIMITED IN HEIGHT.
- NOTE 5. THIS PART OF THE EASEMENT FOR OVERHANGING STRUCTURE IS LIMITED IN DEPTH TO RL 8.85 AND IS UNLIMITED IN HEIGHT.
- NOTE 6. THIS PART OF THE EASEMENT FOR OVERHANGING STRUCTURE IS LIMITED IN DEPTH TO AN INCLINED PLANE BETWEEN RL'S 8.85 AND 7.945 AND IS UNLIMITED IN HEIGHT.
- NOTE 7. THIS PART OF THE EASEMENT FOR SUPPORT & ENCROACHMENT IS LIMITED IN HEIGHT TO RL 2.70 AND IS UNLIMITED IN DEPTH.
- NOTE 8. THIS PART OF THE EASEMENT FOR SUPPORT & ENCROACHMENT IS LIMITED IN HEIGHT TO RL 3.70 AND IS UNLIMITED IN DEPTH.

- (1) ● DENOTES EASEMENT FOR RAKER PILES VARIABLE WIDTH (LIMITED IN HEIGHT TO R.L. 3.2)
- (2) ■ DENOTES RIGHT OF ACCESS VARIABLE WIDTH 'A' (LIMITED IN DEPTH TO RL 1.70)
- (3) ■ DENOTES RIGHT OF FOOTWAY VARIABLE WIDTH
- (4) ■ DENOTES EASEMENT FOR SERVICES 2 WIDE 'B' (LIMITED IN HEIGHT TO R.L. 1.70)
- (5) ■ DENOTES EASEMENT FOR MAINTENANCE 1.05, 2.2 & 2.5 WIDE AND VARIABLE.
- (6) \* DENOTES EASEMENT FOR ENCROACHMENT 0.3 & 0.8 WIDE
- (7) ■ DENOTES RIGHT OF ACCESS VARIABLE WIDTH 'C'
- (9) ■ DENOTES EASEMENT FOR OVERHANGING STRUCTURE 2.4 WIDE
- (10) ■ DENOTES EASEMENT FOR SUPPORT & ENCROACHMENT 1.75 & 4.5 WIDE
- (12) ■ DENOTES EASEMENT FOR CONSTRUCTION 3.55 WIDE
- (13) ● DENOTES EASEMENT FOR ACCESS & ENCROACHMENT 2.2 & 3.055 WIDE

Plan Drawing only to appear in this space

Reduction Ratio 1: 400

SURVEYORS REFERENCE: 29235-11

## **Appendix F City of Sydney Section 149 Certificate**



City of Sydney  
Town Hall House  
456 Kent Street  
Sydney NSW 2000  
Telephone +61 2 9265 9333  
Fax +61 2 9265 9222  
council@cityofsydney.nsw.gov.au  
GPO Box 1591 Sydney NSW 2001  
cityofsydney.nsw.gov.au



JULIA NICHOLSON  
JBS ENVIRONMENTAL PTY LTD  
LEVEL 1 50 MARGARET ST  
SYDNEY NSW 2000

## PLANNING CERTIFICATE

*Under Section 149 of the Environmental Planning and Assessment Act, 1979*

<b>Applicant:</b>	JBS ENVIRONMENTAL PTY LTD
<b>Applicant's reference:</b>	JBS & G
<b>Address of property:</b>	13A Hickson Road , DAWES POINT NSW 2000
<b>Owner:</b>	MARITIME AUTHORITY of NSW
<b>Description of land:</b>	Lot 11 DP 1138931
<b>Certificate No.:</b>	2014300871
<b>Certificate Date:</b>	14/02/14
<b>Receipt No:</b>	5018824
<b>Fee:</b>	\$80.00
<b>Paid:</b>	14/02/14

Title information, description, dimensions and area of land are provided from data supplied by the Valuer General and shown where available.

Issuing Officer *VW*  
per **Monica Barone**  
Chief Executive Officer

### CERTIFICATE ENQUIRIES:

Ph: 9265 9333  
Fax: 9265 9415

**PLANNING CERTIFICATE UNDER SECTION 149 (2) OF THE ENVIRONMENTAL  
PLANNING AND ASSESSMENT ACT, 1979**

**MATTERS AFFECTING THE LAND AS PRESCRIBED BY SCHEDULE 4 -  
ENVIRONMENTAL PLANNING & ASSESSMENT REGULATION, 2000, CLAUSES (1) - (2).**

**DEVELOPMENT CONTROLS**

*The following information must be read in conjunction with and subject to all other provisions of the environmental planning instruments specified in this certificate.*

**ZONING**

**Zone 1 – Walsh Bay Conservation Zone – Sydney Regional Environmental Plan 16.**

- (1) The objectives of this zone are:
- (a) To allow an appropriate range of uses to encourage the adaptive re-use of existing structures while not required for commercial port uses;
  - (b) To ensure that development is consistent with the heritage significance, the scale, the built form and the materials of existing structures in the zone and adjoining areas;
  - (c) To ensure that development is compatible with and does not detract from the financial, commercial and retail functions of the existing city central business district functions and the Sydney Cove Redevelopment Area; and
  - (d) To ensure that development is compatible with and does not adversely impact on the residential amenity and function of the adjoining areas.
- (2) Without Development Consent  
Nil
- (3) Only with Development Consent  
Any purpose other than a purpose included in item (2) or (4)
- (4) Prohibited  
Bus depots, bus stations, car repair stations, gas holders, generating works, helipads, heliports, industries (other than home industries and light industries), institutions, junk yards, liquid fuel depots, marinas, mines, roadside stalls, road transport terminals, sawmills.

**Zone 2 – Walsh Bay Waterway Zone – Sydney Regional Environmental Plan No 16.**

- (1) The objectives of the zone are:
- (a) To control the use of the waterway between the wharves to ensure that any activities associated with any development are compatible with the commercial shipping and navigational requirements in Sydney Harbour;
  - (b) To ensure that the Harbour and Harbour Foreshore is recognised as a community asset; and
  - (c) To limit mooring facilities for private vessels used by the lessees and tenants of property in Zone 1 – Walsh Bay Conservation Zone.
- (2) Without Development Consent  
Aids to navigation, maintenance dredging, maintenance of mooring facilities, mooring of vessels owned by the Maritime Services Board.
- (3) Only with Development Consent  
Boating or waterway access stairs, dredging, emergency vehicle accessways, floating restaurants or entertainment facilities, flora and fauna enclosures, mooring facilities, mooring of fishing and charter vessels, pontoons, public walkways, utility installations (other than gas holders and generating works).

(4) Prohibited

Any purpose other than a purpose included in item (2) or (3).

## PROPOSED ZONING

This property is not affected by a draft zone.

## LOCAL PLANNING CONTROLS

**Sydney Harbour Foreshores and Waterways Area Development Control Plan 2005 (commenced 28.09.2005)** – This DCP applies to all development proposals within the Foreshores and Waterways Area identified in SREP (Sydney Harbour Catchment) 2005 (refer to the Foreshores and Waterways Area map)

**Sydney Development Control Plan 2012 (as amended) - (commenced 14.12.2012)**

## HERITAGE

### Walsh Bay Conservation Zone

A person shall not, in respect of the Walsh Bay Conservation Zone: demolish or alter a building or work within the Zone; damage or remove a relic, including excavation for the purpose of exposing or removing a relic, within the Zone; damage or despoil a place within the Zone; erect a building on or subdivide land within the Zone; or damage any tree within the Zone, except with the consent of the consent authority.

### State Heritage Register (Amendment to Heritage Act, 1977, gazetted 2/4/99)

This property is identified as being of state significance and has been entered on the State Heritage Register. Unless the proposed work is exempt under the Heritage Office Standard Exemptions or is covered by site specific exemptions, an applicant must seek an integrated development approval from Council and as such the proposal will be referred to the Heritage Council. If major changes are proposed the Heritage Council may require the applicant to prepare a conservation management plan in accordance with the NSW Heritage Manual Guidelines. For further information please contact the Heritage Office (02) 9873 8500 or alternatively online [www.heritage.nsw.gov.au](http://www.heritage.nsw.gov.au) .

## STATE PLANNING INSTRUMENTS

*Full copies of State Environmental Planning Policies are available online at [www.planning.nsw.gov.au](http://www.planning.nsw.gov.au).*

### State Environmental Planning Policy No. 1 – Development Standards

This policy makes development standards more flexible. It allows Council to approve a development proposal that does not comply with a set standard where this can be shown to be unreasonable or unnecessary.

**State Environmental Planning Policy No. 4 – Development without Consent and Miscellaneous Complying Development**

This policy allows relatively simple or minor changes of land or building use and certain types of development by public authorities without the need for formal development applications. The types of development covered are outlined in the policy.

**SREP 16 – Walsh Bay**

Clauses 9 & 10 of State Environmental Planning Policy No. 4 do not apply to the land within Sydney Regional Environmental Plan No. 16 – Walsh Bay.

**State Environmental Planning Policy No. 6 – Number of Storeys in a Building**

This policy sets out a method for determining the number of storeys in a building, to prevent possible confusion arising from the interpretation of various environmental planning instruments.

**State Environmental Planning Policy No. 10 – Retention of Low-Cost Accommodation**

This policy aims to provide a mechanism for the retention of low-cost rental accommodation. The policy establishes criteria for determining a low-cost rental residential building (including boarding houses, hostels and low rental residential flat buildings), matters for Council consideration and requirements for development proposed under the policy.

**State Environmental Planning Policy No. 19 – Bushland in Urban Areas**

This is a policy to protect and preserve bushland within certain urban areas, as part of the natural heritage or for recreational, educational and scientific purposes. This policy is designed to protect bushland in public open space zones and reservations, and to ensure that bush preservation is given a high priority when local environmental plans for urban development are prepared.

**State Environmental Planning Policy No. 22 – Shops and Commercial Premises**

This policy allows, with the consent of Council, a change of use from a shop to another kind of shop or commercial premises, where the new use is prohibited under an environmental planning instrument.

**State Environmental Planning Policy No. 32 – Urban Consolidation**

This policy implements the principles of urban consolidation, including the orderly, economic use and development of land. The policy enables urban land which is no longer required for the purpose for which it is currently zoned or used to be redeveloped for multi-unit housing and related development.

**State Environmental Planning Policy No. 33 – Hazardous and Offensive Development**

This policy aims to amend the definitions of hazardous and offensive industries; to render ineffective any environmental planning instruments not defining hazardous or offensive as per this policy; to control development of hazardous and offensive industries.

**State Environmental Planning Policy No. 55 – Remediation of Land**

This policy provides planning controls for the remediation of contaminated land. The policy states that land must not be developed if it is unsuitable for a proposed use because it is contaminated. If the land is unsuitable, remediation must take place before the land is developed. The policy makes remediation permissible across the State, defines when consent is required, requires all remediation to comply with standards, ensures land is investigated if contamination is suspected, and requires councils to be notified of all remediation proposals. To assist councils and developers, the Department, in conjunction with the Environment Protection Authority, has prepared Managing Land Contamination: Planning Guidelines.

**State Environmental Planning Policy No 60 – Exempt and Complying Development (Gazetted 3.03.00)**

Specifies exempt and complying development in certain areas that have not provided for those types of development through a Local Environmental Plan. This is achieved by identifying the development of minimal environmental impact that is to be exempt and identifying development that is to be complying development. The policy also specifies standards for that development, identify complying development separately for metropolitan Sydney and regional areas of New South Wales, specifies conditions for complying development certificates and ensures that development consent is required for the subdivision of land, and the erection of a building or for demolition.

**State Environmental Planning Policy No. 64 – Advertising and Signage**

This policy aims to ensure that signage (including advertising):

Is compatible with the desired amenity and visual character of an area, and

- Provides effective communications in suitable locations, and
- Is of a high quality design and finish.

To this end the policy regulates signage (but not content) under Part 4 of the Act and provides limited time consents for the display of certain advertisements. The policy does not apply to signage that is exempt development under an environmental planning instrument. It does apply to all signage that can be displayed with or without consent and is visible from any public place or reserve, except as provided by the policy.

This policy should be read in conjunction with the Sydney Local Environmental Plan 2005, the City of Sydney Signage and Advertising Structures Development Control Plan 2005 and State Environmental Planning Policy No. 60 where these apply.

**State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Buildings**

This policy aims to improve the design quality of flats of three or more storeys with four or more self contained dwellings. The policy sets out a series of design principles for local councils to consider when assessing development proposals for residential flat development. The policy also creates a role for an independent design review panel and requires the involvement of a qualified designer in the design and approval process.

**State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004**

This Policy does not apply to land described in Schedule 1 (Environmentally sensitive land), or land that is zoned for industrial purposes, or land to which an interim heritage order made under the *Heritage Act 1997* by the Minister administering that Act applies, or land to which a listing on the State Heritage Register kept under the *Heritage Act 1997* applies.

The Policy aims to encourage the provision of housing (including residential care facilities) that will increase the supply and diversity of residences that meet the needs of seniors or people with a disability, and make efficient use of existing infrastructure and services, and be of good design.

**State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004**

Aims to ensure consistency in the implementation of the BASIX scheme throughout the State. This Policy achieves its aim by overriding provisions of other environmental planning instruments and development control plans that would otherwise add to, subtract from or modify any obligations arising under the BASIX scheme.



**State Environmental Planning Policy (Major Development) 2005**

This Policy aims to identify development of economic, social or environmental significance to the State or regions of the State so as to provide a consistent and comprehensive assessment and decision making process for that development.

NB: This SEPP also contains exempt & complying provisions

**State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007**

This Policy aims to provide for the proper management and development of mineral, petroleum and extractive material resources for the social and economic welfare of the State.

**State Environmental Planning Policy (Temporary Structures and Places of Public Entertainment) 2007**

This Policy aims to ensure that suitable provision is made for ensuring the safety of persons using temporary structures or places of public entertainment.

**State Environmental Planning Policy (Infrastructure) 2007**

This Policy aims to facilitate the effective delivery of infrastructure across the state.

NB: This SEPP also contains exempt & complying provisions

**State Environmental Planning Policy (Repeal of Concurrence and Referral Provisions) 2008**

This Policy is an 'amending instrument' that removes or modifies referral and concurrence clauses within local environmental plans (LEPs), regional environmental plans (REPs) and State environmental planning policies (SEPPs).

**State Environmental Planning Policy (Exempt and Complying Development Codes) 2008**

This Policy Streamlines assessment processes for development that complies with specified development standards. The policy provides exempt and complying development codes that have State-wide application, identifying, in the General Exempt Development Code, types of development that are of minimal environmental impact that may be carried out without the need for development consent; and, in the General Housing Code, types of complying development that may be carried out in accordance with a complying development certificate as defined in the Environmental Planning and Assessment Act 1979.

**State Environmental Planning Policy (Affordable Rental Housing) 2009**

Establishes a consistent planning regime for the provision of affordable rental housing. The policy provides incentives for new affordable rental housing, facilitates the retention of existing affordable rentals, and expands the role of not-for-profit providers. It also aims to support local centres by providing housing for workers close to places of work, and facilitate development of housing for the homeless and other disadvantaged people. NOTE: Does not apply to land at Green Square or at Ultimo Pyrmont

**State Environmental Planning Policy (Urban Renewal) 2010**

The aims of this Policy are as follows:

- (a) to establish the process for assessing and identifying sites as urban renewal precincts,
- (b) to facilitate the orderly and economic development and redevelopment of sites in and around urban renewal precincts,
- (c) to facilitate delivery of the objectives of any applicable government State, regional or metropolitan strategies connected with the renewal of urban areas that are accessible by public transport.

**State Environmental Planning Policy (State and Regional Development) 2011**

The aims of this Policy are as follows:

- (a) to identify development that is State significant development,
- (b) to identify development that is State significant infrastructure and critical State significant infrastructure,
- (c) to confer functions on joint regional planning panels to determine development applications.

**Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005**

This plan applies to land within the Sydney Harbour Catchment, as shown edged heavy black on the Sydney Harbour Catchment Map, being part of the Sydney Region declared by order published in Gazette No 38 of 7 April 1989 at page 1841.

This plan has the following aims with respect to the Sydney Harbour Catchment:  
to ensure that the catchment, foreshores, waterways and islands of Sydney Harbour are recognised, protected and maintained: as outstanding natural asset, and as a public asset of national and heritage significance, for existing and future generations; to ensure a healthy, sustainable environment on land and water; to achieve a high quality urban environment; to ensure a prosperous working waterfront and an effective transport corridor, to encourage a culturally rich and vibrant place for people; to ensure accessibility to and along Sydney Harbour and its foreshores; to ensure the protection, maintenance and rehabilitation of watercourses, wetlands, riparian lands, remnant vegetation and ecological connectivity, to provide a consolidated, simplified and updated legislative framework for future planning.

**Sydney Regional Environmental Plan No.16 Walsh Bay (Gazetted 16/06/89, as amended)**

This plan provides for the redevelopment of Walsh Bay by encouraging re-use of existing structures, protection of heritage items, control use of waterways & provision of public access to waterfront.

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**OTHER MATTERS AFFECTING THE LAND AS PRESCRIBED BY SCHEDULE 4 -  
E. P. & A. REGULATION, 2000. CLAUSES (3) - (10)**

**(3) Complying Development**

- (1) Whether or not the land is land on which complying development may be carried out under each of the codes for complying development because of the provisions of clause 1.17A and 1.19 of *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008*.
- (2) If complying development may not be carried out on that land because of the provisions of clause 1.17A and 1.19 of that Policy, the reasons why it may not be carried out under that clause.

**Note: All Exempt and Complying Development Codes :** Clause 1.17A(a) Development that requires concurrence of a person other than the consent authority, or the Director General of the Department of Environment, Climate Change and Water is **not** complying development.

**General Housing Code**

Complying development **may not** be carried out on the land under the General Housing Code if because of the provisions of clause 1.17A & 1.19 (Land-based requirements for exempt and complying development) any of the following statements are **YES**

▪ Clause 1.17A(b). Has been identified as land that is a critical habitat.	<b>NO</b>
▪ Clause 1.17A(d). Has been identified as a property that comprises, or on which there is, an item that is listed on the State Heritage Register under the <i>Heritage Act 1977</i> or that is subject to an interim heritage order under the <i>Heritage Act 1977</i> .	<b>YES</b>
▪ Clause 1.17A(d) & 1.19(3). Has been identified as a property that comprises, or on which there is, a heritage item or draft heritage item.	<b>NO</b>
▪ Clause 1.17A(c). Has been identified as being within a wilderness area (identified under the <i>Wilderness Act 1987</i> .	<b>NO</b>
▪ Clause 1.17A(e) & 1.19(1). Has been identified as land that is within an environmentally sensitive area.	<b>NO</b>
▪ Clause 1.19(6)a. Has been identified as being within a heritage conservation area or a draft heritage conservation area.	<b>YES</b>
▪ Clause 1.19(6)b. Has been identified as being land that is reserved for a public purpose in an environmental planning instrument.	<b>NO</b>
▪ Clause 1.19(6)c. Has been identified as being on an Acid Sulfate Soils Map as being Class 1 or Class 2.	<b>YES</b>
▪ Clause 1.19(6)d. Has been identified as land that is subject to a biobanking agreement under part 7A of the threatened Species Conservation Act 1995 or a property vegetation plan under the Native Vegetation Act 2003.	<b>NO</b>
▪ Clause 1.19 (6)e. Has been identified as being excluded land identified by an environmental planning instrument.	<b>NO</b>
▪ Clause 1.19(6)f. Has been identified as being land in a foreshore area.	<b>YES</b>
▪ Clause 1.19(6)g. Has been identified as land that is in the 25 ANEF contour or a higher ANEF contour.	<b>NO</b>
▪ Clause 1.19(6)h. Has been identified as unsewered land within a drinking water catchment.	<b>NO</b>
▪ Clause 1.19(6)i. Has been identified as land that is declared to be a special area under the Sydney Water Catchment Management Act 1998.	<b>NO</b>

**Housing Alterations Code**

Complying development under the Housing Alterations Code **may not** be carried out on the land.

Reason why:

Refer to 1.17A State Environmental Planning Policy (Except and Complying Development Codes) 2008:

clause 1.17A(d) applies

**General Commercial and Industrial Code**

Complying development under the General Commercial and Industrial Code **may not** be carried out on the land.

Reason why:

Refer to 1.17A State Environmental Planning Policy (Except and Complying Development Codes) 2008:

clause 1.17A(d) applies

**Subdivisions Code**

Complying development under the Subdivisions Code **may not** be carried out on the land.

Reason why:

Refer to 1.17A State Environmental Planning Policy (Except and Complying Development Codes) 2008:

clause 1.17A(d) applies

**Rural Housing Code**

The Rural Housing Code does not apply to this Local Government Area.

**General Development Code**

Complying development under the General Development Code **may not** be carried out on the land.

Reason why:

Refer to 1.17A State Environmental Planning Policy (Except and Complying Development Codes) 2008:

clause 1.17A(d) applies

**Demolition Code**

Complying development under the Demolition Code **may not** be carried out on the land.

Reason why:

Refer to 1.17A State Environmental Planning Policy (Except and Complying Development Codes) 2008:

clause 1.17A(d) applies



(4) Coastal Protection Act, 1979

The council has not been notified by the department of public works that the land is affected by the operation of section 38 or 39 of the coastal protection act, 1979.

(4A) Certain information relating to beaches and coasts

(1) In relation to a coastal council an order has **not** been made under Part 4D of the coastal Protection Act 1979 in relation to temporary coastal protection works (within the meaning of that Act) on the land (or on public land adjacent to that land).

(2) In relation to a coastal council : Council has **not** been notified under section 55X of the Coastal Protection Act 1979 that temporary coastal protection works (within the meaning of that Act) have been placed on the land (or on public land adjacent to that land)

(4B) Annual charges under Local Government Act 1993 for coastal protection services that relate to existing coastal protection works

In relation to a coastal council : The owner (or any previous owner) of the land has not consented in writing to the land being subject to annual charges under section 496B of the Local Government Act 1993 for coastal protection services that relate to existing coastal protection works (within the meaning of section 553B of that Act).

**Note.** "Existing coastal protection works" are works to reduce the impact of coastal hazards on land (such as seawalls, revetments, groynes and beach nourishment) that existed before the commencement of section 553B of the Local Government Act 1993.

(5) Mine Subsidence District

This land has not been proclaimed to be a mine subsidence district within the meaning of section 15 of the mine subsidence compensation act, 1961.

(6) Road Widening and/or Road Realignment affected by (a) Division 2 of Part 3 of the Roads act 1993 or (c) any resolution of council or other authority.

This land **is not** affected by road widening and/or road realignment under section 25 of the Roads Act, 1993 and/or resolution of Council or any other authority.

(6) Road Widening and/or Road Realignment Affected by (b) any environmental planning instrument.

This land **is not** affected by any road widening or road realignment under any planning instrument.

(7) Council and other public authorities policies on hazard risk restrictions:

- (a) The land **is not** affected by a policy adopted by the Council that that restricts the development of the land because of the likelihood of land slip, bushfire, flooding, tidal inundation, subsidence, acid sulphate soils or any other risk; and
- (b) The land **is not** affected by a policy adopted by any other public authority and notified to the council for the express purpose of its adoption by that authority being referred to on planning certificate issued by Council, that restricts the development of the land because of the likelihood of land slip, bushfire, flooding, tidal inundation, subsidence, acid sulphate soils or any other risk.

**(7A) Flood related development controls information.**

The development on this land or part of this land is not subject to flood related development controls.

**(8) Land reserved for acquisition**

No environmental planning instrument, or proposed environmental planning instrument applying to the land, provides for the acquisition of the land by a public authority, as referred to in section 27 of the Act.

**(9) Contribution plans**

The following Contributions Plans apply to properties within the City of Sydney local government area. Contributions plans marked **YES** may apply to this property:

▪ Central Sydney Contributions (Amendment) Plan 2002 – in operation 16 <sup>th</sup> June 2003	<b>NO</b>
▪ Ultimo Pyrmont Section 94 Contributions Plan (approved C.S.P.C 15 <sup>th</sup> December 1994 and Council 19 <sup>th</sup> December 1994)	<b>NO</b>
▪ City of Sydney Development Contributions Plan 2006 – in operation 7 <sup>th</sup> April 2007	<b>NO</b>
▪ Redfern Waterloo Authority Contributions Plan 2006 – in operation 16 <sup>th</sup> May 2007 ▪ Redfern Waterloo Authority Affordable Housing Contributions Plan – in operation 16 <sup>th</sup> May 2007	<b>NO</b>

**(9A) Biodiversity certified land**

The land has not been certified as biodiversity certified land.

**(10) Biobanking Agreement**

Council has not been notified of a biobanking agreement under Part 7A of the Threatened Species Conservation Act 1995.

**(11) Bush fire prone land**

The land has not been identified as Bush fire prone land.

**(12) Property vegetation plans**

Not Applicable.

**(13) Orders under Trees (Disputes Between Neighbours) Act 2006**

Council has not been notified of an order which has been made under the *Trees (Disputes Between Neighbours) Act 2006* to carry out work in relation to a tree on the land.

(14) Directions under Part 3A

Not Applicable.

(15) Site compatibility certificates and conditions for seniors housing

(a) The land to which the certificate relates is not subject to a current site compatibility certificate (seniors housing), of which Council is aware, in respect of proposed development on the land.

(b) The land to which the certificate relates is not subject to any condition of consent to a development application granted after 11 October 2007 required by State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004.

(16) Site compatibility certificates for infrastructure

The land to which the certificate relates is not subject to a valid site compatibility certificate (infrastructure), of which Council is aware, in respect of proposed development on the land.

(17) Site compatibility certificates and conditions for affordable rental housing

(a) The land to which the certificate relates is not subject to a current site compatibility certificate (affordable rental housing), of which Council is aware, in respect of proposed development on the land.

(b) The land to which the certificate relates is not subject to any terms of a kind referred to in clause 17(1) or 37(1) of State Environmental Planning Policy (Affordable Rental Housing) 2009 that have been imposed as a condition of consent to a development application in respect of the land.

(18) Paper subdivision information

Not Applicable.

**Note.** The following matters are prescribed by section 59 (2) of the Contaminated Land Management Act 1997 as additional matters to be specified in a planning certificate:

(a) The land to which the certificate relates **is not** declared to be **significantly contaminated land** within the meaning of that act as at the date when the certificate is issued.

(b) The land to which the certificate relates **is not** subject to a **management order** within the meaning of that act as at the date when the certificate is issued.

(c) The land to which the certificate relates **is not** the subject of an **approved voluntary management proposal** within the meaning of that act at the date the certificate is issued.

(d) The land to which the certificate relates **is not** the subject of an **ongoing maintenance order** within the meaning of that act as at the date when the certificate is issued.

(e) As at the date when the certificate is issued, Council **has not** identified that a **site audit statement** within the meaning of that act has been received in respect of the land the subject of the certificate.

**PLANNING CERTIFICATE SECTION 149(2) INFORMATION:**

*Information provided in accordance with planning certificate section 149 (2) has been taken from council's records and advice from other authorities but council disclaims all liability for any omission or inaccuracy in the information. Specific inquiry should be made where doubt exists.*

**PLANNING CERTIFICATE UNDER SECTION 149 (5) OF THE ENVIRONMENTAL  
PLANNING AND ASSESSMENT ACT, 1979**

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*PLANNING CERTIFICATE SECTION 149 (5) ADVICE is current as at 12:00 noon two working days prior to the date of issue of this certificate. The following matters have been considered & details provided where information exists: easements in favour of council; parking permit scheme; heritage floor space restrictions; low-rental residential building; foreshore building line; tree preservation order.*

**Contaminated Land Potential:**

Council records do not have sufficient information about the uses (including previous uses) of the land which is the subject of this section 149 certificate to confirm that the land has not been used for a purpose which would be likely to have contaminated the land. Parties should make their own enquiries as to whether the land may be contaminated.

**Hazard Risk Restriction:**

The City of Sydney Local Environmental Plan 2012 incorporates Acid Sulfate soil maps. Development on the land identified in those maps should have regard to Division 4 clause 7.16 of the LEP.

**Construction Noise and View Loss Advice:**

Intending purchasers are advised that the subject property may be affected by construction noise and loss or diminution of views as a result of surrounding development.

**City of Sydney Tree Preservation Order 2004 (TPO)**

This order applies to all land where South Sydney Local Environmental Plan 1998 applies and the City of Sydney Council or the Central Sydney Planning Committee is the relevant consent authority under the *Environmental Planning & Assessment Act 1979*. Contact Council's Contract and Asset Management section for more information.

**Outstanding Notice & Order information**

In relation to this property, there **is not** an outstanding Order or Notice of Intention to issue an Order relating to Fire Safety (being an Order or Notice of Intention to issue an Order of type 6, 10, 11 under Section 121B of the *Environmental Planning and Assessment Act, 1979*). Further information about the Order or Notice of Intention to issue an Order may be obtained by applying for a certificate under Section 121ZP of the *Environmental Planning and Assessment Act* and Section 735A of the *Local Government Act*.

In relation to this property, there **is not** an outstanding Order or Notice of Intention to issue an Order (being an Order or Notice of Intention to issue an Order of a type other than relating to fire safety). Further information about the Order or Notice of Intention to issue an Order may be obtained by applying for a certificate under Section 121ZP of the *Environmental Planning and Assessment Act* and Section 735A of the *Local Government Act*.

**Resident & Visitor Parking Permit Schemes Restriction**

Owners and occupiers of this address are **not eligible** to participate in the resident and visitor permit parking schemes.

**The Minister is the Consent Authority**

The Minister is the consent authority where development has a capital investment value of more than \$10 million. (State Environmental Planning Policy (Major Projects))

**Sydney Harbour Foreshore Authority Act 1998**

The provisions of the Sydney Harbour Foreshore Authority Act 1998 apply to the subject land.



For more information, contact the Property Officer at Sydney Harbour Foreshore Authority on telephone (02) 9240 8500.

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## **ADVICE FROM OTHER BODIES**

### **Sydney Ports Corporation Advice**

Some land in the City of Sydney located in the vicinity of the White Bay, Glebe Island and Darling Harbour ports may be affected by noise from port operations.

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*Advice provided in accordance with planning certificate section 149 (5) is supplied in good faith. Council accepts no liability for the validity of the advice given. (see section 149 (6) of the Environmental Planning and Assessment Act, 1979).*

***For information regarding outstanding notices and orders a CERTIFICATE FOR OUTSTANDING NOTICES OF INTENTION AND/OR AN ORDER UNDER SECTION 735A OF THE LOCAL GOVERNMENT ACT, 1993 AND SECTION 121ZP OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979 may be applied for at Sydney City Council.***

*Planning certificate section 149 (2), local planning controls are available for inspection at the following locations:*

### **General Enquiries :**

**Telephone: 02 9265 9333**

**Facsimile: 02 9265 9415**

### **Town Hall House**

Level 2,  
Town Hall House,  
456 Kent Street,  
Sydney.  
8am – 6pm, Monday - Friday

### **Glebe Customer Service Centre**

Glebe Library,  
186 Glebe Point Road,  
Glebe  
9am – 5pm, Monday – Friday

### **Neighbourhood Service Centre Kings Cross**

50 Darlinghurst Road,  
Potts Point  
9am – 5pm, Monday – Friday  
9am – 12pm, Saturday

### **Neighbourhood Service Centre Redfern**

158 Redfern Street  
Redfern  
9am-5pm Monday – Friday  
9am – 12 Noon Saturday

### **Green Square Customer Service Centre**

The Tote,  
100 Joynton Avenue,  
Zetland  
10am-6pm Monday – Friday

*State planning controls are available for inspection at the following locations:*

**Sydney Harbour Foreshore Authority** (former Sydney Cove Authority and Darling Harbour Authority),  
Level 6,  
66 Harrington Street,  
The Rocks.

**Department of Planning & Infrastructure Information Centre**  
23-33 Bridge Street,  
Sydney NSW 2000

*Where planning certificate section 149 (5) matters are supplied, complete details are available by writing to:*  
*Chief Executive Officer,*  
*City of Sydney,*  
*G.P.O. Box 1591,*  
*Sydney, NSW 2000*

End of Document

City of Sydney  
Town Hall House  
456 Kent Street  
Sydney NSW 2000

Telephone +61 2 9265 9333  
Fax +61 2 9265 9222  
council@cityofsydney.nsw.gov.au  
GPO Box 1591 Sydney NSW 2001  
cityofsydney.nsw.gov.au



JULIA NICHOLSON  
JBS ENVIRONMENTAL PTY LTD  
LEVEL 1 50 MARGARET ST  
SYDNEY NSW 2000

## PLANNING CERTIFICATE

*Under Section 149 of the Environmental Planning and Assessment Act, 1979*

<b>Applicant:</b>	JBS ENVIRONMENTAL PTY LTD
<b>Applicant's reference:</b>	JBS & G
<b>Address of property:</b>	13 Hickson Road , DAWES POINT NSW 2000
<b>Owner:</b>	THE OWNERS - STRATA PLAN NO 73989
<b>Description of land:</b>	Lot 24 DP 1071597, Lots 1-22 SP 73989
<b>Certificate No.:</b>	2014300873
<b>Certificate Date:</b>	14/02/14
<b>Receipt No:</b>	5018824
<b>Fee:</b>	\$80.00
<b>Paid:</b>	14/02/14

Title information, description, dimensions and area of land are provided from data supplied by the Valuer General and shown where available.

Issuing Officer *VW*  
per **Monica Barone**  
Chief Executive Officer

### CERTIFICATE ENQUIRIES:

Ph: 9265 9333  
Fax: 9265 9415

Sydney2030/Green Global/Connected

**PLANNING CERTIFICATE UNDER SECTION 149 (2) OF THE ENVIRONMENTAL  
PLANNING AND ASSESSMENT ACT, 1979**

**MATTERS AFFECTING THE LAND AS PRESCRIBED BY SCHEDULE 4 -  
ENVIRONMENTAL PLANNING & ASSESSMENT REGULATION, 2000, CLAUSES (1) - (2).**

**DEVELOPMENT CONTROLS**

*The following information must be read in conjunction with and subject to all other provisions of the environmental planning instruments specified in this certificate.*

**ZONING**

**Zone 1 – Walsh Bay Conservation Zone – Sydney Regional Environmental Plan 16.**

(1) The objectives of this zone are:

- (a) To allow an appropriate range of uses to encourage the adaptive re-use of existing structures while not required for commercial port uses;
- (b) To ensure that development is consistent with the heritage significance, the scale, the built form and the materials of existing structures in the zone and adjoining areas;
- (c) To ensure that development is compatible with and does not detract from the financial, commercial and retail functions of the existing city central business district functions and the Sydney Cove Redevelopment Area; and
- (d) To ensure that development is compatible with and does not adversely impact on the residential amenity and function of the adjoining areas.

(2) Without Development Consent  
Nil

(3) Only with Development Consent  
Any purpose other than a purpose included in item (2) or (4)

(4) Prohibited  
Bus depots, bus stations, car repair stations, gas holders, generating works, helipads, heliports, industries (other than home industries and light industries), institutions, junk yards, liquid fuel depots, marinas, mines, roadside stalls, road transport terminals, sawmills.

**PROPOSED ZONING**

This property is not affected by a draft zone.

**LOCAL PLANNING CONTROLS**

**Sydney Harbour Foreshores and Waterways Area Development Control Plan 2005 (commenced 28.09.2005)** – This DCP applies to all development proposals within the Foreshores and Waterways Area identified in SREP (Sydney Harbour Catchment) 2005 (refer to the Foreshores and Waterways Area map)

**Sydney Development Control Plan 2012 (as amended) - (commenced 14.12.2012)**

**HERITAGE**

### **Walsh Bay Conservation Zone**

A person shall not, in respect of the Walsh Bay Conservation Zone: demolish or alter a building or work within the Zone; damage or remove a relic, including excavation for the purpose of exposing or removing a relic, within the Zone; damage or despoil a place within the Zone; erect a building on or subdivide land within the Zone; or damage any tree within the Zone, except with the consent of the consent authority.

### **State Heritage Register (Amendment to Heritage Act, 1977, gazetted 2/4/99)**

This property is identified as being of state significance and has been entered on the State Heritage Register. Unless the proposed work is exempt under the Heritage Office Standard Exemptions or is covered by site specific exemptions, an applicant must seek an integrated development approval from Council and as such the proposal will be referred to the Heritage Council. If major changes are proposed the Heritage Council may require the applicant to prepare a conservation management plan in accordance with the NSW Heritage Manual Guidelines. For further information please contact the Heritage Office (02) 9873 8500 or alternatively online [www.heritage.nsw.gov.au](http://www.heritage.nsw.gov.au).

## **STATE PLANNING INSTRUMENTS**

*Full copies of State Environmental Planning Policies are available online at [www.planning.nsw.gov.au](http://www.planning.nsw.gov.au).*

### **State Environmental Planning Policy No. 1 – Development Standards**

This policy makes development standards more flexible. It allows Council to approve a development proposal that does not comply with a set standard where this can be shown to be unreasonable or unnecessary.

### **State Environmental Planning Policy No. 4 – Development without Consent and Miscellaneous Complying Development**

This policy allows relatively simple or minor changes of land or building use and certain types of development by public authorities without the need for formal development applications. The types of development covered are outlined in the policy.

### **SREP 16 – Walsh Bay**

Clauses 9 & 10 of State Environmental Planning Policy No. 4 do not apply to the land within Sydney Regional Environmental Plan No. 16 – Walsh Bay.

### **State Environmental Planning Policy No. 6 – Number of Storeys in a Building**

This policy sets out a method for determining the number of storeys in a building, to prevent possible confusion arising from the interpretation of various environmental planning instruments.

### **State Environmental Planning Policy No. 10 – Retention of Low-Cost Accommodation**

This policy aims to provide a mechanism for the retention of low-cost rental accommodation. The policy establishes criteria for determining a low-cost rental residential building (including boarding houses, hostels and low rental residential flat buildings), matters for Council consideration and requirements for development proposed under the policy.



**State Environmental Planning Policy No. 19 – Bushland in Urban Areas**

This is a policy to protect and preserve bushland within certain urban areas, as part of the natural heritage or for recreational, educational and scientific purposes. This policy is designed to protect bushland in public open space zones and reservations, and to ensure that bush preservation is given a high priority when local environmental plans for urban development are prepared.

**State Environmental Planning Policy No. 22 – Shops and Commercial Premises**

This policy allows, with the consent of Council, a change of use from a shop to another kind of shop or commercial premises, where the new use is prohibited under an environmental planning instrument.

**State Environmental Planning Policy No. 32 – Urban Consolidation**

This policy implements the principles of urban consolidation, including the orderly, economic use and development of land. The policy enables urban land which is no longer required for the purpose for which it is currently zoned or used to be redeveloped for multi-unit housing and related development.

**State Environmental Planning Policy No. 33 – Hazardous and Offensive Development**

This policy aims to amend the definitions of hazardous and offensive industries; to render ineffective any environmental planning instruments not defining hazardous or offensive as per this policy; to control development of hazardous and offensive industries.

**State Environmental Planning Policy No. 55 – Remediation of Land**

This policy provides planning controls for the remediation of contaminated land. The policy states that land must not be developed if it is unsuitable for a proposed use because it is contaminated. If the land is unsuitable, remediation must take place before the land is developed. The policy makes remediation permissible across the State, defines when consent is required, requires all remediation to comply with standards, ensures land is investigated if contamination is suspected, and requires councils to be notified of all remediation proposals. To assist councils and developers, the Department, in conjunction with the Environment Protection Authority, has prepared Managing Land Contamination: Planning Guidelines.

**State Environmental Planning Policy No 60 – Exempt and Complying Development (Gazetted 3.03.00)**

Specifies exempt and complying development in certain areas that have not provided for those types of development through a Local Environmental Plan. This is achieved by identifying the development of minimal environmental impact that is to be exempt and identifying development that is to be complying development. The policy also specifies standards for that development, identify complying development separately for metropolitan Sydney and regional areas of New South Wales, specifies conditions for complying development certificates and ensures that development consent is required for the subdivision of land, and the erection of a building or for demolition.

**State Environmental Planning Policy No. 64 – Advertising and Signage**

This policy aims to ensure that signage (including advertising):

Is compatible with the desired amenity and visual character of an area, and

- Provides effective communications in suitable locations, and
- Is of a high quality design and finish.

To this end the policy regulates signage (but not content) under Part 4 of the Act and provides limited time consents for the display of certain advertisements. The policy does not apply to signage that is exempt development under an environmental planning instrument. It does apply to all signage that can be displayed with or without consent and is visible from any public place or reserve, except as provided by the policy.

This policy should be read in conjunction with the Sydney Local Environmental Plan 2005, the City of Sydney Signage and Advertising Structures Development Control Plan 2005 and State Environmental Planning Policy No. 60 where these apply.

**State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Buildings**

This policy aims to improve the design quality of flats of three or more storeys with four or more self contained dwellings. The policy sets out a series of design principles for local councils to consider when assessing development proposals for residential flat development. The policy also creates a role for an independent design review panel and requires the involvement of a qualified designer in the design and approval process.

**State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004**

This Policy does not apply to land described in Schedule 1 (Environmentally sensitive land), or land that is zoned for industrial purposes, or land to which an interim heritage order made under the *Heritage Act 1997* by the Minister administering that Act applies, or land to which a listing on the State Heritage Register kept under the *Heritage Act 1997* applies.

The Policy aims to encourage the provision of housing (including residential care facilities) that will increase the supply and diversity of residences that meet the needs of seniors or people with a disability, and make efficient use of existing infrastructure and services, and be of good design.

**State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004**

Aims to ensure consistency in the implementation of the BASIX scheme throughout the State. This Policy achieves its aim by overriding provisions of other environmental planning instruments and development control plans that would otherwise add to, subtract from or modify any obligations arising under the BASIX scheme.

**State Environmental Planning Policy (Major Development) 2005**

This Policy aims to identify development of economic, social or environmental significance to the State or regions of the State so as to provide a consistent and comprehensive assessment and decision making process for that development.

NB: This SEPP also contains exempt & complying provisions

**State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007**

This Policy aims to provide for the proper management and development of mineral, petroleum and extractive material resources for the social and economic welfare of the State.

**State Environmental Planning Policy (Temporary Structures and Places of Public Entertainment) 2007**

This Policy aims to ensure that suitable provision is made for ensuring the safety of persons using temporary structures or places of public entertainment.

**State Environmental Planning Policy (Infrastructure) 2007**

This Policy aims to facilitate the effective delivery of infrastructure across the state.

NB: This SEPP also contains exempt & complying provisions

**State Environmental Planning Policy (Repeal of Concurrence and Referral Provisions) 2008**

This Policy is an 'amending instrument' that removes or modifies referral and concurrence clauses within local environmental plans (LEPs), regional environmental plans (REPs) and State environmental planning policies (SEPPs).

**State Environmental Planning Policy (Exempt and Complying Development Codes) 2008**

This Policy Streamlines assessment processes for development that complies with specified development standards. The policy provides exempt and complying development codes that have State-wide application, identifying, in the General Exempt Development Code, types of development that are of minimal environmental impact that may be carried out without the need for development consent; and, in the General Housing Code, types of complying development that may be carried out in accordance with a complying development certificate as defined in the Environmental Planning and Assessment Act 1979.

**State Environmental Planning Policy (Affordable Rental Housing) 2009**

Establishes a consistent planning regime for the provision of affordable rental housing. The policy provides incentives for new affordable rental housing, facilitates the retention of existing affordable rentals, and expands the role of not-for-profit providers. It also aims to support local centres by providing housing for workers close to places of work, and facilitate development of housing for the homeless and other disadvantaged people. NOTE: Does not apply to land at Green Square or at Ultimo Pyrmont

**State Environmental Planning Policy (Urban Renewal) 2010**

The aims of this Policy are as follows:

- (a) to establish the process for assessing and identifying sites as urban renewal precincts,
- (b) to facilitate the orderly and economic development and redevelopment of sites in and around urban renewal precincts,
- (c) to facilitate delivery of the objectives of any applicable government State, regional or metropolitan strategies connected with the renewal of urban areas that are accessible by public transport.

**State Environmental Planning Policy (State and Regional Development) 2011**

The aims of this Policy are as follows:

- (a) to identify development that is State significant development,
- (b) to identify development that is State significant infrastructure and critical State significant infrastructure,
- (c) to confer functions on joint regional planning panels to determine development applications.

**Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005**

This plan applies to land within the Sydney Harbour Catchment, as shown edged heavy black on the Sydney Harbour Catchment Map, being part of the Sydney Region declared by order published in Gazette No 38 of 7 April 1989 at page 1841.

This plan has the following aims with respect to the Sydney Harbour Catchment: to ensure that the catchment, foreshores, waterways and islands of Sydney Harbour are recognised, protected and maintained: as outstanding natural asset, and as a public asset of national and heritage significance, for existing and future generations; to ensure a healthy, sustainable environment on land and water; to achieve a high quality urban environment; to ensure a prosperous working waterfront and an effective transport corridor, to encourage a culturally rich and vibrant place for people; to ensure accessibility to and along Sydney Harbour and its foreshores; to ensure the protection, maintenance and rehabilitation of watercourses, wetlands, riparian lands, remnant vegetation and ecological connectivity, to provide a consolidated, simplified and updated legislative framework for future planning.

**Sydney Regional Environmental Plan No.16 Walsh Bay (Gazetted 16/06/89, as amended)**

This plan provides for the redevelopment of Walsh Bay by encouraging re-use of existing structures, protection of heritage items, control use of waterways & provision of public access to waterfront.

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**OTHER MATTERS AFFECTING THE LAND AS PRESCRIBED BY SCHEDULE 4 -  
E. P. & A. REGULATION, 2000. CLAUSES (3) - (10)**

**(3) Complying Development**

- (1) Whether or not the land is land on which complying development may be carried out under each of the codes for complying development because of the provisions of clause 1.17A and 1.19 of *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008*.
- (2) If complying development may not be carried out on that land because of the provisions of clause 1.17A and 1.19 of that Policy, the reasons why it may not be carried out under that clause.

**Note: All Exempt and Complying Development Codes :** Clause 1.17A(a) Development that requires concurrence of a person other than the consent authority, or the Director General of the Department of Environment, Climate Change and Water is **not** complying development.

**General Housing Code**

Complying development **may not** be carried out on the land under the General Housing Code if because of the provisions of clause 1.17A & 1.19 (Land-based requirements for exempt and complying development) any of the following statements are **YES**

▪ Clause 1.17A(b). Has been identified as land that is a critical habitat.	<b>NO</b>
▪ Clause 1.17A(d). Has been identified as a property that comprises, or on which there is, an item that is listed on the State Heritage Register under the <i>Heritage Act 1977</i> or that is subject to an interim heritage order under the <i>Heritage Act 1977</i> .	<b>YES</b>
▪ Clause 1.17A(d) & 1.19(3). Has been identified as a property that comprises, or on which there is, a heritage item or draft heritage item.	<b>NO</b>
▪ Clause 1.17A(c). Has been identified as being within a wilderness area (identified under the <i>Wilderness Act 1987</i> .	<b>NO</b>
▪ Clause 1.17A(e) & 1.19(1). Has been identified as land that is within an environmentally sensitive area.	<b>NO</b>
▪ Clause 1.19(6)a. Has been identified as being within a heritage conservation area or a draft heritage conservation area.	<b>YES</b>
▪ Clause 1.19(6)b. Has been identified as being land that is reserved for a public purpose in an environmental planning instrument.	<b>NO</b>
▪ Clause 1.19(6)c. Has been identified as being on an Acid Sulfate Soils Map as being Class 1 or Class 2.	<b>YES</b>
▪ Clause 1.19(6)d. Has been identified as land that is subject to a biobanking agreement under part 7A of the threatened Species Conservation Act 1995 or a property vegetation plan under the Native Vegetation Act 2003.	<b>NO</b>
▪ Clause 1.19 (6)e. Has been identified as being excluded land identified by an environmental planning instrument.	<b>NO</b>
▪ Clause 1.19(6)f. Has been identified as being land in a foreshore area.	<b>YES</b>
▪ Clause 1.19(6)g. Has been identified as land that is in the 25 ANEF contour or a higher ANEF contour.	<b>NO</b>
▪ Clause 1.19(6)h. Has been identified as unsewered land within a drinking water catchment.	<b>NO</b>
▪ Clause 1.19(6)i. Has been identified as land that is declared to be a special area under the Sydney Water Catchment Management Act 1998.	<b>NO</b>

**Housing Alterations Code**

Complying development under the Housing Alterations Code **may not** be carried out on the land.

Reason why:

Refer to 1.17A State Environmental Planning Policy (Except and Complying Development Codes) 2008:

clause 1.17A(d) applies

**General Commercial and Industrial Code**



Complying development under the General Commercial and Industrial Code **may not** be carried out on the land.

Reason why:

Refer to 1.17A State Environmental Planning Policy (Except and Complying Development Codes) 2008:

clause 1.17A(d) applies

**Subdivisions Code**

Complying development under the Subdivisions Code **may not** be carried out on the land.

Reason why:

Refer to 1.17A State Environmental Planning Policy (Except and Complying Development Codes) 2008:

clause 1.17A(d) applies

**Rural Housing Code**

The Rural Housing Code does not apply to this Local Government Area.

**General Development Code**

Complying development under the General Development Code **may not** be carried out on the land.

Reason why:

Refer to 1.17A State Environmental Planning Policy (Except and Complying Development Codes) 2008:

clause 1.17A(d) applies

**Demolition Code**

Complying development under the Demolition Code **may not** be carried out on the land.

Reason why:

Refer to 1.17A State Environmental Planning Policy (Except and Complying Development Codes) 2008:

clause 1.17A(d) applies

(4) Coastal Protection Act, 1979

The council has not been notified by the department of public works that the land is affected by the operation of section 38 or 39 of the coastal protection act, 1979.

(4A) Certain information relating to beaches and coasts

(1) In relation to a coastal council an order has **not** been made under Part 4D of the coastal Protection Act 1979 in relation to temporary coastal protection works (within the meaning of that Act) on the land (or on public land adjacent to that land).

(2) In relation to a coastal council : Council has **not** been notified under section 55X of the Coastal Protection Act 1979 that temporary coastal protection works (within the meaning of that Act) have been placed on the land (or on public land adjacent to that land)

(4B) Annual charges under Local Government Act 1993 for coastal protection services that relate to existing coastal protection works

In relation to a coastal council : The owner (or any previous owner) of the land has not consented in writing to the land being subject to annual charges under section 496B of the Local Government Act 1993 for coastal protection services that relate to existing coastal protection works (within the meaning of section 553B of that Act).

**Note.** "Existing coastal protection works" are works to reduce the impact of coastal hazards on land (such as seawalls, revetments, groynes and beach nourishment) that existed before the commencement of section 553B of the Local Government Act 1993.

(5) Mine Subsidence District

This land has not been proclaimed to be a mine subsidence district within the meaning of section 15 of the mine subsidence compensation act, 1961.

(6) Road Widening and/or Road Realignment affected by (a) Division 2 of Part 3 of the Roads act 1993 or (c) any resolution of council or other authority.

This land **is not** affected by road widening and/or road realignment under section 25 of the Roads Act, 1993 and/or resolution of Council or any other authority.

(6) Road Widening and/or Road Realignment Affected by (b) any environmental planning instrument.

This land **is not** affected by any road widening or road realignment under any planning instrument.

(7) Council and other public authorities policies on hazard risk restrictions:

(a) The land **is not** affected by a policy adopted by the Council that restricts the development of the land because of the likelihood of land slip, bushfire, flooding, tidal inundation, subsidence, acid sulphate soils or any other risk; and

(b) The land **is not** affected by a policy adopted by any other public authority and notified to the council for the express purpose of its adoption by that authority being referred to on planning certificate issued by Council, that restricts the development of the land because of the likelihood of land slip, bushfire, flooding, tidal inundation, subsidence, acid sulphate soils or any other risk.

**(7A) Flood related development controls information.**

The development on this land or part of this land is not subject to flood related development controls.

**(8) Land reserved for acquisition**

No environmental planning instrument, or proposed environmental planning instrument applying to the land, provides for the acquisition of the land by a public authority, as referred to in section 27 of the Act.

**(9) Contribution plans**

The following Contributions Plans apply to properties within the City of Sydney local government area. Contributions plans marked **YES** may apply to this property:

▪ Central Sydney Contributions (Amendment) Plan 2002 – in operation 16 <sup>th</sup> June 2003	<b>NO</b>
▪ Ultimo Pyrmont Section 94 Contributions Plan (approved C.S.P.C 15 <sup>th</sup> December 1994 and Council 19 <sup>th</sup> December 1994)	<b>NO</b>
▪ City of Sydney Development Contributions Plan 2006 – in operation 7 <sup>th</sup> April 2007	<b>NO</b>
▪ Redfern Waterloo Authority Contributions Plan 2006 – in operation 16 <sup>th</sup> May 2007 ▪ Redfern Waterloo Authority Affordable Housing Contributions Plan – in operation 16 <sup>th</sup> May 2007	<b>NO</b>

**(9A) Biodiversity certified land**

The land has not been certified as biodiversity certified land.

**(10) Biobanking Agreement**

Council has not been notified of a biobanking agreement under Part 7A of the Threatened Species Conservation Act 1995.

**(11) Bush fire prone land**

The land has not been identified as Bush fire prone land.

**(12) Property vegetation plans**

Not Applicable.

**(13) Orders under Trees (Disputes Between Neighbours) Act 2006**

Council has not been notified of an order which has been made under the *Trees (Disputes Between Neighbours) Act 2006* to carry out work in relation to a tree on the land.

(14) Directions under Part 3A

Not Applicable.

(15) Site compatibility certificates and conditions for seniors housing

(a) The land to which the certificate relates is not subject to a current site compatibility certificate (seniors housing), of which Council is aware, in respect of proposed development on the land.

(b) The land to which the certificate relates is not subject to any condition of consent to a development application granted after 11 October 2007 required by State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004.

(16) Site compatibility certificates for infrastructure

The land to which the certificate relates is not subject to a valid site compatibility certificate (infrastructure), of which Council is aware, in respect of proposed development on the land.

(17) Site compatibility certificates and conditions for affordable rental housing

(a) The land to which the certificate relates is not subject to a current site compatibility certificate (affordable rental housing), of which Council is aware, in respect of proposed development on the land.

(b) The land to which the certificate relates is not subject to any terms of a kind referred to in clause 17(1) or 37(1) of State Environmental Planning Policy (Affordable Rental Housing) 2009 that have been imposed as a condition of consent to a development application in respect of the land.

(18) Paper subdivision information

Not Applicable.

**Note.** The following matters are prescribed by section 59 (2) of the Contaminated Land Management Act 1997 as additional matters to be specified in a planning certificate:

(a) The land to which the certificate relates **is not** declared to be **significantly contaminated land** within the meaning of that act as at the date when the certificate is issued.

(b) The land to which the certificate relates **is not** subject to a **management order** within the meaning of that act as at the date when the certificate is issued.

(c) The land to which the certificate relates **is not** the subject of an **approved voluntary management proposal** within the meaning of that act at the date the certificate is issued.

(d) The land to which the certificate relates **is not** the subject of an **ongoing maintenance order** within the meaning of that act as at the date when the certificate is issued.

(e) As at the date when the certificate is issued, Council **has not** identified that a **site audit statement** within the meaning of that act has been received in respect of the land the subject of the certificate.

**PLANNING CERTIFICATE SECTION 149(2) INFORMATION:**

*Information provided in accordance with planning certificate section 149 (2) has been taken from council's records and advice from other authorities but council disclaims all liability for any omission or inaccuracy in the information. Specific inquiry should be made where doubt exists.*



**PLANNING CERTIFICATE UNDER SECTION 149 (5) OF THE ENVIRONMENTAL  
PLANNING AND ASSESSMENT ACT, 1979**

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*PLANNING CERTIFICATE SECTION 149 (5) ADVICE is current as at 12:00 noon two working days prior to the date of issue of this certificate. The following matters have been considered & details provided where information exists: easements in favour of council; parking permit scheme; heritage floor space restrictions; low-rental residential building; foreshore building line; tree preservation order.*

**Contaminated Land Potential:**

Council records do not have sufficient information about the uses (including previous uses) of the land which is the subject of this section 149 certificate to confirm that the land has not been used for a purpose which would be likely to have contaminated the land. Parties should make their own enquiries as to whether the land may be contaminated.

**Hazard Risk Restriction:**

The City of Sydney Local Environmental Plan 2012 incorporates Acid Sulfate soil maps. Development on the land identified in those maps should have regard to Division 4 clause 7.16 of the LEP.

**Construction Noise and View Loss Advice:**

Intending purchasers are advised that the subject property may be affected by construction noise and loss or diminution of views as a result of surrounding development.

**City of Sydney Tree Preservation Order 2004 (TPO)**

This order applies to all land where South Sydney Local Environmental Plan 1998 applies and the City of Sydney Council or the Central Sydney Planning Committee is the relevant consent authority under the *Environmental Planning & Assessment Act 1979*. Contact Council's Contract and Asset Management section for more information.

**Outstanding Notice & Order information**

In relation to this property, there **is not** an outstanding Order or Notice of Intention to issue an Order relating to Fire Safety (being an Order or Notice of Intention to issue an Order of type 6, 10, 11 under Section 121B of the Environmental Planning and Assessment Act, 1979). Further information about the Order or Notice of Intention to issue an Order may be obtained by applying for a certificate under Section 121ZP of the Environmental Planning and Assessment Act and Section 735A of the Local Government Act.

In relation to this property, there **is not** an outstanding Order or Notice of Intention to issue an Order (being an Order or Notice of Intention to issue an Order of a type other than relating to fire safety). Further information about the Order or Notice of Intention to issue an Order may be obtained by applying for a certificate under Section 121ZP of the Environmental Planning and Assessment Act and Section 735A of the Local Government Act.

**Resident & Visitor Parking Permit Schemes Restriction**

Owners and occupiers of this address are **not eligible** to participate in the resident and visitor permit parking schemes.

**The Minister is the Consent Authority**

The Minister is the consent authority where development has a capital investment value of more than \$10 million. (State Environmental Planning Policy (Major Projects))

**Sydney Harbour Foreshore Authority Act 1998**

The provisions of the Sydney Harbour Foreshore Authority Act 1998 apply to the subject land.

For more information, contact the Property Officer at Sydney Harbour Foreshore Authority on telephone (02) 9240 8500.

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## **ADVICE FROM OTHER BODIES**

### **Sydney Ports Corporation Advice**

Some land in the City of Sydney located in the vicinity of the White Bay, Glebe Island and Darling Harbour ports may be affected by noise from port operations.

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*Advice provided in accordance with planning certificate section 149 (5) is supplied in good faith. Council accepts no liability for the validity of the advice given. (see section 149 (6) of the Environmental Planning and Assessment Act, 1979).*

***For information regarding outstanding notices and orders a CERTIFICATE FOR OUTSTANDING NOTICES OF INTENTION AND/OR AN ORDER UNDER SECTION 735A OF THE LOCAL GOVERNMENT ACT, 1993 AND SECTION 121ZP OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979 may be applied for at Sydney City Council.***

*Planning certificate section 149 (2), local planning controls are available for inspection at the following locations:*

### **General Enquiries :**

**Telephone: 02 9265 9333**

**Facsimile: 02 9265 9415**

### **Town Hall House**

Level 2,  
Town Hall House,  
456 Kent Street,  
Sydney.  
8am – 6pm, Monday - Friday

### **Glebe Customer Service Centre**

Glebe Library,  
186 Glebe Point Road,  
Glebe  
9am – 5pm, Monday – Friday

### **Neighbourhood Service Centre Kings Cross**

50 Darlinghurst Road,  
Potts Point  
9am – 5pm, Monday – Friday  
9am – 12pm, Saturday

### **Neighbourhood Service Centre Redfern**

158 Redfern Street  
Redfern  
9am-5pm Monday – Friday  
9am – 12 Noon Saturday

### **Green Square Customer Service Centre**

The Tote,  
100 Joynton Avenue,  
Zetland  
10am-6pm Monday – Friday

*State planning controls are available for inspection at the following locations:*

**Sydney Harbour Foreshore Authority** (former Sydney Cove Authority and Darling Harbour Authority),  
Level 6,  
66 Harrington Street,  
The Rocks.

**Department of Planning & Infrastructure Information Centre**  
23-33 Bridge Street,  
Sydney NSW 2000

*Where planning certificate section 149 (5) matters are supplied, complete details are available by writing to:*  
*Chief Executive Officer,*  
*City of Sydney,*  
*G.P.O. Box 1591,*  
*Sydney, NSW 2000*

End of Document

City of Sydney  
Town Hall House  
456 Kent Street  
Sydney NSW 2000  
Telephone +61 2 9265 9333  
Fax +61 2 9265 9222  
council@cityofsydney.nsw.gov.au  
GPO Box 1591 Sydney NSW 2001  
cityofsydney.nsw.gov.au



JULIA NICHOLSON  
JBS ENVIRONMENTAL PTY LTD  
LEVEL 1 50 MARGARET ST  
SYDNEY NSW 2000

## PLANNING CERTIFICATE

Under Section 149 of the Environmental Planning and Assessment Act, 1979

<b>Applicant:</b>	JBS ENVIRONMENTAL PTY LTD
<b>Applicant's reference:</b>	JBS & G
<b>Address of property:</b>	15 Hickson Road , DAWES POINT NSW 2000
<b>Owner:</b>	WATERWAYS AUTHORITY
<b>Description of land:</b>	Lot 65 DP 1048377
<b>Certificate No.:</b>	2014300874
<b>Certificate Date:</b>	14/02/14
<b>Receipt No:</b>	5018824
<b>Fee:</b>	\$80.00
<b>Paid:</b>	14/02/14

Title information, description, dimensions and area of land are provided from data supplied by the Valuer General and shown where available.

Issuing Officer  
per **Monica Barone**  
Chief Executive Officer

### CERTIFICATE ENQUIRIES:

Ph: 9265 9333  
Fax: 9265 9415

*city of villages*

**PLANNING CERTIFICATE UNDER SECTION 149 (2) OF THE ENVIRONMENTAL  
PLANNING AND ASSESSMENT ACT, 1979**

**MATTERS AFFECTING THE LAND AS PRESCRIBED BY SCHEDULE 4 -  
ENVIRONMENTAL PLANNING & ASSESSMENT REGULATION, 2000, CLAUSES (1) - (2).**

**DEVELOPMENT CONTROLS**

*The following information must be read in conjunction with and subject to all other provisions of the environmental planning instruments specified in this certificate.*

**ZONING**

**Zone 1 – Walsh Bay Conservation Zone – Sydney Regional Environmental Plan 16.**

(1) The objectives of this zone are:

- (a) To allow an appropriate range of uses to encourage the adaptive re-use of existing structures while not required for commercial port uses;
- (b) To ensure that development is consistent with the heritage significance, the scale, the built form and the materials of existing structures in the zone and adjoining areas;
- (c) To ensure that development is compatible with and does not detract from the financial, commercial and retail functions of the existing city central business district functions and the Sydney Cove Redevelopment Area; and
- (d) To ensure that development is compatible with and does not adversely impact on the residential amenity and function of the adjoining areas.

(2) Without Development Consent

Nil

(3) Only with Development Consent

Any purpose other than a purpose included in item (2) or (4)

(4) Prohibited

Bus depots, bus stations, car repair stations, gas holders, generating works, helipads, heliports, industries (other than home industries and light industries), institutions, junk yards, liquid fuel depots, marinas, mines, roadside stalls, road transport terminals, sawmills.

**PROPOSED ZONING**

This property is not affected by a draft zone.

**LOCAL PLANNING CONTROLS**

**Sydney Harbour Foreshores and Waterways Area Development Control Plan 2005 (commenced 28.09.2005)** – This DCP applies to all development proposals within the Foreshores and Waterways Area identified in SREP (Sydney Harbour Catchment) 2005 (refer to the Foreshores and Waterways Area map)

**Sydney Development Control Plan 2012 (as amended) - (commenced 14.12.2012)**

**HERITAGE**



### **Walsh Bay Conservation Zone**

A person shall not, in respect of the Walsh Bay Conservation Zone: demolish or alter a building or work within the Zone; damage or remove a relic, including excavation for the purpose of exposing or removing a relic, within the Zone; damage or despoil a place within the Zone; erect a building on or subdivide land within the Zone; or damage any tree within the Zone, except with the consent of the consent authority.

### **State Heritage Register (Amendment to Heritage Act, 1977, gazetted 2/4/99)**

This property is identified as being of state significance and has been entered on the State Heritage Register. Unless the proposed work is exempt under the Heritage Office Standard Exemptions or is covered by site specific exemptions, an applicant must seek an integrated development approval from Council and as such the proposal will be referred to the Heritage Council. If major changes are proposed the Heritage Council may require the applicant to prepare a conservation management plan in accordance with the NSW Heritage Manual Guidelines. For further information please contact the Heritage Office (02) 9873 8500 or alternatively online [www.heritage.nsw.gov.au](http://www.heritage.nsw.gov.au).

## **STATE PLANNING INSTRUMENTS**

*Full copies of State Environmental Planning Policies are available online at [www.planning.nsw.gov.au](http://www.planning.nsw.gov.au).*

### **State Environmental Planning Policy No. 1 – Development Standards**

This policy makes development standards more flexible. It allows Council to approve a development proposal that does not comply with a set standard where this can be shown to be unreasonable or unnecessary.

### **State Environmental Planning Policy No. 4 – Development without Consent and Miscellaneous Complying Development**

This policy allows relatively simple or minor changes of land or building use and certain types of development by public authorities without the need for formal development applications. The types of development covered are outlined in the policy.

### **SREP 16 – Walsh Bay**

Clauses 9 & 10 of State Environmental Planning Policy No. 4 do not apply to the land within Sydney Regional Environmental Plan No. 16 – Walsh Bay.

### **State Environmental Planning Policy No. 6 – Number of Storeys in a Building**

This policy sets out a method for determining the number of storeys in a building, to prevent possible confusion arising from the interpretation of various environmental planning instruments.

### **State Environmental Planning Policy No. 10 – Retention of Low-Cost Accommodation**

This policy aims to provide a mechanism for the retention of low-cost rental accommodation. The policy establishes criteria for determining a low-cost rental residential building (including boarding houses, hostels and low rental residential flat buildings), matters for Council consideration and requirements for development proposed under the policy.

**State Environmental Planning Policy No. 19 – Bushland in Urban Areas**

This is a policy to protect and preserve bushland within certain urban areas, as part of the natural heritage or for recreational, educational and scientific purposes. This policy is designed to protect bushland in public open space zones and reservations, and to ensure that bush preservation is given a high priority when local environmental plans for urban development are prepared.

**State Environmental Planning Policy No. 22 – Shops and Commercial Premises**

This policy allows, with the consent of Council, a change of use from a shop to another kind of shop or commercial premises, where the new use is prohibited under an environmental planning instrument.

**State Environmental Planning Policy No. 32 – Urban Consolidation**

This policy implements the principles of urban consolidation, including the orderly, economic use and development of land. The policy enables urban land which is no longer required for the purpose for which it is currently zoned or used to be redeveloped for multi-unit housing and related development.

**State Environmental Planning Policy No. 33 – Hazardous and Offensive Development**

This policy aims to amend the definitions of hazardous and offensive industries; to render ineffective any environmental planning instruments not defining hazardous or offensive as per this policy; to control development of hazardous and offensive industries.

**State Environmental Planning Policy No. 55 – Remediation of Land**

This policy provides planning controls for the remediation of contaminated land. The policy states that land must not be developed if it is unsuitable for a proposed use because it is contaminated. If the land is unsuitable, remediation must take place before the land is developed. The policy makes remediation permissible across the State, defines when consent is required, requires all remediation to comply with standards, ensures land is investigated if contamination is suspected, and requires councils to be notified of all remediation proposals. To assist councils and developers, the Department, in conjunction with the Environment Protection Authority, has prepared Managing Land Contamination: Planning Guidelines.

**State Environmental Planning Policy No 60 – Exempt and Complying Development (Gazetted 3.03.00)**

Specifies exempt and complying development in certain areas that have not provided for those types of development through a Local Environmental Plan. This is achieved by identifying the development of minimal environmental impact that is to be exempt and identifying development that is to be complying development. The policy also specifies standards for that development, identify complying development separately for metropolitan Sydney and regional areas of New South Wales, specifies conditions for complying development certificates and ensures that development consent is required for the subdivision of land, and the erection of a building or for demolition.

**State Environmental Planning Policy No. 64 – Advertising and Signage**

This policy aims to ensure that signage (including advertising):

Is compatible with the desired amenity and visual character of an area, and

- Provides effective communications in suitable locations, and
- Is of a high quality design and finish.

To this end the policy regulates signage (but not content) under Part 4 of the Act and provides limited time consents for the display of certain advertisements. The policy does not apply to signage that is exempt development under an environmental planning instrument. It does apply to all signage that can be displayed with or without consent and is visible from any public place or reserve, except as provided by the policy.

This policy should be read in conjunction with the Sydney Local Environmental Plan 2005, the City of Sydney Signage and Advertising Structures Development Control Plan 2005 and State Environmental Planning Policy No. 60 where these apply.

**State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Buildings**

This policy aims to improve the design quality of flats of three or more storeys with four or more self contained dwellings. The policy sets out a series of design principles for local councils to consider when assessing development proposals for residential flat development. The policy also creates a role for an independent design review panel and requires the involvement of a qualified designer in the design and approval process.

**State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004**

This Policy does not apply to land described in Schedule 1 (Environmentally sensitive land), or land that is zoned for industrial purposes, or land to which an interim heritage order made under the *Heritage Act 1997* by the Minister administering that Act applies, or land to which a listing on the State Heritage Register kept under the *Heritage Act 1997* applies.

The Policy aims to encourage the provision of housing (including residential care facilities) that will increase the supply and diversity of residences that meet the needs of seniors or people with a disability, and make efficient use of existing infrastructure and services, and be of good design.

**State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004**

Aims to ensure consistency in the implementation of the BASIX scheme throughout the State. This Policy achieves its aim by overriding provisions of other environmental planning instruments and development control plans that would otherwise add to, subtract from or modify any obligations arising under the BASIX scheme.

**State Environmental Planning Policy (Major Development) 2005**

This Policy aims to identify development of economic, social or environmental significance to the State or regions of the State so as to provide a consistent and comprehensive assessment and decision making process for that development.

NB: This SEPP also contains exempt & complying provisions

**State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007**

This Policy aims to provide for the proper management and development of mineral, petroleum and extractive material resources for the social and economic welfare of the State.

**State Environmental Planning Policy (Temporary Structures and Places of Public Entertainment) 2007**

This Policy aims to ensure that suitable provision is made for ensuring the safety of persons using temporary structures or places of public entertainment.

**State Environmental Planning Policy (Infrastructure) 2007**

This Policy aims to facilitate the effective delivery of infrastructure across the state.

NB: This SEPP also contains exempt & complying provisions

**State Environmental Planning Policy (Repeal of Concurrence and Referral Provisions) 2008**

This Policy is an 'amending instrument' that removes or modifies referral and concurrence clauses within local environmental plans (LEPs), regional environmental plans (REPs) and State environmental planning policies (SEPPs).

**State Environmental Planning Policy (Exempt and Complying Development Codes) 2008**

This Policy Streamlines assessment processes for development that complies with specified development standards. The policy provides exempt and complying development codes that have State-wide application, identifying, in the General Exempt Development Code, types of development that are of minimal environmental impact that may be carried out without the need for development consent; and, in the General Housing Code, types of complying development that may be carried out in accordance with a complying development certificate as defined in the Environmental Planning and Assessment Act 1979.

**State Environmental Planning Policy (Affordable Rental Housing) 2009**

Establishes a consistent planning regime for the provision of affordable rental housing. The policy provides incentives for new affordable rental housing, facilitates the retention of existing affordable rentals, and expands the role of not-for-profit providers. It also aims to support local centres by providing housing for workers close to places of work, and facilitate development of housing for the homeless and other disadvantaged people. NOTE: Does not apply to land at Green Square or at Ultimo Pyrmont

**State Environmental Planning Policy (Urban Renewal) 2010**

The aims of this Policy are as follows:

- (a) to establish the process for assessing and identifying sites as urban renewal precincts,
- (b) to facilitate the orderly and economic development and redevelopment of sites in and around urban renewal precincts,
- (c) to facilitate delivery of the objectives of any applicable government State, regional or metropolitan strategies connected with the renewal of urban areas that are accessible by public transport.

**State Environmental Planning Policy (State and Regional Development) 2011**

The aims of this Policy are as follows:

- (a) to identify development that is State significant development,
- (b) to identify development that is State significant infrastructure and critical State significant infrastructure,
- (c) to confer functions on joint regional planning panels to determine development applications.

**Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005**

This plan applies to land within the Sydney Harbour Catchment, as shown edged heavy black on the Sydney Harbour Catchment Map, being part of the Sydney Region declared by order published in Gazette No 38 of 7 April 1989 at page 1841.

This plan has the following aims with respect to the Sydney Harbour Catchment: to ensure that the catchment, foreshores, waterways and islands of Sydney Harbour are recognised, protected and maintained: as outstanding natural asset, and as a public asset of national and heritage significance, for existing and future generations; to ensure a healthy, sustainable environment on land and water; to achieve a high quality urban environment; to ensure a prosperous working waterfront and an effective transport corridor, to encourage a culturally rich and vibrant place for people; to ensure accessibility to and along Sydney Harbour and its foreshores; to ensure the protection, maintenance and rehabilitation of watercourses, wetlands, riparian lands, remnant vegetation and ecological connectivity, to provide a consolidated, simplified and updated legislative framework for future planning.

**Sydney Regional Environmental Plan No.16 Walsh Bay (Gazetted 16/06/89, as amended)**

This plan provides for the redevelopment of Walsh Bay by encouraging re-use of existing structures, protection of heritage items, control use of waterways & provision of public access to waterfront.

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**OTHER MATTERS AFFECTING THE LAND AS PRESCRIBED BY SCHEDULE 4 -  
E. P. & A. REGULATION, 2000. CLAUSES (3) - (10)**

**(3) Complying Development**

- (1) Whether or not the land is land on which complying development may be carried out under each of the codes for complying development because of the provisions of clause 1.17A and 1.19 of *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008*.
- (2) If complying development may not be carried out on that land because of the provisions of clause 1.17A and 1.19 of that Policy, the reasons why it may not be carried out under that clause.

**Note: All Exempt and Complying Development Codes :** Clause 1.17A(a) Development that requires concurrence of a person other than the consent authority, or the Director General of the Department of Environment, Climate Change and Water is **not** complying development.

**General Housing Code**

Complying development **may not** be carried out on the land under the General Housing Code if because of the provisions of clause 1.17A & 1.19 (Land-based requirements for exempt and complying development) any of the following statements are **YES**



▪ Clause 1.17A(b). Has been identified as land that is a critical habitat.	<b>NO</b>
▪ Clause 1.17A(d). Has been identified as a property that comprises, or on which there is, an item that is listed on the State Heritage Register under the <i>Heritage Act 1977</i> or that is subject to an interim heritage order under the <i>Heritage Act 1977</i> .	<b>YES</b>
▪ Clause 1.17A(d) & 1.19(3). Has been identified as a property that comprises, or on which there is, a heritage item or draft heritage item.	<b>NO</b>
▪ Clause 1.17A(c). Has been identified as being within a wilderness area (identified under the <i>Wilderness Act 1987</i> .	<b>NO</b>
▪ Clause 1.17A(e) & 1.19(1). Has been identified as land that is within an environmentally sensitive area.	<b>NO</b>
▪ Clause 1.19(6)a. Has been identified as being within a heritage conservation area or a draft heritage conservation area.	<b>YES</b>
▪ Clause 1.19(6)b. Has been identified as being land that is reserved for a public purpose in an environmental planning instrument.	<b>NO</b>
▪ Clause 1.19(6)c. Has been identified as being on an Acid Sulfate Soils Map as being Class 1 or Class 2.	<b>YES</b>
▪ Clause 1.19(6)d. Has been identified as land that is subject to a biobanking agreement under part 7A of the threatened Species Conservation Act 1995 or a property vegetation plan under the Native Vegetation Act 2003.	<b>NO</b>
▪ Clause 1.19 (6)e. Has been identified as being excluded land identified by an environmental planning instrument.	<b>NO</b>
▪ Clause 1.19(6)f. Has been identified as being land in a foreshore area.	<b>YES</b>
▪ Clause 1.19(6)g. Has been identified as land that is in the 25 ANEF contour or a higher ANEF contour.	<b>NO</b>
▪ Clause 1.19(6)h. Has been identified as unsewered land within a drinking water catchment.	<b>NO</b>
▪ Clause 1.19(6)i. Has been identified as land that is declared to be a special area under the Sydney Water Catchment Management Act 1998.	<b>NO</b>

**Housing Alterations Code**

Complying development under the Housing Alterations Code **may not** be carried out on the land.

Reason why:

Refer to 1.17A State Environmental Planning Policy (Except and Complying Development Codes) 2008:

clause 1.17A(d) applies

**General Commercial and Industrial Code**

Complying development under the General Commercial and Industrial Code **may not** be carried out on the land.

Reason why:

Refer to 1.17A State Environmental Planning Policy (Except and Complying Development Codes) 2008:

clause 1.17A(d) applies

**Subdivisions Code**

Complying development under the Subdivisions Code **may not** be carried out on the land.

Reason why:

Refer to 1.17A State Environmental Planning Policy (Except and Complying Development Codes) 2008:

clause 1.17A(d) applies

**Rural Housing Code**

The Rural Housing Code does not apply to this Local Government Area.

**General Development Code**

Complying development under the General Development Code **may not** be carried out on the land.

Reason why:

Refer to 1.17A State Environmental Planning Policy (Except and Complying Development Codes) 2008:

clause 1.17A(d) applies

**Demolition Code**

Complying development under the Demolition Code **may not** be carried out on the land.

Reason why:

Refer to 1.17A State Environmental Planning Policy (Except and Complying Development Codes) 2008:

clause 1.17A(d) applies

(4) Coastal Protection Act, 1979

The council has not been notified by the department of public works that the land is affected by the operation of section 38 or 39 of the coastal protection act, 1979.

(4A) Certain information relating to beaches and coasts

(1) In relation to a coastal council an order has **not** been made under Part 4D of the coastal Protection Act 1979 in relation to temporary coastal protection works (within the meaning of that Act) on the land (or on public land adjacent to that land).

(2) In relation to a coastal council : Council has **not** been notified under section 55X of the Coastal Protection Act 1979 that temporary coastal protection works (within the meaning of that Act) have been placed on the land (or on public land adjacent to that land)

(4B) Annual charges under Local Government Act 1993 for coastal protection services that relate to existing coastal protection works

In relation to a coastal council : The owner (or any previous owner) of the land has not consented in writing to the land being subject to annual charges under section 496B of the Local Government Act 1993 for coastal protection services that relate to existing coastal protection works (within the meaning of section 553B of that Act).

**Note.** "Existing coastal protection works" are works to reduce the impact of coastal hazards on land (such as seawalls, revetments, groynes and beach nourishment) that existed before the commencement of section 553B of the Local Government Act 1993.

(5) Mine Subsidence District

This land has not been proclaimed to be a mine subsidence district within the meaning of section 15 of the mine subsidence compensation act, 1961.

(6) Road Widening and/or Road Realignment affected by (a) Division 2 of Part 3 of the Roads act 1993 or (c) any resolution of council or other authority.

This land **is not** affected by road widening and/or road realignment under section 25 of the Roads Act, 1993 and/or resolution of Council or any other authority.

(6) Road Widening and/or Road Realignment Affected by (b) any environmental planning instrument.

This land **is not** affected by any road widening or road realignment under any planning instrument.

(7) Council and other public authorities policies on hazard risk restrictions:

- (a) The land **is not** affected by a policy adopted by the Council that restricts the development of the land because of the likelihood of land slip, bushfire, flooding, tidal inundation, subsidence, acid sulphate soils or any other risk; and
- (b) The land **is not** affected by a policy adopted by any other public authority and notified to the council for the express purpose of its adoption by that authority being referred to on planning certificate issued by Council, that restricts the development of the land because of the likelihood of land slip, bushfire, flooding, tidal inundation, subsidence, acid sulphate soils or any other risk.

**(7A) Flood related development controls information.**

The development on this land or part of this land is not subject to flood related development controls.

**(8) Land reserved for acquisition**

No environmental planning instrument, or proposed environmental planning instrument applying to the land, provides for the acquisition of the land by a public authority, as referred to in section 27 of the Act.

**(9) Contribution plans**

The following Contributions Plans apply to properties within the City of Sydney local government area. Contributions plans marked **YES** may apply to this property:

▪ Central Sydney Contributions (Amendment) Plan 2002 – in operation 16 <sup>th</sup> June 2003	<b>NO</b>
▪ Ultimo Pyrmont Section 94 Contributions Plan (approved C.S.P.C 15 <sup>th</sup> December 1994 and Council 19 <sup>th</sup> December 1994)	<b>NO</b>
▪ City of Sydney Development Contributions Plan 2006 – in operation 7 <sup>th</sup> April 2007	<b>NO</b>
▪ Redfern Waterloo Authority Contributions Plan 2006 – in operation 16 <sup>th</sup> May 2007 ▪ Redfern Waterloo Authority Affordable Housing Contributions Plan – in operation 16 <sup>th</sup> May 2007	<b>NO</b>

**(9A) Biodiversity certified land**

The land has not been certified as biodiversity certified land.

**(10) Biobanking Agreement**

Council has not been notified of a biobanking agreement under Part 7A of the Threatened Species Conservation Act 1995.

**(11) Bush fire prone land**

The land has not been identified as Bush fire prone land.

**(12) Property vegetation plans**

Not Applicable.

**(13) Orders under Trees (Disputes Between Neighbours) Act 2006**

Council has not been notified of an order which has been made under the *Trees (Disputes Between Neighbours) Act 2006* to carry out work in relation to a tree on the land.

(14) Directions under Part 3A

Not Applicable.

(15) Site compatibility certificates and conditions for seniors housing

(a) The land to which the certificate relates is not subject to a current site compatibility certificate (seniors housing), of which Council is aware, in respect of proposed development on the land.

(b) The land to which the certificate relates is not subject to any condition of consent to a development application granted after 11 October 2007 required by State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004.

(16) Site compatibility certificates for infrastructure

The land to which the certificate relates is not subject to a valid site compatibility certificate (infrastructure), of which Council is aware, in respect of proposed development on the land.

(17) Site compatibility certificates and conditions for affordable rental housing

(a) The land to which the certificate relates is not subject to a current site compatibility certificate (affordable rental housing), of which Council is aware, in respect of proposed development on the land.

(b) The land to which the certificate relates is not subject to any terms of a kind referred to in clause 17(1) or 37(1) of State Environmental Planning Policy (Affordable Rental Housing) 2009 that have been imposed as a condition of consent to a development application in respect of the land.

(18) Paper subdivision information

Not Applicable.

**Note.** The following matters are prescribed by section 59 (2) of the Contaminated Land Management Act 1997 as additional matters to be specified in a planning certificate:

(a) The land to which the certificate relates **is not** declared to be **significantly contaminated land** within the meaning of that act as at the date when the certificate is issued.

(b) The land to which the certificate relates **is not** subject to a **management order** within the meaning of that act as at the date when the certificate is issued.

(c) The land to which the certificate relates **is not** the subject of an **approved voluntary management proposal** within the meaning of that act at the date the certificate is issued.

(d) The land to which the certificate relates **is not** the subject of an **ongoing maintenance order** within the meaning of that act as at the date when the certificate is issued.

(e) As at the date when the certificate is issued, Council **has not** identified that a **site audit statement** within the meaning of that act has been received in respect of the land the subject of the certificate.



**PLANNING CERTIFICATE SECTION 149(2) INFORMATION:**

*Information provided in accordance with planning certificate section 149 (2) has been taken from council's records and advice from other authorities but council disclaims all liability for any omission or inaccuracy in the information. Specific inquiry should be made where doubt exists.*

**PLANNING CERTIFICATE UNDER SECTION 149 (5) OF THE ENVIRONMENTAL  
PLANNING AND ASSESSMENT ACT, 1979**

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*PLANNING CERTIFICATE SECTION 149 (5) ADVICE is current as at 12:00 noon two working days prior to the date of issue of this certificate. The following matters have been considered & details provided where information exists: easements in favour of council; parking permit scheme; heritage floor space restrictions; low-rental residential building; foreshore building line; tree preservation order.*

**Contaminated Land Potential:**

Council records do not have sufficient information about the uses (including previous uses) of the land which is the subject of this section 149 certificate to confirm that the land has not been used for a purpose which would be likely to have contaminated the land. Parties should make their own enquiries as to whether the land may be contaminated.

**Hazard Risk Restriction:**

The City of Sydney Local Environmental Plan 2012 incorporates Acid Sulfate soil maps. Development on the land identified in those maps should have regard to Division 4 clause 7.16 of the LEP.

**Construction Noise and View Loss Advice:**

Intending purchasers are advised that the subject property may be affected by construction noise and loss or diminution of views as a result of surrounding development.

**City of Sydney Tree Preservation Order 2004 (TPO)**

This order applies to all land where South Sydney Local Environmental Plan 1998 applies and the City of Sydney Council or the Central Sydney Planning Committee is the relevant consent authority under the *Environmental Planning & Assessment Act 1979*. Contact Council's Contract and Asset Management section for more information.

**Outstanding Notice & Order information**

In relation to this property, there **is not** an outstanding Order or Notice of Intention to issue an Order relating to Fire Safety (being an Order or Notice of Intention to issue an Order of type 6, 10, 11 under Section 121B of the *Environmental Planning and Assessment Act, 1979*). Further information about the Order or Notice of Intention to issue an Order may be obtained by applying for a certificate under Section 121ZP of the *Environmental Planning and Assessment Act* and Section 735A of the *Local Government Act*.

In relation to this property, there **is not** an outstanding Order or Notice of Intention to issue an Order (being an Order or Notice of Intention to issue an Order of a type other than relating to fire safety). Further information about the Order or Notice of Intention to issue an Order may be obtained by applying for a certificate under Section 121ZP of the *Environmental Planning and Assessment Act* and Section 735A of the *Local Government Act*.

**Resident & Visitor Parking Permit Schemes Restriction**

Owners and occupiers of this address are **not eligible** to participate in the resident and visitor permit parking schemes.

**Sydney Harbour Foreshore Authority Act 1998**

The provisions of the Sydney Harbour Foreshore Authority Act 1998 apply to the subject land. For more information, contact the Property Officer at Sydney Harbour Foreshore Authority on telephone (02) 9240 8500.

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## **ADVICE FROM OTHER BODIES**

### **Sydney Ports Corporation Advice**

Some land in the City of Sydney located in the vicinity of the White Bay, Glebe Island and Darling Harbour ports may be affected by noise from port operations.

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*Advice provided in accordance with planning certificate section 149 (5) is supplied in good faith. Council accepts no liability for the validity of the advice given. (see section 149 (6) of the Environmental Planning and Assessment Act, 1979).*

***For information regarding outstanding notices and orders a CERTIFICATE FOR OUTSTANDING NOTICES OF INTENTION AND/OR AN ORDER UNDER SECTION 735A OF THE LOCAL GOVERNMENT ACT, 1993 AND SECTION 121ZP OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979 may be applied for at Sydney City Council.***

*Planning certificate section 149 (2), local planning controls are available for inspection at the following locations:*

#### **General Enquiries :**

**Telephone: 02 9265 9333**

**Facsimile: 02 9265 9415**

#### **Town Hall House**

Level 2,  
Town Hall House,  
456 Kent Street,  
Sydney.  
8am – 6pm, Monday - Friday

#### **Glebe Customer Service Centre**

Glebe Library,  
186 Glebe Point Road,  
Glebe  
9am – 5pm, Monday – Friday

#### **Neighbourhood Service Centre Kings Cross**

50 Darlinghurst Road,  
Potts Point  
9am – 5pm, Monday – Friday  
9am – 12pm, Saturday

#### **Neighbourhood Service Centre Redfern**

158 Redfern Street  
Redfern  
9am-5pm Monday – Friday  
9am – 12 Noon Saturday

#### **Green Square Customer Service Centre**

The Tote,  
100 Joynton Avenue,  
Zetland  
10am-6pm Monday – Friday

*State planning controls are available for inspection at the following locations:*

**Sydney Harbour Foreshore Authority** (former Sydney Cove Authority and Darling Harbour Authority),  
Level 6,  
66 Harrington Street,  
The Rocks.

**Department of Planning & Infrastructure Information Centre**  
23-33 Bridge Street,  
Sydney NSW 2000

*Where planning certificate section 149 (5) matters are supplied, complete details are available by writing to:*

*Chief Executive Officer,  
City of Sydney,  
G.P.O. Box 1591,  
Sydney, NSW 2000*

End of Document

## **Appendix G WorkCover NSW Dangerous Goods Database Search Results**





Dangerous Goods Licensing  
WorkCover NSW  
Locked Bag 2906  
LISAROW NSW 2252

To whom it may concern

I, Marianna Preston of Arts NSW (current property owner), hereby authorise JBS&G to undertake a 'Site Search for License to Keep Dangerous Goods' for the property located at Pier 2/3 - Lot 11 DP 1138931, Pier 2/3 Shore Sheds – Lot 24 DP 1071597 and Wharf 4/5 - Lot 65 in DP 1048377. The information is required by JBS&G in the preparation of an Environmental Site Assessment report for the property.

If you have any queries relating to the property or require further information please do not hesitate to contact me on [marianna.preston@arts.nsw.gov.au](mailto:marianna.preston@arts.nsw.gov.au) or by phone on 02 9995 0502.

Kind regards

Marianna Preston  
Director, Infrastructure

Date: 11 Feb 2014.

## CONTACT FOR NOTIFICATION INQUIRIES

Title: Mr / Miss / Ms / Mrs / Other (please specify) MR Family name PRESTON  
Given name JOHN Other names EDWARD  
Gender ☒ Male / Female (please circle) Date of birth 01 / 03 / 46 Place of birth GRIFFIN  
Postal address P.O. Box 777  
Suburb Millers Point State NSW Postcode 2000  
Business phone 02 9250 1730 Business fax number 02 9250 1732  
Business email address jpreston@sydneytheatre.com.au

Previous Licence Number or Acknowledgement Number (if known)

35/ 02 47388 / 1/10/06

Previous Occupier (if known)

100.00  
Date 3.8.06  
Rec. No. 467417

Site on which dangerous goods are to be kept

Number Street

4/5 HICKSON ROAD WALSH BAY

Nearest cross Street

POTTINGER STREET

Lot and DP if no street number

Is the site staffed? If yes state number of employees 100Site staffing: Hours per day 17 Days per week 6

## Site Emergency Contact

Phone number

Name

(02) 0414 313 765 MARTYN NIGHTINGALE

Nature of site (eg petrol station, warehouse etc)

PERFORMING ARTS VENUES

Nature of your primary business activity

LIVE PERFORMANCE PRODUCTION

ABN Number (if any)

Website details (if any)

87 001 667 983 WWW.SYDNEYTHEATRE.COM.AU

What is the ANSZIC code most applicable to your business? (see guide for list of codes and further information)

Code

Description

925 LIVE PERFORMANCE PRODUCTION

Attach a site sketch(s) of the premises. Refer to the Guide for information on the requirements for the site sketch.

Attach a photocopy page from a local Street Directory or other map showing the locality of the premises. Mark the location of the premises with an X

< notifiable amounts  
1/10/06

List the dangerous goods that will be stored and/or processed on these premises. Copy this page and attach additional sheets if there is insufficient space.

Identifier	Type of storage location or process	Class	Maximum Storage Capacity (L, kg, M <sup>3</sup> )
2	Flammable Goods Cabinet	3	250 L

UN Number	Proper Shipping Name	Class	PG (I, II, III)	Product or Common Name	HazChem Symbol	Typical Qty	Unit eg L, kg, M <sup>3</sup>
UN 1193		III		ETHYL METHYL KETONE		5	L
UN 1219		III		ISOPROPANOL		2	L
UN 1263		III		Paint related material		8	L
UN 1300	Turps	III		TURPENTINE SUBSTITUTE		20	L

LP  
1/14/06

Identifier	Type of storage location or process	Class	Maximum Storage Capacity (L, kg, M <sup>3</sup> )
2	Flammable Goods Cabinet	3	250 L

UN Number	Proper Shipping Name	Class	PG (I, II, III)	Product or Common Name	HazChem Symbol	Typical Qty	Unit eg L, kg, M <sup>3</sup>
UN 1866		III		RESIN SOLUTION		81	L

Identifier	Type of storage location or process	Class	Maximum Storage Capacity (L, kg, M <sup>3</sup> )
H69	Roofed Store	3-1/2	850 L

UN Number	Proper Shipping Name	Class	PG (I, II, III)	Product or Common Name	HazChem Symbol	Typical Qty	Unit eg L, kg, M <sup>3</sup>
UN 1170				ETHANOL		20	L
UN 1263				PAINT		24	L
UN 1263				PAINT		40	L
UN 1300				TURPENTINE SUBSTITUTE		250	L

LP  
if mixed PG

Identifier	Type of storage location or process	Class	Maximum Storage Capacity (L, kg, M <sup>3</sup> )
H69	Roofed Store	3-1/2	850 L

UN Number	Proper Shipping Name	Class	PG (I, II, III)	Product or Common Name	HazChem Symbol	Typical Qty	Unit eg L, kg, M <sup>3</sup>
UN 1300				TURPENTINE SUBSTITUTE		20	L

340 g.

Identifier	Type of storage location or process	Class	Maximum Storage Capacity (L, kg, M <sup>3</sup> )

UN Number	Proper Shipping Name	Class	PG (I, II, III)	Product or Common Name	HazChem Symbol	Typical Qty	Unit eg L, kg, M <sup>3</sup>

No 2 Depot

Paints Workshop

WORKSHOP

Compressed  
air lines

Note: For high level lighting  
to these areas see A38

Line of cable tray

Existing  
Hoist

Chain link  
enclosure

RC Soffit to stair

Steel deck exposed  
as ceiling

SD

Remov

Ex. cl  
to re

Ex mmb

DECK 1

Ex. crane rail  
to remain

SCENERY SET UP

Remove ex gantry rails

PAINT FLOOR

Depot

H69

PAINT FLOOR

Mech. exhaust  
ducts

Steel truss

STAFF  
ROOM

Depot 5

No 1

Depot 2

No 4  
No 3

PUBLIC WALKWAY

remain

from this point

P.B.

MENS

WOMENS

PAINT

PREP

DYING

SD

SD

SD

SD

SD

SD

SD

SD



List the dangerous goods that will be stored and/or processed on these premises. Copy this page and attach additional sheets if there is insufficient space.

Identifier	Type of storage location or process	Class	Maximum Storage Capacity (L, kg, M <sup>3</sup> )
Nº1	FLAMMABLE LIQUIDS CABINET	3	850 L

UN Number	Proper Shipping Name	Class	PG (I, II, III)	Product or Common Name	HazChem Symbol	Typical Qty	Unit eg L, kg, M <sup>3</sup>
1170	ETHYL ALCOHOL		II	ETHANOL		20	L
1263	ZINC RICH KIT		II	PAINT		64	L
1300	TURPS SUBSTITUTE		II	TURPENTINE		270	L

Identifier	Type of storage location or process	Class	Maximum Storage Capacity (L, kg, M <sup>3</sup> )
Nº2	FLAMMABLE LIQUIDS CABINET	3	250 L

UN Number	Proper Shipping Name	Class	PG (I, II, III)	Product or Common Name	HazChem Symbol	Typical Qty	Unit eg L, kg, M <sup>3</sup>
1193	ETHYL KETONE		II	METHYLETHYL KETONE		5	L
1219	ISOPROPANOL		II	ISOPROPYL ALCOHOL		2	L
1263	PAINT		II	PAINT		8	L
1300	TURPS		II	TURPENTINE		20	L

Identifier	Type of storage location or process	Class	Maximum Storage Capacity (L, kg, M <sup>3</sup> )
Nº1	FLAMMABLE LIQUIDS CABINET	3	250 L

UN Number	Proper Shipping Name	Class	PG (I, II, III)	Product or Common Name	HazChem Symbol	Typical Qty	Unit eg L, kg, M <sup>3</sup>
1866	RESIN SOLUTION		II	RESIN		81	L

Identifier	Type of storage location or process	Class	Maximum Storage Capacity (L, kg, M <sup>3</sup> )
H69	ROOFED STORE	2 1/2	900 L

UN Number	Proper Shipping Name	Class	PG (I, II, III)	Product or Common Name	HazChem Symbol	Typical Qty	Unit eg L, kg, M <sup>3</sup>
1263	PAINT		II	WATER BASED		150	L
1263	PAINT		II	AEROSOL		20	L

Identifier	Type of storage location or process	Class	Maximum Storage Capacity (L, kg, M <sup>3</sup> )
Nº3	FLAMMABLE LIQUIDS CABINET	3	160 L

UN Number	Proper Shipping Name	Class	PG (I, II, III)	Product or Common Name	HazChem Symbol	Typical Qty	Unit eg L, kg, M <sup>3</sup>
1263	PAINT		II	DESIGN MASTER		10	L
1950	PAINT	2	II	DESIGN MASTER		10	L

## NOTIFICATION OF DANGEROUS GOODS ON PREMISES FORM

FDG01

List the dangerous goods that will be stored and/or processed on these premises. Copy this page and attach additional sheets if there is insufficient space.

Identifier	Type of storage location or process	Class	Maximum Storage Capacity (L, kg, M <sup>3</sup> )
N <sup>o</sup> 4	Flammable Liquids Cabinet	3	80 L

UN Number	Proper Shipping Name	Class	PG (I, II, III)	Product or Common Name	HazChem Symbol	Typical Qty	Unit eg L, kg, M <sup>3</sup>
1950	DESIGN MASTER	2	II	DESIGN MASTER		8	L
1263	PAINT		II	PAINT		4	L

Identifier	Type of storage location or process	Class	Maximum Storage Capacity (L, kg, M <sup>3</sup> )

UN Number	Proper Shipping Name	Class	PG (I, II, III)	Product or Common Name	HazChem Symbol	Typical Qty	Unit eg L, kg, M <sup>3</sup>

Identifier	Type of storage location or process	Class	Maximum Storage Capacity (L, kg, M <sup>3</sup> )

UN Number	Proper Shipping Name	Class	PG (I, II, III)	Product or Common Name	HazChem Symbol	Typical Qty	Unit eg L, kg, M <sup>3</sup>

Identifier	Type of storage location or process	Class	Maximum Storage Capacity (L, kg, M <sup>3</sup> )

UN Number	Proper Shipping Name	Class	PG (I, II, III)	Product or Common Name	HazChem Symbol	Typical Qty	Unit eg L, kg, M <sup>3</sup>

Identifier	Type of storage location or process	Class	Maximum Storage Capacity (L, kg, M <sup>3</sup> )

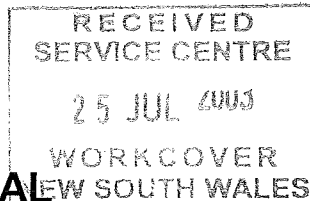
UN Number	Proper Shipping Name	Class	PG (I, II, III)	Product or Common Name	HazChem Symbol	Typical Qty	Unit eg L, kg, M <sup>3</sup>



Add new fcc  
order file

ORD - 2

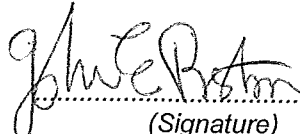
Licence No. 35/027888



## APPLICATION FOR RENEWAL OF LICENCE TO KEEP DANGEROUS GOODS

ISSUED UNDER AND SUBJECT TO THE PROVISIONS OF THE DANGEROUS GOODS ACT, 1975 AND REGULATION THEREUNDER

**DECLARATION:** Please renew licence number 35/027888 to 15/08/2004. I confirm that all the licence details shown below are correct (amend if necessary).

  
(Signature)

for: SYDNEY THEATRE CO LTD

John PRESTON  
(Please print name)

3/7/03  
(Date signed)

### THIS SIGNED DECLARATION SHOULD BE RETURNED TO:

WorkCover New South Wales  
Dangerous Goods Licensing Section  
LOCKED BAG 2906  
LISAROW NSW 2252

Enquiries:ph (02) 43215500  
fax (02) 92875500

### Details of licence on 27 June 2003

Licence Number 35/027888 Expiry Date 15/08/2003

Licensee SYDNEY THEATRE CO LTD ACN 001 667 983

Postal Address: P O BOX 777 MILLERS POINT NSW 2000

Licensee Contact JOHN EDWARD PRESTON Ph. 9250 1700 Fax. 9251 3687

Premises Licensed to Keep Dangerous Goods PIER 4  
SYDNEY THEATRE CO LTD  
HICKSON RD WALSH BAY 2000

Nature of Site PERFORMING ARTS VENUES

Major Supplier of Dangerous Goods NOT APPLICABLE

Emergency Contact for this Site JOHN ED PRESTON(0414-907734) Ph: 9250-1730

Site staffing 17 HRS 6 DAYS

MARTYN NIGHTINGALE OH 9313765 02 9250 1724  
9250 1700

### Details of Depots

Depot No.	Depot Type	Goods Stored in Depot	Qty
H69	ROOFED STORE	Class 3	850 L
		UN 1170 ETHANOL (ETHYL ALCOHOL)	20 L
		UN 1263 PAINT, (ZINC RICH KIT)	24 L
		UN 1263 PAINT, (ZINC RICH KIT)	40 L
		UN 1300 TURPENTINE SUBSTITUTE	250 L
		UN 1300 TURPENTINE SUBSTITUTE	20 L

# Application for Licence to Keep Dangerous Goods

Application for: New Licence ☒ Amendment ☐ Transfer ☐ Renewal of expired licence ☒

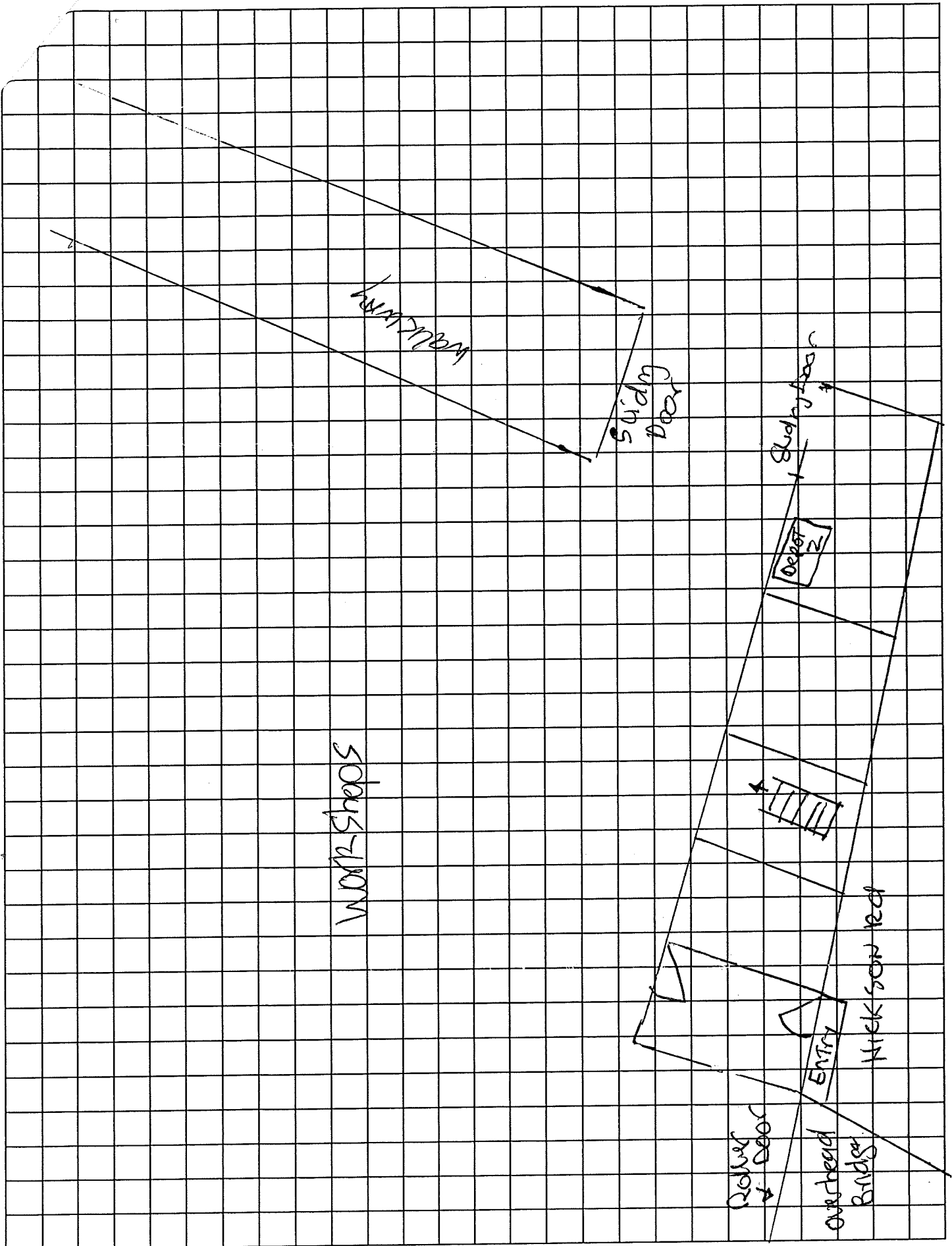
## PART A - Applicant and site information (See page 2 of Guidance Notes)

- 1 Name of applicant ACN  
Sydney Theatre Company Ltd 001 667 983
- 2 Postal Address of Applicant Suburb/Town Postcode  
P.O. Box 777 millers Point 2000
- 3 Trading Name or Site Occupier's Name  
Sydney Theatre Company
- 4 Contact for Licence Inquiries  
Phone Fax Name  
(02) 9250 1730 (02) 9250 1732 JOHN PRESTON
- 5 Previous Licence Number (if known) 35/
- 6 Previous Occupier (if known)
- 7 Site to be Licensed  
No Street  
Pier 4 Hickson Rd Walsh Bay
- 8 Main Business of Site Performing Arts Venues
- 9 Site staffing: Hours per day 17 Days per week 6
- 10 Site Emergency Contact  
Phone Name  
(02) 9250 1724-9250-1700 MARTYN NISHTINGALE
- 11 Major Supplier of Dangerous Goods N/A
- 12 If a new site or for amendments to depots - see page 4 of Guidance Notes.  
Plans Stamped by: Signature of Competent Person Printed Name Date stamped  
N/A

I certify that the details in this application (including any accompanying computer disk) are correct and cover all licensable quantities of dangerous goods kept on the premises.

- 13 Signature of Applicant Printed Name  
John E Preston John Edward Preston

Dangerous Goods Licensing,  
**WorkCover NSW, Locked Bag 2906, LISAROW NSW 2252**





pot? See page 5 of the Guidance Notes

- Dangerous Goods Storage Complete one section per depot

u have more depots than that space provided, photocopy sufficient sheets first

Depot Number	Type of Depot (see page 5)	Depot Class	Maximum Storage Capacity			
2	Flammable liquids Cabinet	3	250 Lt			
UN Number	Proper Shipping Name	Class	PG (I, II, III)	Product or Common Name	Typical Quantity	Unit eg L, kg, m <sup>3</sup>
UN1300	Mineral Turpentine	3	III	Turpentine	20	Lt
1263 LTP	Paints & Thinners	3	II	Brush Wash	8	Lt
<del>2810</del> 1760	Resin	6.1(b)	II	Casting Resin Part A	16	Kg
1760	"	8	III	" " Part D	8	Kg
1866	Polyvinyl Alcohol	3	III	PVA Blue	4	Kg
Free	Resin	2	II	Poly Foaming Resin A	4	Lt
2207	"	6	III	" " " B	4	Lt
-	Foam	3	-	Plast. Foam A	1	Kg
-	"	"	-	" " B	1	Kg
1219	Alcohol Gel	4		130 Propyl Alcohol gel	2	Lt
3105	Methyl Ethyl Ketone			Ketone	5	Kg
1866	Gelcoat	3	III	Polyester Gelcoat	4	Lt
	Hydrochloric Acid			Acid	8	Lt
1866	Flowcoat	3	III	Polyester Flowcoat	4	Lt
1866	Fiber Glass Resin	3	III	Resin	22.44	Kg
1866	Flowcoat	3	3	White Flowcoat	25	Kg
	Multi-purpose thinner	3		Thinners	20	Lt
	Foam			Taxidermist Foam A	5	Kg
	"			" " B	7	Kg



WorkCover New South Wales, 400 Kent Street, Sydney 2000. Telephone 9370 5000 ALL MAIL TO G.P.O. BOX 5364 SYDNEY 2001

Licence No. 35/027888



## APPLICATION FOR RENEWAL OF LICENCE TO KEEP DANGEROUS GOODS

ISSUED UNDER AND SUBJECT TO THE PROVISIONS OF THE DANGEROUS GOODS ACT, 1975 AND REGULATION THEREUNDER

**DECLARATION:** Please renew licence number 35/027888 to 16/08/2000. I confirm that all the licence details shown below are correct (amend if necessary).

*John E Preston*  
(Signature)

John Edward Preston  
(Please print name)

22/7/99  
(Date signed)

for: SYDNEY THEATRE CO LTD

**THIS SIGNED DECLARATION SHOULD BE RETURNED TO:**

WorkCover New South Wales  
Dangerous Goods Licensing Section  
GPO BOX 5364  
SYDNEY 2001

Enquiries: ph (02) 9370 5187  
fax (02) 9370 6105

**Details of licence on 14 July 1999**

Licence Number 35/027888 Expiry Date 16/08/1999

Licensee SYDNEY THEATRE CO LTD ACN 001 667 983

Postal Address: BOX 777 P O MILLERS POINT NSW 2000

Licensee Contact JOHN EDWARD PRESTON Ph 9250 1700 Fax 9251 3687

Premises Licensed to Keep Dangerous Goods PIER 4  
SYDNEY THEATRE CO LTD  
HICKSON RD WALSH BAY 2000

Nature of Site PERFORMING ARTS VENUES

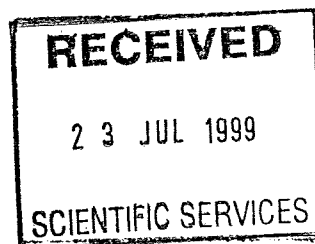
Major Supplier of Dangerous Goods NOT APPLICABLE

Emergency Contact for this Site JOHN EDWARD PRESTON Ph 9250 1730 MOB 0914 907734

Site staffing 17 HRS 6 DAYS

**Details of Depots**

Depot No.	Depot Type	Goods Stored in Depot	Qty
H69	ROOFED STORE	Class 3	850 L
		UN 1170 ETHANOL (ETHYL ALCOHOL)	20 L
		UN 1263 PAINT, (ZINC RICH KIT)	24 L
		UN 1263 PAINT, (ZINC RICH KIT)	40 L
		UN 1300 TURPENTINE SUBSTITUTE	250 L
		UN 1300 TURPENTINE SUBSTITUTE	20 L



Form DG10



Box No. 620

WorkCover New South Wales, 400 Kent Street, Sydney 2000. Tel: 9370 5000 Fax: 9370 5999 ALL MAIL TO G.P.O. BOX 5364 SYDNEY 2001  
Licence No. 35/027888



## APPLICATION FOR RENEWAL OF LICENCE TO KEEP DANGEROUS GOODS

ISSUED UNDER AND SUBJECT TO THE PROVISIONS OF THE DANGEROUS GOODS ACT, 1975 AND REGULATION THEREUNDER

**DECLARATION:** Please renew licence number 35/027888 to 15/08/2001. I confirm that all the licence details shown below are correct (amend if necessary).

  
(Signature)

John Edward Preston  
(Please print name)

29/6/00  
(Date signed)

for: SYDNEY THEATRE CO LTD

**THIS SIGNED DECLARATION SHOULD BE RETURNED TO: (please do not fax)**

WorkCover New South Wales  
Dangerous Goods Licensing Section  
GPO BOX 5364  
SYDNEY 2001

Enquiries: ph (02) 9370 5187  
fax (02) 9370 6104

### Details of licence on 27 June 2000

Licence Number 35/027888 Expiry Date 15/08/2000

Licensee SYDNEY THEATRE CO LTD ACN 001 667 983

Postal Address: BOX 777 P O MILLERS POINT NSW 2000

Licensee Contact JOHN EDWARD PRESTON Ph. 9250 1700 Fax. 9251 3687

Premises Licensed to Keep Dangerous Goods PIER 4  
SYDNEY THEATRE CO LTD  
HICKSON RD WALSH BAY 2000

Nature of Site PERFORMING ARTS VENUES

Major Supplier of Dangerous Goods NOT APPLICABLE

Emergency Contact for this Site JOHN ED. PRESTON(0414 907734) Ph. 9250 1730

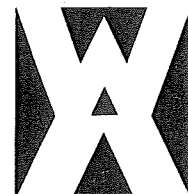
Site staffing 17 HRS 6 DAYS

### Details of Depots

Depot No.	Depot Type	Goods Stored in Depot	Qty
H69	ROOFED STORE	Class 3	850 L
		UN 1170 ETHANOL (ETHYL ALCOHOL)	20 L
		UN 1263 PAINT, (ZINC RICH KIT)	24 L
		UN 1263 PAINT, (ZINC RICH KIT)	40 L
		UN 1300 TURPENTINE SUBSTITUTE	250 L
		UN 1300 TURPENTINE SUBSTITUTE	20 L

Form DG10

# WORKCOVER AUTHORITY



## LICENCE TO KEEP DANGEROUS GOODS

(Dangerous Goods Act 1975)

### Application for new licence, amendment or transfer

Expiry: 16.8.94

1. Name of applicant ACN  
 THE SYDNEY THEATRE COMPANY 001 667 983

2. Site to be licensed   
 No \* Pier 4  
 Street 7  
 16R 4 WICKSON RD DATA  
 Suburb/Town delete 4 from Street no. 29 JUN 1993  
 WALSH BAY 2000 ENTERED

3. Previous licence number (if known) 35-027888

4. Nature of site \* 9136  
 LIVE THEATRE CONSTRUCTION & PERFORMANCE

5. Emergency contact on site:  
 Phone Name  
 \* 250-1730 W.Hours. \* John EDWARD PRESTON JP

6. Site staffing: 70 Hours per day \* 17 Days per week \* 6

7. Major supplier of dangerous goods

8. If new site or significant modification  
 Plan stamped by: Accredited consultant's name: Date stamped

9. Number of dangerous goods depots at site 1

10. Trading name or occupier's name  
 THE SYDNEY THEATRE COMPANY LTD (delete ctrl-L)

11. Postal address of applicant Suburb/Town Postcode  
 \* P.O. Box 777 \* Millers Point \* 2000

12. Contact for licence enquiries:  
 Phone Fax Name  
 \* 250-1100 \* 251-3687 \* John Edward Preston JP

I certify that the details contained in this application (or the accompanying computer disk) are true and correct

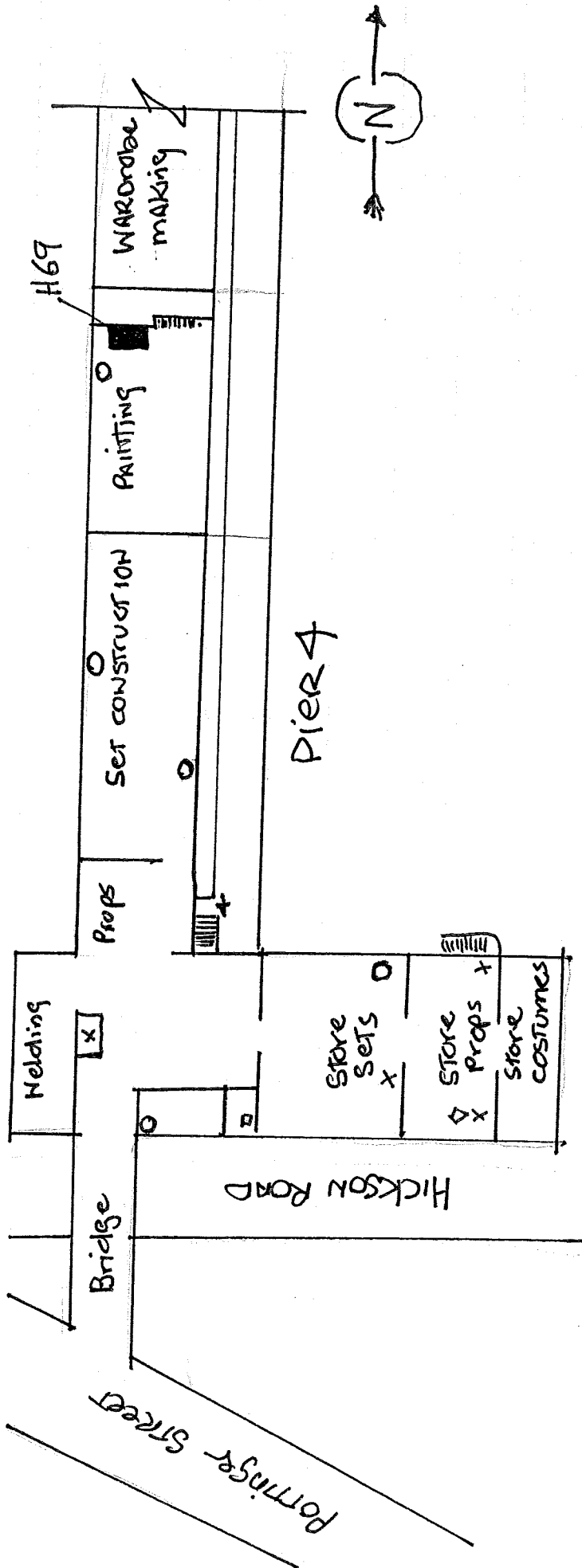
13. Signature of applicant Date  
18/5/93

Sent 20/6/93

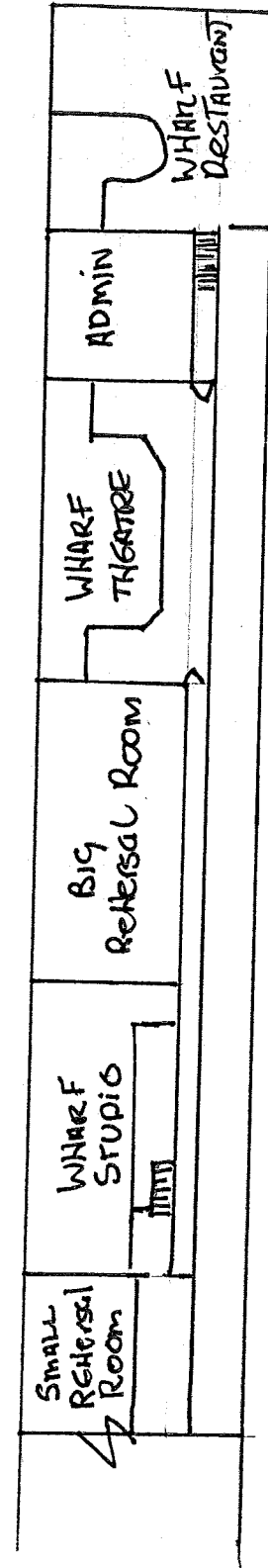
# Site Sketch

35-027888

Please carefully read the instructions in Part B of the guide before sketching the site.



## PART B



O - HOSE REEL

X -

X - H2O



**If you have more depots than the space provided, photocopy sufficient sheets first.**

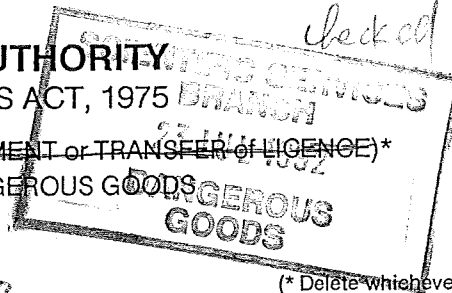
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**WORKCOVER AUTHORITY**

DANGEROUS GOODS ACT, 1975

LICENCE No.

35 027888

APPLICATION FOR LICENCE (or AMENDMENT or TRANSFER of LICENCE)\*  
FOR THE KEEPING OF DANGEROUS GOODS

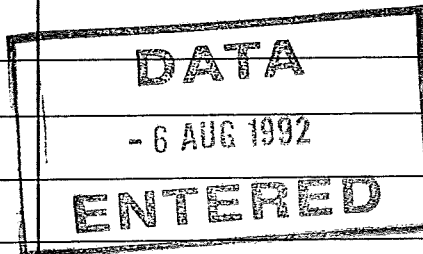
Plan No: 367

(\* Delete whichever is not required)

Name of Applicant in full (see Item 1 - Explanatory notes - page 4)		
Trading name or occupier's name (if any)	SYDNEY THEATRE COMPANY LTD.	
Postal Address		Postcode
Address of the premises to be licensed. (Including Street No.)	THE WHARF THEATRE PIER 4 HICKSON ST. WASHBAY Postcode 2000	
Nature of premises (See Item 2 - Explanatory notes - page 4)	THEATRE, PROPS & PAINT STORE.	
Telephone number of applicant	STD Code	Number

Particulars of type of depots and maximum quantities of dangerous goods to be kept at any one time.

Depot number	Type of depot (See item 3 - Explanatory notes - page 4)	Storage capacity	Dangerous goods	C & C Office use only
			Product being stored	
1	INT. FLAM. CABINET	850 L.	Mixed Products Class 3.	
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				



Has site plan been approved by the Dangerous Goods Branch?

Yes  
~~No~~

If yes, no plans required.

If no, please attach site plan, or provide sketch plan overleaf. which has been checked by an accredited consultant

Have premises previously been licensed?

Yes  
~~No~~

If, yes, state name of previous occupier, and licence No. (if known)

Name of oil company supplying flammable liquid (if applicable).

Various

Signature of applicant

Date

10.7.92

For external explosives magazine(s), please fill in page 3.

FOR OFFICE USE ONLY

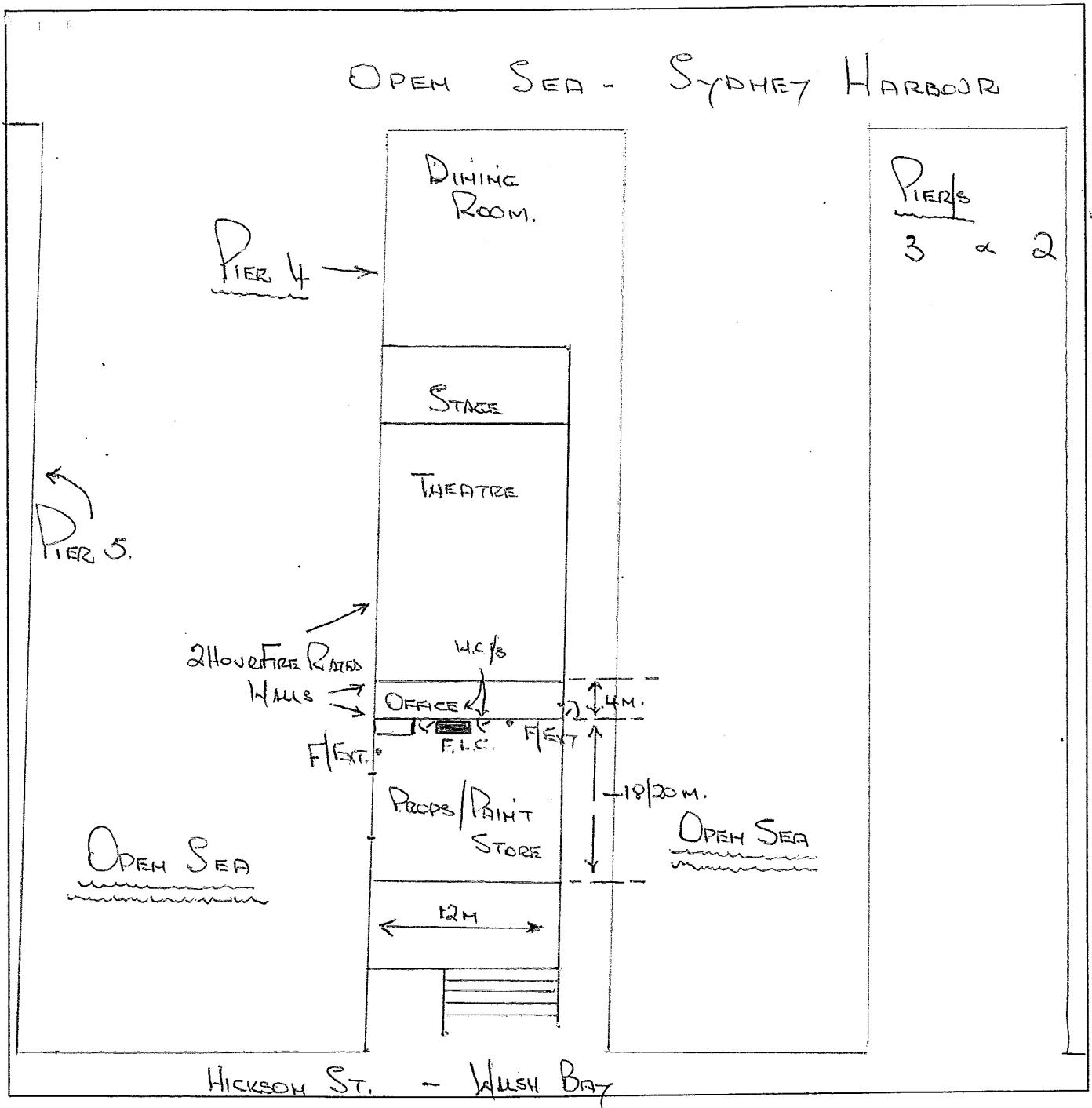
**CERTIFICATE OF INSPECTION**

I, \_\_\_\_\_ being an Inspector under the Dangerous Goods Act, 1975, do hereby certify that the premises described above do comply with the requirements of the Dangerous Goods Act, 1975, and the Dangerous Goods Regulation with regard to their situation and construction for the keeping of dangerous goods of the nature and in the quantity specified.

Date

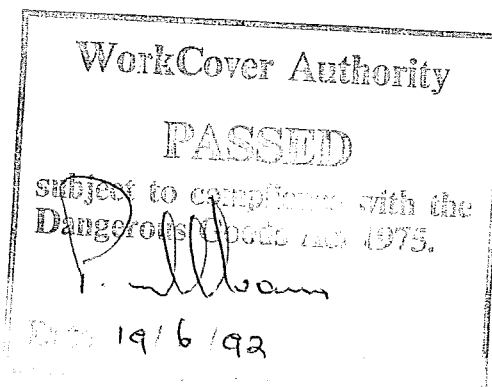
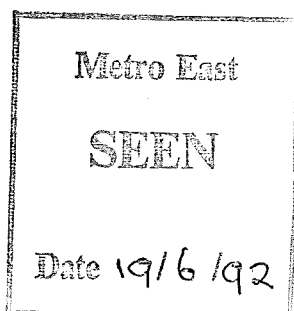
(1)

# SKETCH PLAN OF SITE



Show positions of Depot(s) with:-

- (1) distances from public places and protected works;
- (2) street names;
- (3) nature and details of adjacent properties.



## **Appendix H Laboratory Certificates of Analysis**

## Certificate of Analysis

**JBS & G Australia (NSW & WA) P/L**  
**Level 1, 50 Margaret St**  
**Sydney**  
**NSW 2000**



**NATA Accredited**  
**Accreditation Number 1261**  
**Site Number 18217**

Accredited for compliance with ISO/IEC 17025 – Testing  
The results of the tests, calibrations and/or  
measurements included in this document are traceable  
to Australian/national standards.

**Attention:** **Rohan Hammond**

**Report** **531205-S**  
**Project name** WALSH BAY  
**Project ID** 52304  
**Received Date** Jan 20, 2017

Client Sample ID			JBH01_0.24-0.25	JBH03_0.5-0.6	JBH06_0.75-0.85	QA20170119
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins   mgt Sample No.			S17-Ja11505	S17-Ja11507	S17-Ja11508	S17-Ja11509
Date Sampled			Jan 19, 2017	Jan 19, 2017	Jan 19, 2017	Jan 19, 2017
Test/Reference	LOR	Unit				
<b>Total Recoverable Hydrocarbons - 1999 NEPM Fractions</b>						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	260	150
TRH C29-C36	50	mg/kg	< 50	< 50	66	< 50
TRH C10-36 (Total)	50	mg/kg	< 50	< 50	326	150
<b>BTEX</b>						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	125	123	122	123
<b>Volatile Organics</b>						
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5	4.2	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5



Client Sample ID			JBH01_0.24-0.25	JBH03_0.5-0.6	JBH06_0.75-0.85	QA20170119
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins   mgt Sample No.			S17-Ja11505	S17-Ja11507	S17-Ja11508	S17-Ja11509
Date Sampled			Jan 19, 2017	Jan 19, 2017	Jan 19, 2017	Jan 19, 2017
Test/Reference	LOR	Unit				
<b>Volatile Organics</b>						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	0.5	< 0.5	0.8	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Xylenes - Total	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
Fluorobenzene (surr.)	1	%	111	111	108	110
4-Bromofluorobenzene (surr.)	1	%	125	123	122	123
<b>Total Recoverable Hydrocarbons - 2013 NEPM Fractions</b>						
Naphthalene <sup>N02</sup>	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH >C10-C16 less Naphthalene (F2) <sup>N01</sup>	50	mg/kg	< 50	< 50	< 50	< 50
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1) <sup>N04</sup>	20	mg/kg	< 20	< 20	< 20	< 20
<b>Polycyclic Aromatic Hydrocarbons</b>						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	7.8	5.1
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	7.8	5.4
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	7.8	5.6
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	0.7	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	3.2	1.0
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	6.6	4.3
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	5.3	3.8
Benzo(b&j)fluoranthene <sup>N07</sup>	0.5	mg/kg	< 0.5	< 0.5	5.1	4.5

Client Sample ID			JBH01_0.24-0.25	JBH03_0.5-0.6	JBH06_0.75-0.85	QA20170119
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins   mgt Sample No.			S17-Ja11505	S17-Ja11507	S17-Ja11508	S17-Ja11509
Date Sampled			Jan 19, 2017	Jan 19, 2017	Jan 19, 2017	Jan 19, 2017
Test/Reference	LOR	Unit				
<b>Polycyclic Aromatic Hydrocarbons</b>						
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	< 0.5	2.6	2.1
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	4.0	2.1
Chrysene	0.5	mg/kg	< 0.5	< 0.5	5.1	3.2
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	0.6	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	16	6.6
Fluorene	0.5	mg/kg	< 0.5	< 0.5	1.1	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	2.3	1.8
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	14	1.0
Pyrene	0.5	mg/kg	< 0.5	< 0.5	13	6.8
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	79.6	37.2
2-Fluorobiphenyl (surr.)	1	%	92	92	89	91
p-Terphenyl-d14 (surr.)	1	%	94	89	86	89
<b>Organochlorine Pesticides</b>						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Toxaphene	1	mg/kg	< 1	< 1	< 1	< 1
Dibutylchlorodate (surr.)	1	%	57	59	80	116
Tetrachloro-m-xylene (surr.)	1	%	81	78	90	92
<b>Organophosphorus Pesticides</b>						
Azinphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Bolstar	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Coumaphos	2	mg/kg	< 2	< 2	< 2	< 2
Demeton-S	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Demeton-O	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Diazinon	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Dimethoate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2

Client Sample ID			JBH01_0.24-0.25	JBH03_0.5-0.6	JBH06_0.75-0.85	QA20170119
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins   mgt Sample No.			S17-Ja11505	S17-Ja11507	S17-Ja11508	S17-Ja11509
Date Sampled			Jan 19, 2017	Jan 19, 2017	Jan 19, 2017	Jan 19, 2017
Test/Reference	LOR	Unit				
<b>Organophosphorus Pesticides</b>						
Disulfoton	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
EPN	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethoprop	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fenthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Malathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Merphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Mevinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Monocrotophos	2	mg/kg	< 2	< 2	< 2	< 2
Omethoate	2	mg/kg	< 2	< 2	< 2	< 2
Phorate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ronnel	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Terbufos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Tokuthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Trichloronate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Triphenylphosphate (surr.)	1	%	84	93	83	80
<b>Polychlorinated Biphenyls</b>						
Aroclor-1016	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1242	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1248	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1254	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1260	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PCB*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibutylchlorendate (surr.)	1	%	57	59	80	116
Tetrachloro-m-xylene (surr.)	1	%	81	78	90	92
<b>Semivolatile Chlorinated Hydrocarbons</b>						
1,2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1,2,4-Trichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1,2,4,5-Tetrachlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1,3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1,4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Hexachlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Hexachlorobutadiene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Hexachlorocyclopentadiene	1	mg/kg	< 1	< 1	< 1	< 1
Hexachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pentachlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Nitrobenzene-d5 (surr.)	1	%	85	89	85	87
p-Terphenyl-d14 (surr.)	1	%	94	89	86	89
2-Fluorobiphenyl (surr.)	1	%	92	92	89	91

<b>Client Sample ID</b>			<b>JBH01_0.24-0.25</b>	<b>JBH03_0.5-0.6</b>	<b>JBH06_0.75-0.85</b>	<b>QA20170119</b>
<b>Sample Matrix</b>			<b>Soil</b>	<b>Soil</b>	<b>Soil</b>	<b>Soil</b>
<b>Eurofins   mgt Sample No.</b>			<b>S17-Ja11505</b>	<b>S17-Ja11507</b>	<b>S17-Ja11508</b>	<b>S17-Ja11509</b>
<b>Date Sampled</b>			<b>Jan 19, 2017</b>	<b>Jan 19, 2017</b>	<b>Jan 19, 2017</b>	<b>Jan 19, 2017</b>
Test/Reference	LOR	Unit				
<b>Total Recoverable Hydrocarbons - 2013 NEPM Fractions</b>						
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	330	200
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
<b>Heavy Metals</b>						
Arsenic	2	mg/kg	3.7	< 2	< 2	< 2
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	17	< 5	5.0	6.8
Copper	5	mg/kg	52	21	89	26
Lead	5	mg/kg	120	14	42	170
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	14	< 5	7.9	< 5
Zinc	5	mg/kg	150	20	52	81
% Moisture	1	%	17	10.0	15	16

## Sample History

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

A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results (regarding both quality and NATA accreditation).

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions - Method: TRH C6-C36 - LTM-ORG-2010	Sydney	Jan 24, 2017	14 Day
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: TRH C6-C40 - LTM-ORG-2010	Sydney	Jan 23, 2017	14 Day
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: TRH C6-C40 - LTM-ORG-2010	Sydney	Jan 24, 2017	14 Day
BTEX - Method: TRH C6-C40 - LTM-ORG-2010	Sydney	Jan 23, 2017	14 Day
Volatile Organics - Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices	Sydney	Jan 23, 2017	7 Days
Polycyclic Aromatic Hydrocarbons - Method: E007 Polyaromatic Hydrocarbons (PAH)	Sydney	Jan 24, 2017	14 Day
Organochlorine Pesticides - Method: E013 Organochlorine Pesticides (OC)	Sydney	Jan 24, 2017	14 Day
Organophosphorus Pesticides - Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS	Sydney	Jan 24, 2017	14 Day
Polychlorinated Biphenyls - Method: E013 Polychlorinated Biphenyls (PCB)	Sydney	Jan 24, 2017	28 Day
Semivolatile Chlorinated Hydrocarbons - Method: E017 Semivolatile Chlorinated Hydrocarbons	Sydney	Jan 24, 2017	14 Day
Metals M8 - Method: LTM-MET-3040_R0 TOTAL AND DISSOLVED METALS AND MERCURY IN WATERS BY ICP-MS	Sydney	Jan 23, 2017	28 Day
% Moisture - Method: LTM-GEN-7080 Moisture	Sydney	Jan 20, 2017	14 Day

**Company Name:** JBS & G Australia (NSW & WA) P/L  
**Address:** Level 1, 50 Margaret St  
 Sydney  
 NSW 2000  
**Project Name:** WALSH BAY  
**Project ID:** 52304

**Order No.:**  
**Report #:** 531205  
**Phone:** 02 8245 0300  
**Fax:**

**Received:** Jan 20, 2017 5:05 PM  
**Due:** Jan 25, 2017  
**Priority:** 3 Day  
**Contact Name:** Rohan Hammond

**Eurofins | mgt Analytical Services Manager : Nibha Vaidya**

Sample Detail						Asbestos Absence /Presence	HOLD	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Polychlorinated Biphenyls	Metals M8	BTEX	Semivolatile Chlorinated Hydrocarbons	Volatile Organics	Moisture Set	Total Recoverable Hydrocarbons
Melbourne Laboratory - NATA Site # 1254 & 14271																	
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794																	
Perth Laboratory - NATA Site # 18217																	
Internal Laboratory																	
Sample ID	Sample Date	Sampling Time	Matrix	LAB ID													
JBH01_0.24-0.25	Jan 19, 2017		Soil	S17-Ja11505	X		X	X	X	X	X	X	X	X	X	X	X
JBH02_0.6-0.7	Jan 19, 2017		Soil	S17-Ja11506		X											
JBH03_0.5-0.6	Jan 19, 2017		Soil	S17-Ja11507	X		X	X	X	X	X	X	X	X	X	X	X
JBH06_0.75-0.85	Jan 19, 2017		Soil	S17-Ja11508	X		X	X	X	X	X	X	X	X	X	X	X
QA20170119	Jan 19, 2017		Soil	S17-Ja11509	X		X	X	X	X	X	X	X	X	X	X	X
TB20170120	Jan 20, 2017		Water	S17-Ja11510									X				
TS20170120	Jan 20, 2017		Water	S17-Ja11511									X				
RB20170120	Jan 20, 2017		Water	S17-Ja11512			X					X		X	X		X



**Company Name:** JBS & G Australia (NSW & WA) P/L  
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**Eurofins | mgt Analytical Services Manager : Nibha Vaidya**

Sample Detail	Asbestos Absence /Presence	HOLD	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Polychlorinated Biphenyls	Metals M8	BTEX	Semivolatile Chlorinated Hydrocarbons	Volatile Organics	Moisture Set	Total Recoverable Hydrocarbons
Melbourne Laboratory - NATA Site # 1254 & 14271												
Sydney Laboratory - NATA Site # 18217	X	X	X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794												
Perth Laboratory - NATA Site # 18217												
Test Counts	4	1	5	4	4	4	5	6	5	5	4	5

## Internal Quality Control Review and Glossary

### 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 LORs are matrix dependant. Quoted LORs 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 Advice.

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 RPD

### Units

**mg/kg:** milligrams per Kilogram

**mg/l:** milligrams per litre

**ug/l:** micrograms per litre

**ppm:** Parts per million

**ppb:** Parts per billion

**%:** Percentage

**org/100ml:** Organisms per 100 millilitres

**NTU:** Nephelometric Turbidity Units

**MPN/100mL:** Most Probable Number of organisms per 100 millilitres

### Terms

<b>Dry</b>	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
<b>LOR</b>	Limit of Reporting.
<b>SPIKE</b>	Addition of the analyte to the sample and reported as percentage recovery.
<b>RPD</b>	Relative Percent Difference between two Duplicate pieces of analysis.
<b>LCS</b>	Laboratory Control Sample - reported as percent recovery
<b>CRM</b>	Certified Reference Material - reported as percent recovery
<b>Method Blank</b>	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.
<b>Surr - Surrogate</b>	The addition of a like compound to the analyte target and reported as percentage recovery.
<b>Duplicate</b>	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
<b>Batch Duplicate</b>	A second piece of analysis from a sample outside of the clients batch of samples but run within the laboratory batch of analysis.
<b>Batch SPIKE</b>	Spike recovery reported on a sample from outside of the clients batch of samples but run within the laboratory batch of analysis.
<b>USEPA</b>	United States Environmental Protection Agency
<b>APHA</b>	American Public Health Association
<b>TCLP</b>	Toxicity Characteristic Leaching Procedure
<b>COC</b>	Chain of Custody
<b>SRA</b>	Sample Receipt Advice
<b>CP</b>	Client Parent - QC was performed on samples pertaining to this report
<b>NCP</b>	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within
<b>TEQ</b>	Toxic Equivalency Quotient

### 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 0-30%

Surrogate Recoveries: Recoveries must lie between 50-150%-Phenols & PFASs 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, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene 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 Aroclor 1260 in Matrix Spikes and LCS.
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 RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

## Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
<b>Method Blank</b>							
<b>Total Recoverable Hydrocarbons - 1999 NEPM Fractions</b>							
TRH C6-C9	mg/kg	< 20			20	Pass	
<b>Method Blank</b>							
<b>BTEX</b>							
Benzene	mg/kg	< 0.1			0.1	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Xylenes - Total	mg/kg	< 0.3			0.3	Pass	
<b>Method Blank</b>							
<b>Volatile Organics</b>							
1.1-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
1.1.1-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.1.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dibromoethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.3-Trichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.3.5-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
2-Butanone (MEK)	mg/kg	< 0.5			0.5	Pass	
2-Propanone (Acetone)	mg/kg	< 0.5			0.5	Pass	
4-Chlorotoluene	mg/kg	< 0.5			0.5	Pass	
4-Methyl-2-pentanone (MIBK)	mg/kg	< 0.5			0.5	Pass	
Allyl chloride	mg/kg	< 0.5			0.5	Pass	
Bromobenzene	mg/kg	< 0.5			0.5	Pass	
Bromochloromethane	mg/kg	< 0.5			0.5	Pass	
Bromodichloromethane	mg/kg	< 0.5			0.5	Pass	
Bromoform	mg/kg	< 0.5			0.5	Pass	
Bromomethane	mg/kg	< 0.5			0.5	Pass	
Carbon disulfide	mg/kg	< 0.5			0.5	Pass	
Carbon Tetrachloride	mg/kg	< 0.5			0.5	Pass	
Chlorobenzene	mg/kg	< 0.5			0.5	Pass	
Chloroethane	mg/kg	< 0.5			0.5	Pass	
Chloroform	mg/kg	< 0.5			0.5	Pass	
Chloromethane	mg/kg	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
cis-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Dibromochloromethane	mg/kg	< 0.5			0.5	Pass	
Dibromomethane	mg/kg	< 0.5			0.5	Pass	
Dichlorodifluoromethane	mg/kg	< 0.5			0.5	Pass	
Iodomethane	mg/kg	< 0.5			0.5	Pass	
Isopropyl benzene (Cumene)	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Methylene Chloride	mg/kg	< 0.5			0.5	Pass	
Styrene	mg/kg	< 0.5			0.5	Pass	
Tetrachloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1,2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1,3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Trichloroethene	mg/kg	< 0.5			0.5	Pass	
Trichlorofluoromethane	mg/kg	< 0.5			0.5	Pass	
Vinyl chloride	mg/kg	< 0.5			0.5	Pass	
<b>Method Blank</b>							
<b>Total Recoverable Hydrocarbons - 2013 NEPM Fractions</b>							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
<b>Method Blank</b>							
<b>Polycyclic Aromatic Hydrocarbons</b>							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g,h,i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a,h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
<b>Method Blank</b>							
<b>Polychlorinated Biphenyls</b>							
Aroclor-1016	mg/kg	< 0.5			0.5	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.5			0.5	Pass	
Aroclor-1242	mg/kg	< 0.5			0.5	Pass	
Aroclor-1248	mg/kg	< 0.5			0.5	Pass	
Aroclor-1254	mg/kg	< 0.5			0.5	Pass	
Aroclor-1260	mg/kg	< 0.5			0.5	Pass	
Total PCB*	mg/kg	< 0.5			0.5	Pass	
<b>Method Blank</b>							
<b>Semivolatile Chlorinated Hydrocarbons</b>							
1,2-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1,2,4-Trichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1,2,4,5-Tetrachlorobenzene	mg/kg	< 0.5			0.5	Pass	
1,3-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1,4-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
Hexachlorobenzene	mg/kg	< 0.5			0.5	Pass	
Hexachlorobutadiene	mg/kg	< 0.5			0.5	Pass	
Hexachlorocyclopentadiene	mg/kg	< 1			1	Pass	
Hexachloroethane	mg/kg	< 0.5			0.5	Pass	
Pentachlorobenzene	mg/kg	< 0.5			0.5	Pass	
<b>LCS - % Recovery</b>							
<b>Total Recoverable Hydrocarbons - 1999 NEPM Fractions</b>							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
TRH C6-C9	%	91			70-130	Pass	
<b>LCS - % Recovery</b>							
<b>BTEX</b>							
Benzene	%	122			70-130	Pass	
Toluene	%	115			70-130	Pass	
Ethylbenzene	%	119			70-130	Pass	
m&p-Xylenes	%	118			70-130	Pass	
o-Xylene	%	119			70-130	Pass	
Xylenes - Total	%	118			70-130	Pass	
<b>LCS - % Recovery</b>							
<b>Volatile Organics</b>							
1.1-Dichloroethane	%	126			70-130	Pass	
1.1-Dichloroethene	%	124			70-130	Pass	
1.1.1-Trichloroethane	%	114			70-130	Pass	
1.1.1.2-Tetrachloroethane	%	91			70-130	Pass	
1.1.2-Trichloroethane	%	116			70-130	Pass	
1.1.2.2-Tetrachloroethane	%	130			70-130	Pass	
1.2-Dibromoethane	%	113			70-130	Pass	
1.2-Dichlorobenzene	%	116			70-130	Pass	
1.2-Dichloroethane	%	122			70-130	Pass	
1.2-Dichloropropane	%	128			70-130	Pass	
1.2.3-Trichloropropane	%	127			70-130	Pass	
1.2.4-Trimethylbenzene	%	126			70-130	Pass	
1.3-Dichlorobenzene	%	116			70-130	Pass	
1.3-Dichloropropane	%	127			70-130	Pass	
1.3.5-Trimethylbenzene	%	125			70-130	Pass	
1.4-Dichlorobenzene	%	116			70-130	Pass	
2-Butanone (MEK)	%	109			70-130	Pass	
2-Propanone (Acetone)	%	124			70-130	Pass	
4-Chlorotoluene	%	123			70-130	Pass	
4-Methyl-2-pentanone (MIBK)	%	121			70-130	Pass	
Allyl chloride	%	124			70-130	Pass	
Bromobenzene	%	129			70-130	Pass	
Bromochloromethane	%	124			70-130	Pass	
Bromodichloromethane	%	113			70-130	Pass	
Bromoform	%	76			70-130	Pass	
Carbon disulfide	%	114			70-130	Pass	
Carbon Tetrachloride	%	91			70-130	Pass	
Chlorobenzene	%	112			70-130	Pass	
Chloroethane	%	89			70-130	Pass	
Chloroform	%	130			70-130	Pass	
Chloromethane	%	128			70-130	Pass	
cis-1.2-Dichloroethene	%	118			70-130	Pass	
cis-1.3-Dichloropropene	%	89			70-130	Pass	
Dibromochloromethane	%	89			70-130	Pass	
Dibromomethane	%	126			70-130	Pass	
Dichlorodifluoromethane	%	106			70-130	Pass	
Iodomethane	%	74			70-130	Pass	
Isopropyl benzene (Cumene)	%	112			70-130	Pass	
Methylene Chloride	%	127			70-130	Pass	
Styrene	%	110			70-130	Pass	
Tetrachloroethene	%	92			70-130	Pass	
trans-1.2-Dichloroethene	%	120			70-130	Pass	
trans-1.3-Dichloropropene	%	99			70-130	Pass	

Test				Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Trichloroethene				%	104			70-130	Pass	
Trichlorofluoromethane				%	118			70-130	Pass	
Vinyl chloride				%	78			70-130	Pass	
LCS - % Recovery										
Total Recoverable Hydrocarbons - 2013 NEPM Fractions										
Naphthalene				%	126			70-130	Pass	
TRH C6-C10				%	85			70-130	Pass	
LCS - % Recovery										
Polycyclic Aromatic Hydrocarbons										
Acenaphthene				%	73			70-130	Pass	
Acenaphthylene				%	91			70-130	Pass	
Anthracene				%	85			70-130	Pass	
Benz(a)anthracene				%	84			70-130	Pass	
Benzo(a)pyrene				%	92			70-130	Pass	
Benzo(b&j)fluoranthene				%	91			70-130	Pass	
Benzo(g,h,i)perylene				%	85			70-130	Pass	
Benzo(k)fluoranthene				%	92			70-130	Pass	
Chrysene				%	94			70-130	Pass	
Dibenz(a,h)anthracene				%	81			70-130	Pass	
Fluoranthene				%	86			70-130	Pass	
Fluorene				%	84			70-130	Pass	
Indeno(1.2.3-cd)pyrene				%	77			70-130	Pass	
Naphthalene				%	100			70-130	Pass	
Phenanthrene				%	77			70-130	Pass	
Pyrene				%	85			70-130	Pass	
LCS - % Recovery										
Polychlorinated Biphenyls										
Aroclor-1260				%	102			70-130	Pass	
LCS - % Recovery										
Semivolatile Chlorinated Hydrocarbons										
1.2.4-Trichlorobenzene				%	77			70-130	Pass	
1.4-Dichlorobenzene				%	78			70-130	Pass	
Test		Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate										
Total Recoverable Hydrocarbons - 1999 NEPM Fractions					Result 1	Result 2	RPD			
TRH C6-C9		S17-Ja10323	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14		S17-Ja11217	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28		S17-Ja11217	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36		S17-Ja11217	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
Duplicate										
BTEX					Result 1	Result 2	RPD			
Benzene		S17-Ja10323	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene		S17-Ja10323	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene		S17-Ja10323	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes		S17-Ja10323	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene		S17-Ja10323	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total		S17-Ja10323	NCP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate										
Volatile Organics					Result 1	Result 2	RPD			
1.1-Dichloroethane		S17-Ja10323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene		S17-Ja10323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane		S17-Ja10323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane		S17-Ja10323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2-Trichloroethane		S17-Ja10323	NCP	mg/ka	< 0.5	< 0.5	<1	30%	Pass	



Duplicate								
Volatile Organics				Result 1	Result 2	RPD		
1.1.2.2-Tetrachloroethane	S17-Ja10323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.2-Dibromoethane	S17-Ja10323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.2-Dichlorobenzene	S17-Ja10323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.2-Dichloroethane	S17-Ja10323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.2-Dichloropropane	S17-Ja10323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.2.3-Trichloropropane	S17-Ja10323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.2.4-Trimethylbenzene	S17-Ja10323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.3-Dichlorobenzene	S17-Ja10323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.3-Dichloropropane	S17-Ja10323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
1.4-Dichlorobenzene	S17-Ja10323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2-Butanone (MEK)	S17-Ja10323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2-Propanone (Acetone)	S17-Ja10323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
4-Chlorotoluene	S17-Ja10323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
4-Methyl-2-pentanone (MIBK)	S17-Ja10323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Allyl chloride	S17-Ja10323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromobenzene	S17-Ja10323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromochloromethane	S17-Ja10323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromodichloromethane	S17-Ja10323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromoform	S17-Ja10323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromomethane	S17-Ja10323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Carbon disulfide	S17-Ja10323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Carbon Tetrachloride	S17-Ja10323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chlorobenzene	S17-Ja10323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chloroethane	S17-Ja10323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chloroform	S17-Ja10323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chloromethane	S17-Ja10323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
cis-1.2-Dichloroethene	S17-Ja10323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
cis-1.3-Dichloropropene	S17-Ja10323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibromochloromethane	S17-Ja10323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibromomethane	S17-Ja10323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dichlorodifluoromethane	S17-Ja10323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Iodomethane	S17-Ja10323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Isopropyl benzene (Cumene)	S17-Ja10323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Methylene Chloride	S17-Ja10323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Styrene	S17-Ja10323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Tetrachloroethene	S17-Ja10323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
trans-1.2-Dichloroethene	S17-Ja10323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
trans-1.3-Dichloropropene	S17-Ja10323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Trichloroethene	S17-Ja10323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Trichlorofluoromethane	S17-Ja10323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Vinyl chloride	S17-Ja10323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD		
Benz(a)anthracene	S17-Ja09858	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(a)pyrene	S17-Ja09858	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(b&j)fluoranthene	S17-Ja09858	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(g,h,i)perylene	S17-Ja09858	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(k)fluoranthene	S17-Ja09858	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chrysene	S17-Ja09858	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibenz(a,h)anthracene	S17-Ja09858	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluoranthene	S17-Ja09858	NCP	mg/kg	0.7	0.8	12	30%	Pass
Indeno(1.2.3-cd)pyrene	S17-Ja09858	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Pyrene	S17-Ja09858	NCP	mg/kg	1.2	1.2	<1	30%	Pass

Duplicate								
Organochlorine Pesticides				Result 1	Result 2	RPD		
Chlordanes - Total	S17-Ja12840	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
4,4'-DDD	S17-Ja12840	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
4,4'-DDE	S17-Ja12840	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
4,4'-DDT	S17-Ja12840	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
a-BHC	S17-Ja12840	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Aldrin	S17-Ja12840	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
b-BHC	S17-Ja12840	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
d-BHC	S17-Ja12840	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Dieldrin	S17-Ja12840	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan I	S17-Ja12840	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan II	S17-Ja12840	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan sulphate	S17-Ja12840	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin	S17-Ja12840	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin aldehyde	S17-Ja12840	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin ketone	S17-Ja12840	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
g-BHC (Lindane)	S17-Ja12840	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Heptachlor	S17-Ja12840	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Heptachlor epoxide	S17-Ja12840	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Hexachlorobenzene	S17-Ja12840	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Methoxychlor	S17-Ja12840	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Toxaphene	S17-Ja12840	NCP	mg/kg	< 1	< 1	<1	30%	Pass
Duplicate								
Polychlorinated Biphenyls				Result 1	Result 2	RPD		
Aroclor-1016	S17-Ja12840	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Aroclor-1221	S17-Ja12840	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1232	S17-Ja12840	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Aroclor-1242	S17-Ja12840	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Aroclor-1248	S17-Ja12840	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Aroclor-1254	S17-Ja12840	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Aroclor-1260	S17-Ja12840	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD		
TRH >C10-C16	S17-Ja11217	NCP	mg/kg	< 50	< 50	<1	30%	Pass
TRH >C16-C34	S17-Ja11217	NCP	mg/kg	< 100	< 100	<1	30%	Pass
TRH >C34-C40	S17-Ja11217	NCP	mg/kg	< 100	< 100	<1	30%	Pass
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Arsenic	S17-Ja10279	NCP	mg/kg	4.3	3.6	16	30%	Pass
Cadmium	S17-Ja10279	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass
Chromium	S17-Ja10279	NCP	mg/kg	6.6	7.5	13	30%	Pass
Copper	S17-Ja10279	NCP	mg/kg	35	38	8.0	30%	Pass
Lead	S17-Ja10279	NCP	mg/kg	100	110	8.0	30%	Pass
Mercury	S17-Ja10279	NCP	mg/kg	0.2	0.3	18	30%	Pass
Nickel	S17-Ja10279	NCP	mg/kg	5.0	5.2	4.0	30%	Pass
Zinc	S17-Ja10279	NCP	mg/kg	78	92	16	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
% Moisture	S17-Ja01412	NCP	%	6.8	6.9	1.0	30%	Pass
Duplicate								
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD		
Acenaphthene	S17-Ja09848	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Acenaphthylene	S17-Ja09848	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Anthracene	S17-Ja09848	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluorene	S17-Ja09848	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass

Duplicate								
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD		
Naphthalene	S17-Ja09848	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Phenanthrene	S17-Ja09848	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass

## Comments

### Sample Integrity

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

### Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs

### Authorised By

Nibha Vaidya	Analytical Services Manager
Nibha Vaidya	Senior Analyst-Asbestos (NSW)
Ryan Hamilton	Senior Analyst-Organic (NSW)
Ryan Hamilton	Senior Analyst-Volatile (NSW)
Ryan Hamilton	Senior Analyst-Metal (NSW)
Ryan Hamilton	Senior Analyst-Inorganic (NSW)



**Glenn Jackson**

**National Operations Manager**

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

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

Measurement uncertainty of test data is available on request or please [click here](#).

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# Certificate of Analysis



**NATA Accredited**  
**Accreditation Number 1261**  
**Site Number 18217**

Accredited for compliance with ISO/IEC 17025–Testing  
 The results of the tests, calibrations and/or  
 measurements included in this document are traceable  
 to Australian/national standards.

**JBS & G Australia (NSW & WA) P/L**  
**Level 1, 50 Margaret St**  
**Sydney**  
**NSW 2000**

**Attention:** Rohan Hammond  
**Report** 531205-AID  
**Project Name** WALSH BAY  
**Project ID** 52304  
**Received Date** Jan 20, 2017  
**Date Reported** Jan 25, 2017

## Methodology:

Asbestos ID	Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques. Bulk samples include building materials, soils and ores.
Subsampling Soil Samples	The whole sample submitted is first dried and then sieved through a 10mm sieve followed by a 2mm sieve. All fibrous matter viz greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) Iron ores - Sampling and Sample preparation procedures is employed. Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis in accordance with AS 4964-2004.
Bonded asbestos-containing material (ACM)	The material is first examined and any fibres isolated and where required interfering organic fibres or matter may be removed by treating the sample for several hours at a temperature not exceeding 400 ± 30°C. The resultant material is then ground and examined in accordance with AS 4964-2004.
Limit of Reporting	The nominal detection limit of the AS4964 method is around 0.01%. The examination of large sample sizes (at least 500 ml is recommended) may improve the likelihood of identifying asbestos material in the greater than 2 mm fraction. The NEPM screening level of 0.001% w/w asbestos in soil for FA and AF (i.e. non-bonded/friable asbestos) only applies where the FA and AF are able to be quantified by gravimetric procedures. This screening level is not applicable to free fibres. NOTE: NATA News, September 2011 – page 34, states, “Weighing of fibres is problematic and can lead to loss of fibres and potential exposure for laboratory analysts. To request laboratories to report information which is outside the scope of AS 4964-2004 and the scope of their accreditation is misleading and is most unwise” therefore such values reported are outside the scope of Eurofins   mgt NATA accreditation as designated by an asterisk.

**Project Name** WALSH BAY  
**Project ID** 52304  
**Date Sampled** Jan 19, 2017  
**Report** 531205-AID

Client Sample ID	Eurofins   mgt Sample No.	Date Sampled	Sample Description	Result
JBH01_0.24-0.25	17-Ja11505	Jan 19, 2017	Approximate Sample 122g Sample consisted of: Brown fine grain soil and rocks	No asbestos detected. Organic fibre detected. No respirable fibres detected.
JBH03_0.5-0.6	17-Ja11507	Jan 19, 2017	Approximate Sample 60g Sample consisted of: Brown fine grain soil and rocks	No asbestos detected. Organic fibre detected. No respirable fibres detected.
JBH06_0.75-0.85	17-Ja11508	Jan 19, 2017	Approximate Sample 94g Sample consisted of: Brown fine grain soil and rocks	No asbestos detected. Organic fibre detected. No respirable fibres detected.
QA20170119	17-Ja11509	Jan 19, 2017	Approximate Sample 106g Sample consisted of: Brown fine grain soil and rocks	No asbestos detected. Organic fibre detected. No respirable fibres detected.



### Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported. A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results (regarding both quality and NATA accreditation).

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Sydney	Jan 20, 2017	Indefinite

**Company Name:** JBS & G Australia (NSW & WA) P/L  
**Address:** Level 1, 50 Margaret St  
Sydney  
NSW 2000  
**Project Name:** WALSH BAY  
**Project ID:** 52304

**Order No.:**  
**Report #:** 531205  
**Phone:** 02 8245 0300  
**Fax:**

**Received:** Jan 20, 2017 5:05 PM  
**Due:** Jan 25, 2017  
**Priority:** 3 Day  
**Contact Name:** Rohan Hammond

**Eurofins | mgt Analytical Services Manager : Nibha Vaidya**

Sample Detail						Asbestos Absence / Presence	HOLD	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Polychlorinated Biphenyls	Metals M8	BTEX	Semivolatile Chlorinated Hydrocarbons	Volatile Organics	Moisture Set	Total Recoverable Hydrocarbons
Melbourne Laboratory - NATA Site # 1254 & 14271																	
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794																	
Perth Laboratory - NATA Site # 18217																	
External Laboratory																	
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID												
1	JBH01_0.24-0.25	Jan 19, 2017		Soil	S17-Ja11505	X		X	X	X	X	X	X	X	X	X	X
2	JBH02_0.6-0.7	Jan 19, 2017		Soil	S17-Ja11506		X										
3	JBH03_0.5-0.6	Jan 19, 2017		Soil	S17-Ja11507	X		X	X	X	X	X	X	X	X	X	X
4	JBH06_0.75-0.85	Jan 19, 2017		Soil	S17-Ja11508	X		X	X	X	X	X	X	X	X	X	X
5	QA20170119	Jan 19, 2017		Soil	S17-Ja11509	X		X	X	X	X	X	X	X	X	X	X
6	TB20170120	Jan 20, 2017		Water	S17-Ja11510								X				
7	TS20170120	Jan 20, 2017		Water	S17-Ja11511								X				
8	RB20170120	Jan 20, 2017		Water	S17-Ja11512			X				X		X	X		X

**Company Name:** JBS & G Australia (NSW & WA) P/L  
**Address:** Level 1, 50 Margaret St  
Sydney  
NSW 2000  
**Project Name:** WALSH BAY  
**Project ID:** 52304

**Order No.:**  
**Report #:** 531205  
**Phone:** 02 8245 0300  
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**Received:** Jan 20, 2017 5:05 PM  
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**Contact Name:** Rohan Hammond

**Eurofins | mgt Analytical Services Manager : Nibha Vaidya**

Sample Detail	Asbestos Absence / Presence	HOLD	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Polychlorinated Biphenyls	Metals M8	BTEX	Semivolatile Chlorinated Hydrocarbons	Volatile Organics	Moisture Set	Total Recoverable Hydrocarbons
	X	X	X	X	X	X	X	X	X	X	X	X
<b>Melbourne Laboratory - NATA Site # 1254 &amp; 14271</b>												
<b>Sydney Laboratory - NATA Site # 18217</b>	X	X	X	X	X	X	X	X	X	X	X	X
<b>Brisbane Laboratory - NATA Site # 20794</b>												
<b>Perth Laboratory - NATA Site # 18217</b>												
<b>Test Counts</b>	4	1	5	4	4	4	5	6	5	5	4	5

## Internal Quality Control Review and Glossary

### General

1. QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Samples were analysed on an 'as received' basis.
4. 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 Advice.

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.

### Units

% w/w: weight for weight basis	grams per kilogram
Filter loading:	fibres/100 graticule areas
Reported Concentration:	fibres/mL
Flowrate:	L/min

### Terms

<b>Dry</b>	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
<b>LOR</b>	Limit of Reporting.
<b>COC</b>	Chain of custody
<b>SRA</b>	Sample Receipt Advice
<b>ISO</b>	International Standards Organisation
<b>AS</b>	Australian Standards
<b>WA DOH</b>	Western Australia Department of Health
<b>NOHSC</b>	National Occupational Health and Safety Commission
<b>ACM</b>	Bonded asbestos-containing material means any material containing more than 1% asbestos and comprises asbestos-containing-material which is in sound condition, although possibly broken or fragmented, and where the asbestos is bound in a matrix such as cement or resin. Common examples of ACM include but are not limited to: pipe and boiler insulation, sprayed-on fireproofing, troweled-on acoustical plaster, floor tile and mastic, floor linoleum, transite shingles, roofing materials, wall and ceiling plaster, ceiling tiles, and gasket materials. This term is restricted to material that cannot pass a 7 mm x 7 mm sieve. This sieve size is selected because it approximates the thickness of common asbestos cement sheeting and for fragments to be smaller than this would imply a high degree of damage and hence potential for fibre release.
<b>FA</b>	FA comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. This type of friable asbestos is defined here as asbestos material that is in a degraded condition such that it can be broken or crumbled by hand pressure. This material is typically unbonded or was previously bonded and is now significantly degraded (crumbling).
<b>PACM</b>	Presumed Asbestos-Containing Material means thermal system insulation and surfacing material found in buildings, vessels, and vessel sections constructed no later than 1980 that are assumed to contain greater than one percent asbestos but have not been sampled or analyzed to verify or negate the presence of asbestos.
<b>AF</b>	Asbestos fines (AF) are defined as free fibres, or fibre bundles, smaller than 7mm. It is the free fibres which present the greatest risk to human health, although very small fibres (< 5 microns in length) are not considered to be such a risk. AF also includes small fragments of bonded ACM that pass through a 7 mm x 7 mm sieve. (Note that for bonded ACM fragments to pass through a 7 mm x 7 mm sieve implies a substantial degree of damage which increases the potential for fibre release.)
<b>AC</b>	Asbestos cement means a mixture of cement and asbestos fibres (typically 90:10 ratios).

## Comments

The samples received were not collected in an approved asbestos bag and was therefore sub-sampled from the 250mL glass jar. Valid sub-sampling procedures were applied so as to ensure that the sub-samples to be analysed accurately represented the samples received.

## Sample Integrity

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

## Qualifier Codes/Comments

Code	Description
N/A	Not applicable

## Authorised by:

Nibha Vaidya

Senior Analyst - Asbestos(NSW)



**Glenn Jackson**

**National Operations Manager**

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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# Certificate of Analysis

**JBS & G Australia (NSW & WA) P/L**  
**Level 1, 50 Margaret St**  
**Sydney**  
**NSW 2000**



**NATA Accredited**  
**Accreditation Number 1261**  
**Site Number 18217**

Accredited for compliance with ISO/IEC 17025 – Testing  
The results of the tests, calibrations and/or  
measurements included in this document are traceable  
to Australian/national standards.

**Attention:** **Rohan Hammond**

**Report** **531205-W**  
Project name **WALSH BAY**  
Project ID **52304**  
Received Date **Jan 20, 2017**

Client Sample ID			TB20170120	TS20170120	RB20170120
Sample Matrix			Water	Water	Water
Eurofins   mgt Sample No.			S17-Ja11510	S17-Ja11511	S17-Ja11512
Date Sampled			Jan 20, 2017	Jan 20, 2017	Jan 20, 2017
Test/Reference	LOR	Unit			
<b>Total Recoverable Hydrocarbons - 1999 NEPM Fractions</b>					
TRH C6-C9	0.02	mg/L	-	-	< 0.02
TRH C10-C14	0.05	mg/L	-	-	< 0.05
TRH C15-C28	0.1	mg/L	-	-	< 0.1
TRH C29-C36	0.1	mg/L	-	-	< 0.1
TRH C10-36 (Total)	0.1	mg/L	-	-	< 0.1
<b>BTEX</b>					
Benzene	0.001	mg/L	< 0.001	103%	-
Toluene	0.001	mg/L	< 0.001	102%	-
Ethylbenzene	0.001	mg/L	< 0.001	98%	-
m&p-Xylenes	0.002	mg/L	< 0.002	96%	-
o-Xylene	0.001	mg/L	< 0.001	97%	-
Xylenes - Total	0.003	mg/L	< 0.003	96%	-
4-Bromofluorobenzene (surr.)	1	%	91	99	-
<b>Volatile Organics</b>					
1.1-Dichloroethane	0.001	mg/L	-	-	< 0.001
1.1-Dichloroethene	0.001	mg/L	-	-	< 0.001
1.1.1-Trichloroethane	0.001	mg/L	-	-	< 0.001
1.1.1.2-Tetrachloroethane	0.001	mg/L	-	-	< 0.001
1.1.2-Trichloroethane	0.001	mg/L	-	-	< 0.001
1.1.2.2-Tetrachloroethane	0.001	mg/L	-	-	< 0.001
1.2-Dibromoethane	0.001	mg/L	-	-	< 0.001
1.2-Dichlorobenzene	0.001	mg/L	-	-	< 0.001
1.2-Dichloroethane	0.001	mg/L	-	-	< 0.001
1.2-Dichloropropane	0.001	mg/L	-	-	< 0.001
1.2.3-Trichloropropane	0.001	mg/L	-	-	< 0.001
1.2.4-Trimethylbenzene	0.001	mg/L	-	-	< 0.001
1.3-Dichlorobenzene	0.001	mg/L	-	-	< 0.001
1.3-Dichloropropane	0.001	mg/L	-	-	< 0.001
1.3.5-Trimethylbenzene	0.001	mg/L	-	-	< 0.001
1.4-Dichlorobenzene	0.001	mg/L	-	-	< 0.001
2-Butanone (MEK)	0.001	mg/L	-	-	< 0.001
2-Propanone (Acetone)	0.001	mg/L	-	-	< 0.001
4-Chlorotoluene	0.001	mg/L	-	-	< 0.001
4-Methyl-2-pentanone (MIBK)	0.001	mg/L	-	-	< 0.001
Allyl chloride	0.001	mg/L	-	-	< 0.001



Client Sample ID			TB20170120	TS20170120	RB20170120
Sample Matrix			Water	Water	Water
Eurofins   mgt Sample No.			S17-Ja11510	S17-Ja11511	S17-Ja11512
Date Sampled			Jan 20, 2017	Jan 20, 2017	Jan 20, 2017
Test/Reference	LOR	Unit			
<b>Volatile Organics</b>					
Benzene	0.001	mg/L	-	-	< 0.001
Bromobenzene	0.001	mg/L	-	-	< 0.001
Bromochloromethane	0.001	mg/L	-	-	< 0.001
Bromodichloromethane	0.001	mg/L	-	-	< 0.001
Bromoform	0.001	mg/L	-	-	< 0.001
Bromomethane	0.001	mg/L	-	-	< 0.001
Carbon disulfide	0.001	mg/L	-	-	< 0.001
Carbon Tetrachloride	0.001	mg/L	-	-	< 0.001
Chlorobenzene	0.001	mg/L	-	-	< 0.001
Chloroethane	0.001	mg/L	-	-	< 0.001
Chloroform	0.005	mg/L	-	-	< 0.005
Chloromethane	0.001	mg/L	-	-	< 0.001
cis-1,2-Dichloroethene	0.001	mg/L	-	-	< 0.001
cis-1,3-Dichloropropene	0.001	mg/L	-	-	< 0.001
Dibromochloromethane	0.001	mg/L	-	-	< 0.001
Dibromomethane	0.001	mg/L	-	-	< 0.001
Dichlorodifluoromethane	0.001	mg/L	-	-	< 0.001
Ethylbenzene	0.001	mg/L	-	-	< 0.001
Iodomethane	0.001	mg/L	-	-	< 0.001
Isopropyl benzene (Cumene)	0.001	mg/L	-	-	< 0.001
m&p-Xylenes	0.002	mg/L	-	-	< 0.002
Methylene Chloride	0.001	mg/L	-	-	< 0.001
o-Xylene	0.001	mg/L	-	-	< 0.001
Styrene	0.001	mg/L	-	-	< 0.001
Tetrachloroethene	0.001	mg/L	-	-	< 0.001
Toluene	0.001	mg/L	-	-	< 0.001
trans-1,2-Dichloroethene	0.001	mg/L	-	-	< 0.001
trans-1,3-Dichloropropene	0.001	mg/L	-	-	< 0.001
Trichloroethene	0.001	mg/L	-	-	< 0.001
Trichlorofluoromethane	0.001	mg/L	-	-	< 0.001
Vinyl chloride	0.001	mg/L	-	-	< 0.001
Xylenes - Total	0.003	mg/L	-	-	< 0.003
Fluorobenzene (surr.)	1	%	-	-	126
4-Bromofluorobenzene (surr.)	1	%	-	-	105
<b>Total Recoverable Hydrocarbons - 2013 NEPM Fractions</b>					
Naphthalene <sup>N02</sup>	0.01	mg/L	-	-	< 0.01
TRH >C10-C16 less Naphthalene (F2) <sup>N01</sup>	0.05	mg/L	-	-	< 0.05
TRH C6-C10	0.02	mg/L	-	-	< 0.02
TRH C6-C10 less BTEX (F1) <sup>N04</sup>	0.02	mg/L	-	-	< 0.02
<b>Polycyclic Aromatic Hydrocarbons</b>					
Acenaphthene	0.001	mg/L	-	-	< 0.001
Acenaphthylene	0.001	mg/L	-	-	< 0.001
Anthracene	0.001	mg/L	-	-	< 0.001
Benz(a)anthracene	0.001	mg/L	-	-	< 0.001
Benzo(a)pyrene	0.001	mg/L	-	-	< 0.001
Benzo(b&j)fluoranthene <sup>N07</sup>	0.001	mg/L	-	-	< 0.001
Benzo(g,h,i)perylene	0.001	mg/L	-	-	< 0.001
Benzo(k)fluoranthene	0.001	mg/L	-	-	< 0.001
Chrysene	0.001	mg/L	-	-	< 0.001

Client Sample ID			TB20170120	TS20170120	RB20170120
Sample Matrix			Water	Water	Water
Eurofins   mgt Sample No.			S17-Ja11510	S17-Ja11511	S17-Ja11512
Date Sampled			Jan 20, 2017	Jan 20, 2017	Jan 20, 2017
Test/Reference	LOR	Unit			
<b>Polycyclic Aromatic Hydrocarbons</b>					
Dibenz(a,h)anthracene	0.001	mg/L	-	-	< 0.001
Fluoranthene	0.001	mg/L	-	-	< 0.001
Fluorene	0.001	mg/L	-	-	< 0.001
Indeno(1.2.3-cd)pyrene	0.001	mg/L	-	-	< 0.001
Naphthalene	0.001	mg/L	-	-	< 0.001
Phenanthrene	0.001	mg/L	-	-	< 0.001
Pyrene	0.001	mg/L	-	-	< 0.001
Total PAH*	0.001	mg/L	-	-	< 0.001
2-Fluorobiphenyl (surr.)	1	%	-	-	58
p-Terphenyl-d14 (surr.)	1	%	-	-	61
<b>Semivolatile Chlorinated Hydrocarbons</b>					
1,2-Dichlorobenzene	0.002	mg/L	-	-	< 0.002
1,2,4-Trichlorobenzene	0.002	mg/L	-	-	< 0.002
1,2,4,5-Tetrachlorobenzene	0.002	mg/L	-	-	< 0.002
1,3-Dichlorobenzene	0.002	mg/L	-	-	< 0.002
1,4-Dichlorobenzene	0.002	mg/L	-	-	< 0.002
Hexachlorobenzene	0.002	mg/L	-	-	< 0.002
Hexachlorobutadiene	0.002	mg/L	-	-	< 0.002
Hexachlorocyclopentadiene	0.004	mg/L	-	-	< 0.004
Hexachloroethane	0.002	mg/L	-	-	< 0.002
Pentachlorobenzene	0.002	mg/L	-	-	< 0.002
Nitrobenzene-d5 (surr.)	1	%	-	-	106
p-Terphenyl-d14 (surr.)	1	%	-	-	61
2-Fluorobiphenyl (surr.)	1	%	-	-	58
<b>Total Recoverable Hydrocarbons - 2013 NEPM Fractions</b>					
TRH >C10-C16	0.05	mg/L	-	-	< 0.05
TRH >C16-C34	0.1	mg/L	-	-	< 0.1
TRH >C34-C40	0.1	mg/L	-	-	< 0.1
<b>Heavy Metals</b>					
Arsenic	0.001	mg/L	-	-	< 0.001
Cadmium	0.0002	mg/L	-	-	< 0.0002
Chromium	0.001	mg/L	-	-	< 0.001
Copper	0.001	mg/L	-	-	< 0.001
Lead	0.001	mg/L	-	-	< 0.001
Mercury	0.0001	mg/L	-	-	< 0.0001
Nickel	0.001	mg/L	-	-	< 0.001
Zinc	0.005	mg/L	-	-	< 0.005

## Sample History

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

A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results (regarding both quality and NATA accreditation).

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions - Method: TRH C6-C36 - LTM-ORG-2010	Sydney	Jan 24, 2017	7 Day
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: TRH C6-C40 - LTM-ORG-2010	Sydney	Jan 20, 2017	7 Day
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: TRH C6-C40 - LTM-ORG-2010	Sydney	Jan 20, 2017	7 Day
BTEX - Method: TRH C6-C40 - LTM-ORG-2010	Sydney	Jan 20, 2017	14 Day
Volatile Organics - Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices	Sydney	Jan 20, 2017	7 Days
Polycyclic Aromatic Hydrocarbons - Method: E007 Polyaromatic Hydrocarbons (PAH)	Sydney	Jan 20, 2017	7 Day
Semivolatile Chlorinated Hydrocarbons - Method: E017 Semivolatile Chlorinated Hydrocarbons	Sydney	Jan 24, 2017	7 Day
Metals M8 - Method: LTM-MET-3040 Metals in Waters by ICP-MS	Sydney	Jan 20, 2017	28 Day

**Company Name:** JBS & G Australia (NSW & WA) P/L  
**Address:** Level 1, 50 Margaret St  
 Sydney  
 NSW 2000  
**Project Name:** WALSH BAY  
**Project ID:** 52304

**Order No.:**  
**Report #:** 531205  
**Phone:** 02 8245 0300  
**Fax:**

**Received:** Jan 20, 2017 5:05 PM  
**Due:** Jan 25, 2017  
**Priority:** 3 Day  
**Contact Name:** Rohan Hammond

**Eurofins | mgt Analytical Services Manager : Nibha Vaidya**

Sample Detail						Asbestos Absence / Presence	HOLD	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Polychlorinated Biphenyls	Metals M8	BTEX	Semivolatile Chlorinated Hydrocarbons	Volatile Organics	Moisture Set	Total Recoverable Hydrocarbons
Melbourne Laboratory - NATA Site # 1254 & 14271																	
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794																	
Perth Laboratory - NATA Site # 18217																	
Internal Laboratory																	
Sample ID	Sample Date	Sampling Time	Matrix	LAB ID													
JBH01_0.24-0.25	Jan 19, 2017		Soil	S17-Ja11505	X		X	X	X	X	X	X	X	X	X	X	X
JBH02_0.6-0.7	Jan 19, 2017		Soil	S17-Ja11506		X											
JBH03_0.5-0.6	Jan 19, 2017		Soil	S17-Ja11507	X		X	X	X	X	X	X	X	X	X	X	X
JBH06_0.75-0.85	Jan 19, 2017		Soil	S17-Ja11508	X		X	X	X	X	X	X	X	X	X	X	X
QA20170119	Jan 19, 2017		Soil	S17-Ja11509	X		X	X	X	X	X	X	X	X	X	X	X
TB20170120	Jan 20, 2017		Water	S17-Ja11510									X				
TS20170120	Jan 20, 2017		Water	S17-Ja11511									X				
RB20170120	Jan 20, 2017		Water	S17-Ja11512			X					X		X	X		X

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Sample Detail	Asbestos Absence / Presence	HOLD	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Polychlorinated Biphenyls	Metals M8	BTEX	Semivolatile Chlorinated Hydrocarbons	Volatile Organics	Moisture Set	Total Recoverable Hydrocarbons
Melbourne Laboratory - NATA Site # 1254 & 14271												
Sydney Laboratory - NATA Site # 18217	X	X	X	X	X	X	X	X	X	X	X	X
Perth Laboratory - NATA Site # 20794												
Perth Laboratory - NATA Site # 18217												
Test Counts	4	1	5	4	4	4	5	6	5	5	4	5

## Internal Quality Control Review and Glossary

### 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 LORs are matrix dependant. Quoted LORs 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 Advice.

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 RPD

### Units

**mg/kg:** milligrams per Kilogram

**mg/l:** milligrams per litre

**ug/l:** micrograms per litre

**ppm:** Parts per million

**ppb:** Parts per billion

**%:** Percentage

**org/100ml:** Organisms per 100 millilitres

**NTU:** Nephelometric Turbidity Units

**MPN/100mL:** Most Probable Number of organisms per 100 millilitres

### Terms

<b>Dry</b>	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
<b>LOR</b>	Limit of Reporting.
<b>SPIKE</b>	Addition of the analyte to the sample and reported as percentage recovery.
<b>RPD</b>	Relative Percent Difference between two Duplicate pieces of analysis.
<b>LCS</b>	Laboratory Control Sample - reported as percent recovery
<b>CRM</b>	Certified Reference Material - reported as percent recovery
<b>Method Blank</b>	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.
<b>Surr - Surrogate</b>	The addition of a like compound to the analyte target and reported as percentage recovery.
<b>Duplicate</b>	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
<b>Batch Duplicate</b>	A second piece of analysis from a sample outside of the clients batch of samples but run within the laboratory batch of analysis.
<b>Batch SPIKE</b>	Spike recovery reported on a sample from outside of the clients batch of samples but run within the laboratory batch of analysis.
<b>USEPA</b>	United States Environmental Protection Agency
<b>APHA</b>	American Public Health Association
<b>TCLP</b>	Toxicity Characteristic Leaching Procedure
<b>COC</b>	Chain of Custody
<b>SRA</b>	Sample Receipt Advice
<b>CP</b>	Client Parent - QC was performed on samples pertaining to this report
<b>NCP</b>	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within
<b>TEQ</b>	Toxic Equivalency Quotient

### 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 0-30%

Surrogate Recoveries: Recoveries must lie between 50-150%-Phenols & PFASs 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, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene 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 Aroclor 1260 in Matrix Spikes and LCS.
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 RPDs are calculated from raw analytical data thus it is possible to have two sets of data.



## Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
<b>Method Blank</b>							
<b>Total Recoverable Hydrocarbons - 1999 NEPM Fractions</b>							
TRH C6-C9	mg/L	< 0.02			0.02	Pass	
TRH C10-C14	mg/L	< 0.05			0.05	Pass	
TRH C15-C28	mg/L	< 0.1			0.1	Pass	
TRH C29-C36	mg/L	< 0.1			0.1	Pass	
<b>Method Blank</b>							
<b>BTEX</b>							
Benzene	mg/L	< 0.001			0.001	Pass	
Toluene	mg/L	< 0.001			0.001	Pass	
Ethylbenzene	mg/L	< 0.001			0.001	Pass	
m&p-Xylenes	mg/L	< 0.002			0.002	Pass	
o-Xylene	mg/L	< 0.001			0.001	Pass	
Xylenes - Total	mg/L	< 0.003			0.003	Pass	
<b>Method Blank</b>							
<b>Volatile Organics</b>							
1.1-Dichloroethane	mg/L	< 0.001			0.001	Pass	
1.1-Dichloroethene	mg/L	< 0.001			0.001	Pass	
1.1.1-Trichloroethane	mg/L	< 0.001			0.001	Pass	
1.1.1.2-Tetrachloroethane	mg/L	< 0.001			0.001	Pass	
1.1.2-Trichloroethane	mg/L	< 0.001			0.001	Pass	
1.1.2.2-Tetrachloroethane	mg/L	< 0.001			0.001	Pass	
1.2-Dibromoethane	mg/L	< 0.001			0.001	Pass	
1.2-Dichlorobenzene	mg/L	< 0.001			0.001	Pass	
1.2-Dichloroethane	mg/L	< 0.001			0.001	Pass	
1.2-Dichloropropane	mg/L	< 0.001			0.001	Pass	
1.2.3-Trichloropropane	mg/L	< 0.001			0.001	Pass	
1.2.4-Trimethylbenzene	mg/L	< 0.001			0.001	Pass	
1.3-Dichlorobenzene	mg/L	< 0.001			0.001	Pass	
1.3-Dichloropropane	mg/L	< 0.001			0.001	Pass	
1.3.5-Trimethylbenzene	mg/L	< 0.001			0.001	Pass	
1.4-Dichlorobenzene	mg/L	< 0.001			0.001	Pass	
2-Butanone (MEK)	mg/L	< 0.001			0.001	Pass	
2-Propanone (Acetone)	mg/L	< 0.001			0.001	Pass	
4-Chlorotoluene	mg/L	< 0.001			0.001	Pass	
4-Methyl-2-pentanone (MIBK)	mg/L	< 0.001			0.001	Pass	
Allyl chloride	mg/L	< 0.001			0.001	Pass	
Bromobenzene	mg/L	< 0.001			0.001	Pass	
Bromochloromethane	mg/L	< 0.001			0.001	Pass	
Bromodichloromethane	mg/L	< 0.001			0.001	Pass	
Bromoform	mg/L	< 0.001			0.001	Pass	
Bromomethane	mg/L	< 0.001			0.001	Pass	
Carbon disulfide	mg/L	< 0.001			0.001	Pass	
Carbon Tetrachloride	mg/L	< 0.001			0.001	Pass	
Chlorobenzene	mg/L	< 0.001			0.001	Pass	
Chloroethane	mg/L	< 0.001			0.001	Pass	
Chloroform	mg/L	< 0.005			0.005	Pass	
Chloromethane	mg/L	< 0.001			0.001	Pass	
cis-1.2-Dichloroethene	mg/L	< 0.001			0.001	Pass	
cis-1.3-Dichloropropene	mg/L	< 0.001			0.001	Pass	
Dibromochloromethane	mg/L	< 0.001			0.001	Pass	
Dibromomethane	mg/L	< 0.001			0.001	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dichlorodifluoromethane	mg/L	< 0.001			0.001	Pass	
Iodomethane	mg/L	< 0.001			0.001	Pass	
Isopropyl benzene (Cumene)	mg/L	< 0.001			0.001	Pass	
Methylene Chloride	mg/L	< 0.001			0.001	Pass	
Styrene	mg/L	< 0.001			0.001	Pass	
Tetrachloroethene	mg/L	< 0.001			0.001	Pass	
trans-1,2-Dichloroethene	mg/L	< 0.001			0.001	Pass	
trans-1,3-Dichloropropene	mg/L	< 0.001			0.001	Pass	
Trichloroethene	mg/L	< 0.001			0.001	Pass	
Trichlorofluoromethane	mg/L	< 0.001			0.001	Pass	
Vinyl chloride	mg/L	< 0.001			0.001	Pass	
<b>Method Blank</b>							
<b>Total Recoverable Hydrocarbons - 2013 NEPM Fractions</b>							
Naphthalene	mg/L	< 0.01			0.01	Pass	
TRH C6-C10	mg/L	< 0.02			0.02	Pass	
<b>Method Blank</b>							
<b>Polycyclic Aromatic Hydrocarbons</b>							
Acenaphthene	mg/L	< 0.001			0.001	Pass	
Acenaphthylene	mg/L	< 0.001			0.001	Pass	
Anthracene	mg/L	< 0.001			0.001	Pass	
Benz(a)anthracene	mg/L	< 0.001			0.001	Pass	
Benzo(a)pyrene	mg/L	< 0.001			0.001	Pass	
Benzo(b&j)fluoranthene	mg/L	< 0.001			0.001	Pass	
Benzo(g,h,i)perylene	mg/L	< 0.001			0.001	Pass	
Benzo(k)fluoranthene	mg/L	< 0.001			0.001	Pass	
Chrysene	mg/L	< 0.001			0.001	Pass	
Dibenz(a,h)anthracene	mg/L	< 0.001			0.001	Pass	
Fluoranthene	mg/L	< 0.001			0.001	Pass	
Fluorene	mg/L	< 0.001			0.001	Pass	
Indeno(1,2,3-cd)pyrene	mg/L	< 0.001			0.001	Pass	
Naphthalene	mg/L	< 0.001			0.001	Pass	
Phenanthrene	mg/L	< 0.001			0.001	Pass	
Pyrene	mg/L	< 0.001			0.001	Pass	
<b>Method Blank</b>							
<b>Semivolatile Chlorinated Hydrocarbons</b>							
1,2-Dichlorobenzene	mg/L	< 0.002			0.002	Pass	
1,2,4-Trichlorobenzene	mg/L	< 0.002			0.002	Pass	
1,2,4,5-Tetrachlorobenzene	mg/L	< 0.002			0.002	Pass	
1,3-Dichlorobenzene	mg/L	< 0.002			0.002	Pass	
1,4-Dichlorobenzene	mg/L	< 0.002			0.002	Pass	
Hexachlorobenzene	mg/L	< 0.002			0.002	Pass	
Hexachlorobutadiene	mg/L	< 0.002			0.002	Pass	
Hexachlorocyclopentadiene	mg/L	< 0.004			0.004	Pass	
Hexachloroethane	mg/L	< 0.002			0.002	Pass	
Pentachlorobenzene	mg/L	< 0.002			0.002	Pass	
<b>Method Blank</b>							
<b>Total Recoverable Hydrocarbons - 2013 NEPM Fractions</b>							
TRH >C10-C16	mg/L	< 0.05			0.05	Pass	
TRH >C16-C34	mg/L	< 0.1			0.1	Pass	
TRH >C34-C40	mg/L	< 0.1			0.1	Pass	
<b>Method Blank</b>							
<b>Heavy Metals</b>							
Arsenic	mg/L	< 0.001			0.001	Pass	
Cadmium	mg/L	< 0.0002			0.0002	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Chromium	mg/L	< 0.001			0.001	Pass	
Copper	mg/L	< 0.001			0.001	Pass	
Lead	mg/L	< 0.001			0.001	Pass	
Mercury	mg/L	< 0.0001			0.0001	Pass	
Nickel	mg/L	< 0.001			0.001	Pass	
Zinc	mg/L	< 0.005			0.005	Pass	
<b>LCS - % Recovery</b>							
<b>Total Recoverable Hydrocarbons - 1999 NEPM Fractions</b>							
TRH C6-C9	%	85			70-130	Pass	
TRH C10-C14	%	102			70-130	Pass	
<b>LCS - % Recovery</b>							
<b>BTEX</b>							
Benzene	%	99			70-130	Pass	
Toluene	%	103			70-130	Pass	
Ethylbenzene	%	104			70-130	Pass	
m&p-Xylenes	%	102			70-130	Pass	
o-Xylene	%	101			70-130	Pass	
Xylenes - Total	%	102			70-130	Pass	
<b>LCS - % Recovery</b>							
<b>Volatile Organics</b>							
1.1-Dichloroethane	%	113			70-130	Pass	
1.1-Dichloroethene	%	118			70-130	Pass	
1.1.1-Trichloroethane	%	98			70-130	Pass	
1.1.1.2-Tetrachloroethane	%	82			70-130	Pass	
1.1.2-Trichloroethane	%	99			70-130	Pass	
1.1.2.2-Tetrachloroethane	%	102			70-130	Pass	
1.2-Dibromoethane	%	96			70-130	Pass	
1.2-Dichlorobenzene	%	101			70-130	Pass	
1.2-Dichloroethane	%	127			70-130	Pass	
1.2-Dichloropropane	%	108			70-130	Pass	
1.2.3-Trichloropropane	%	111			70-130	Pass	
1.2.4-Trimethylbenzene	%	108			70-130	Pass	
1.3-Dichlorobenzene	%	101			70-130	Pass	
1.3-Dichloropropane	%	107			70-130	Pass	
1.3.5-Trimethylbenzene	%	109			70-130	Pass	
1.4-Dichlorobenzene	%	101			70-130	Pass	
2-Butanone (MEK)	%	84			70-130	Pass	
2-Propanone (Acetone)	%	94			70-130	Pass	
4-Chlorotoluene	%	106			70-130	Pass	
4-Methyl-2-pentanone (MIBK)	%	105			70-130	Pass	
Allyl chloride	%	115			70-130	Pass	
Bromobenzene	%	120			70-130	Pass	
Bromochloromethane	%	126			70-130	Pass	
Bromodichloromethane	%	98			70-130	Pass	
Bromoform	%	76			70-130	Pass	
Bromomethane	%	96			70-130	Pass	
Carbon disulfide	%	95			70-130	Pass	
Carbon Tetrachloride	%	83			70-130	Pass	
Chlorobenzene	%	98			70-130	Pass	
Chloroethane	%	116			70-130	Pass	
Chloroform	%	108			70-130	Pass	
Chloromethane	%	124			70-130	Pass	
cis-1.2-Dichloroethene	%	99			70-130	Pass	
cis-1.3-Dichloropropene	%	82			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dibromochloromethane	%	80			70-130	Pass	
Dibromomethane	%	106			70-130	Pass	
Dichlorodifluoromethane	%	105			70-130	Pass	
Iodomethane	%	102			70-130	Pass	
Isopropyl benzene (Cumene)	%	98			70-130	Pass	
Methylene Chloride	%	126			70-130	Pass	
Styrene	%	96			70-130	Pass	
Tetrachloroethene	%	84			70-130	Pass	
trans-1,2-Dichloroethene	%	114			70-130	Pass	
trans-1,3-Dichloropropene	%	90			70-130	Pass	
Trichloroethene	%	94			70-130	Pass	
Trichlorofluoromethane	%	114			70-130	Pass	
Vinyl chloride	%	124			70-130	Pass	
<b>LCS - % Recovery</b>							
<b>Total Recoverable Hydrocarbons - 2013 NEPM Fractions</b>							
Naphthalene	%	98			70-130	Pass	
TRH C6-C10	%	95			70-130	Pass	
<b>LCS - % Recovery</b>							
<b>Polycyclic Aromatic Hydrocarbons</b>							
Acenaphthene	%	102			70-130	Pass	
Acenaphthylene	%	95			70-130	Pass	
Anthracene	%	109			70-130	Pass	
Benz(a)anthracene	%	92			70-130	Pass	
Benzo(a)pyrene	%	90			70-130	Pass	
Benzo(b&j)fluoranthene	%	77			70-130	Pass	
Benzo(g,h,i)perylene	%	95			70-130	Pass	
Benzo(k)fluoranthene	%	98			70-130	Pass	
Chrysene	%	102			70-130	Pass	
Dibenz(a,h)anthracene	%	83			70-130	Pass	
Fluoranthene	%	104			70-130	Pass	
Fluorene	%	103			70-130	Pass	
Indeno(1,2,3-cd)pyrene	%	83			70-130	Pass	
Naphthalene	%	102			70-130	Pass	
Phenanthrene	%	108			70-130	Pass	
Pyrene	%	106			70-130	Pass	
<b>LCS - % Recovery</b>							
<b>Semivolatile Chlorinated Hydrocarbons</b>							
1,2,4-Trichlorobenzene	%	100			70-130	Pass	
1,3-Dichlorobenzene	%	100			70-130	Pass	
1,4-Dichlorobenzene	%	100			70-130	Pass	
<b>LCS - % Recovery</b>							
<b>Total Recoverable Hydrocarbons - 2013 NEPM Fractions</b>							
TRH >C10-C16	%	108			70-130	Pass	
<b>LCS - % Recovery</b>							
<b>Heavy Metals</b>							
Arsenic	%	104			70-130	Pass	
Cadmium	%	115			70-130	Pass	
Chromium	%	101			70-130	Pass	
Copper	%	96			70-130	Pass	
Lead	%	97			70-130	Pass	
Mercury	%	89			70-130	Pass	
Nickel	%	95			70-130	Pass	
Zinc	%	103			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
<b>Spike - % Recovery</b>									
<b>BTEX</b>				Result 1					
Benzene	S17-Ja09604	NCP	%	97			70-130	Pass	
Toluene	S17-Ja09604	NCP	%	99			70-130	Pass	
Ethylbenzene	S17-Ja09604	NCP	%	99			70-130	Pass	
m&p-Xylenes	S17-Ja09604	NCP	%	99			70-130	Pass	
o-Xylene	S17-Ja09604	NCP	%	97			70-130	Pass	
Xylenes - Total	S17-Ja09604	NCP	%	98			70-130	Pass	
<b>Spike - % Recovery</b>									
<b>Total Recoverable Hydrocarbons - 1999 NEPM Fractions</b>				Result 1					
TRH C6-C9	S17-Ja09604	NCP	%	84			70-130	Pass	
<b>Spike - % Recovery</b>									
<b>Volatile Organics</b>				Result 1					
1.1-Dichloroethane	S17-Ja07282	NCP	%	116			70-130	Pass	
1.1-Dichloroethene	S17-Ja07282	NCP	%	116			70-130	Pass	
1.1.1-Trichloroethane	S17-Ja07282	NCP	%	99			70-130	Pass	
1.1.1.2-Tetrachloroethane	S17-Ja07282	NCP	%	81			70-130	Pass	
1.1.2-Trichloroethane	S17-Ja07282	NCP	%	106			70-130	Pass	
1.1.2.2-Tetrachloroethane	S17-Ja07282	NCP	%	118			70-130	Pass	
1.2-Dibromoethane	S17-Ja07282	NCP	%	100			70-130	Pass	
1.2-Dichlorobenzene	S17-Ja07282	NCP	%	101			70-130	Pass	
1.2-Dichloroethane	S17-Ja07282	NCP	%	121			70-130	Pass	
1.2-Dichloropropane	S17-Ja07282	NCP	%	112			70-130	Pass	
1.2.3-Trichloropropane	S17-Ja07282	NCP	%	122			70-130	Pass	
1.2.4-Trimethylbenzene	S17-Ja07282	NCP	%	105			70-130	Pass	
1.3-Dichlorobenzene	S17-Ja07282	NCP	%	99			70-130	Pass	
1.3-Dichloropropane	S17-Ja07282	NCP	%	112			70-130	Pass	
1.3.5-Trimethylbenzene	S17-Ja07282	NCP	%	106			70-130	Pass	
1.4-Dichlorobenzene	S17-Ja07282	NCP	%	100			70-130	Pass	
2-Butanone (MEK)	S17-Ja07282	NCP	%	95			70-130	Pass	
2-Propanone (Acetone)	S17-Ja07282	NCP	%	114			70-130	Pass	
4-Chlorotoluene	S17-Ja07282	NCP	%	106			70-130	Pass	
4-Methyl-2-pentanone (MIBK)	S17-Ja07282	NCP	%	128			70-130	Pass	
Allyl chloride	S17-Ja07282	NCP	%	107			70-130	Pass	
Bromobenzene	S17-Ja07282	NCP	%	118			70-130	Pass	
Bromochloromethane	S17-Ja07282	NCP	%	126			70-130	Pass	
Bromodichloromethane	S17-Ja07282	NCP	%	93			70-130	Pass	
Bromomethane	S17-Ja07282	NCP	%	77			70-130	Pass	
Carbon disulfide	S17-Ja07282	NCP	%	102			70-130	Pass	
Carbon Tetrachloride	S17-Ja07282	NCP	%	78			70-130	Pass	
Chlorobenzene	S17-Ja07282	NCP	%	104			70-130	Pass	
Chloroethane	S17-Ja07282	NCP	%	118			70-130	Pass	
Chloroform	S17-Ja07282	NCP	%	110			70-130	Pass	
Chloromethane	S17-Ja07282	NCP	%	109			70-130	Pass	
cis-1.2-Dichloroethene	S17-Ja07282	NCP	%	105			70-130	Pass	
cis-1.3-Dichloropropene	S17-Ja07282	NCP	%	82			70-130	Pass	
Dibromochloromethane	S17-Ja07282	NCP	%	74			70-130	Pass	
Dibromomethane	S17-Ja07282	NCP	%	110			70-130	Pass	
Dichlorodifluoromethane	S17-Ja07282	NCP	%	121			70-130	Pass	
Isopropyl benzene (Cumene)	S17-Ja07282	NCP	%	102			70-130	Pass	
Methylene Chloride	S17-Ja07282	NCP	%	128			70-130	Pass	
Styrene	S17-Ja07282	NCP	%	100			70-130	Pass	
Tetrachloroethene	S17-Ja07282	NCP	%	88			70-130	Pass	
trans-1.2-Dichloroethene	S17-Ja07282	NCP	%	114			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
trans-1,3-Dichloropropene	S17-Ja07282	NCP	%	87			70-130	Pass	
Trichloroethene	S17-Ja07282	NCP	%	97			70-130	Pass	
Trichlorofluoromethane	S17-Ja07282	NCP	%	110			70-130	Pass	
Vinyl chloride	S17-Ja07282	NCP	%	100			70-130	Pass	
<b>Spike - % Recovery</b>									
<b>Total Recoverable Hydrocarbons - 2013 NEPM Fractions</b>				Result 1					
Naphthalene	S17-Ja13149	NCP	%	91			70-130	Pass	
TRH C6-C10	S17-Ja09604	NCP	%	93			70-130	Pass	
<b>Spike - % Recovery</b>									
<b>Heavy Metals</b>				Result 1					
Arsenic	S17-Ja11512	CP	%	86			70-130	Pass	
Cadmium	S17-Ja11512	CP	%	88			70-130	Pass	
Chromium	S17-Ja11512	CP	%	84			70-130	Pass	
Copper	S17-Ja11512	CP	%	83			70-130	Pass	
Lead	S17-Ja11512	CP	%	84			70-130	Pass	
Mercury	S17-Ja11512	CP	%	82			70-130	Pass	
Nickel	S17-Ja11512	CP	%	83			70-130	Pass	
Zinc	S17-Ja11512	CP	%	88			70-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
<b>Duplicate</b>									
<b>BTEX</b>				Result 1	Result 2	RPD			
Benzene	S17-Ja09602	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Toluene	S17-Ja09602	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Ethylbenzene	S17-Ja09602	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
m&p-Xylenes	S17-Ja09602	NCP	mg/L	< 0.002	< 0.002	<1	30%	Pass	
o-Xylene	S17-Ja09602	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Xylenes - Total	S17-Ja09602	NCP	mg/L	< 0.003	< 0.003	<1	30%	Pass	
<b>Duplicate</b>									
<b>Total Recoverable Hydrocarbons - 1999 NEPM Fractions</b>				Result 1	Result 2	RPD			
TRH C6-C9	S17-Ja09602	NCP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
<b>Duplicate</b>									
<b>Volatile Organics</b>				Result 1	Result 2	RPD			
1,1-Dichloroethane	S17-Ja07281	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1,1-Dichloroethene	S17-Ja07281	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1,1,1-Trichloroethane	S17-Ja07281	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1,1,1,2-Tetrachloroethane	S17-Ja07281	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1,1,2-Trichloroethane	S17-Ja07281	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1,1,2,2-Tetrachloroethane	S17-Ja07281	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1,2-Dibromoethane	S17-Ja07281	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1,2-Dichloroethane	S17-Ja07281	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1,2-Dichloropropane	S17-Ja07281	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1,2,3-Trichloropropane	S17-Ja07281	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1,3-Dichloropropane	S17-Ja07281	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2-Butanone (MEK)	S17-Ja07281	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2-Propanone (Acetone)	S17-Ja07281	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	S17-Ja07281	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Allyl chloride	S17-Ja07281	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Bromochloromethane	S17-Ja07281	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Bromodichloromethane	S17-Ja07281	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Bromomethane	S17-Ja07281	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Carbon Tetrachloride	S17-Ja07281	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Chlorobenzene	S17-Ja07281	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Chloroethane	S17-Ja07281	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Chloromethane	S17-Ja07281	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	



Duplicate								
Volatile Organics				Result 1	Result 2	RPD		
cis-1.2-Dichloroethene	S17-Ja07281	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
cis-1.3-Dichloropropene	S17-Ja07281	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Dibromochloromethane	S17-Ja07281	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Dibromomethane	S17-Ja07281	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Dichlorodifluoromethane	S17-Ja07281	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Iodomethane	S17-Ja07281	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Isopropyl benzene (Cumene)	S17-Ja07281	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Styrene	S17-Ja07281	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
trans-1.2-Dichloroethene	S17-Ja07281	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
trans-1.3-Dichloropropene	S17-Ja07281	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Trichlorofluoromethane	S17-Ja07281	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Vinyl chloride	S17-Ja07281	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Duplicate								
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD		
TRH C6-C10	S17-Ja09602	NCP	mg/L	< 0.02	< 0.02	<1	30%	Pass
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Arsenic	M17-Ja09381	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Cadmium	M17-Ja09381	NCP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
Chromium	M17-Ja09369	NCP	mg/L	0.002	0.002	4.0	30%	Pass
Copper	M17-Ja09369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Lead	M17-Ja09381	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Mercury	M17-Ja09381	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass
Nickel	M17-Ja09381	NCP	mg/L	0.003	0.003	7.0	30%	Pass

## Comments

### Sample Integrity

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

### Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs

## Authorised By

Nibha Vaidya	Analytical Services Manager
Ryan Hamilton	Senior Analyst-Organic (NSW)
Ryan Hamilton	Senior Analyst-Volatile (NSW)
Ryan Hamilton	Senior Analyst-Metal (NSW)



**Glenn Jackson**

### National Operations Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

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

Measurement uncertainty of test data is available on request or please [click here](#).

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**Company Name:** JBS & G Australia (NSW & WA) P/L  
**Address:** Level 1, 50 Margaret St  
 Sydney  
 NSW 2000  
**Project Name:** WALSH BAY  
**Project ID:** 52304

**Order No.:**  
**Report #:** 531205  
**Phone:** 02 8245 0300  
**Fax:**

**Received:** Jan 20, 2017 5:05 PM  
**Due:** Jan 25, 2017  
**Priority:** 3 Day  
**Contact Name:** Rohan Hammond

**Eurofins | mgt Analytical Services Manager : Nibha Vaidya**

Sample Detail						Asbestos Absence /Presence	HOLD	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Polychlorinated Biphenyls	Metals M8	BTEX	Semivolatile Chlorinated Hydrocarbons	Volatile Organics	Moisture Set	Total Recoverable Hydrocarbons
Melbourne Laboratory - NATA Site # 1254 & 14271																	
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794																	
Perth Laboratory - NATA Site # 18217																	
Internal Laboratory																	
Sample ID	Sample Date	Sampling Time	Matrix	LAB ID													
BH01_0.24-0.25	Jan 19, 2017		Soil	S17-Ja11505	X		X	X	X	X	X	X	X	X	X	X	X
BH02_0.6-0.7	Jan 19, 2017		Soil	S17-Ja11506		X											
BH03_0.5-0.6	Jan 19, 2017		Soil	S17-Ja11507	X		X	X	X	X	X	X	X	X	X	X	X
BH06_0.75-0.85	Jan 19, 2017		Soil	S17-Ja11508	X		X	X	X	X	X	X	X	X	X	X	X
QA20170119	Jan 19, 2017		Soil	S17-Ja11509	X		X	X	X	X	X	X	X	X	X	X	X
TB20170120	Jan 20, 2017		Water	S17-Ja11510									X				
TS20170120	Jan 20, 2017		Water	S17-Ja11511									X				
RB20170120	Jan 20, 2017		Water	S17-Ja11512			X					X		X	X		X

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**Project Name:** WALSH BAY  
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**Report #:** 531205  
**Phone:** 02 8245 0300  
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**Received:** Jan 20, 2017 5:05 PM  
**Due:** Jan 25, 2017  
**Priority:** 3 Day  
**Contact Name:** Rohan Hammond

**Eurofins | mgt Analytical Services Manager : Nibha Vaidya**

Sample Detail	Asbestos Absence / Presence	HOLD	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Polychlorinated Biphenyls	Metals M8	BTEX	Semivolatile Chlorinated Hydrocarbons	Volatile Organics	Moisture Set	Total Recoverable Hydrocarbons
Melbourne Laboratory - NATA Site # 1254 & 14271												
Sydney Laboratory - NATA Site # 18217	X	X	X	X	X	X	X	X	X	X	X	X
Perth Laboratory - NATA Site # 20794												
Perth Laboratory - NATA Site # 18217												
Test Counts	4	1	5	4	4	4	5	6	5	5	4	5

## Sample Receipt Advice

Company name: **JBS & G Australia (NSW & WA) P/L**

Contact name: **Rohan Hammond**

Project name: **WALSH BAY**

Project ID: **52304**

COC number: **Not provided**

Turn around time: **3 Day**

Date/Time received: **Jan 20, 2017 5:05 PM**

Eurofins | mgt reference: **531205**

### Sample information

- ☒ A detailed list of analytes logged into our LIMS, is included in the attached summary table.
- ☒ Sample Temperature of a random sample selected from the batch as recorded by Eurofins | mgt Sample Receipt : 15.5 degrees Celsius.
- ☒ All samples have been received as described on the above COC.
- ☒ COC has been completed correctly.
- ☒ Attempt to chill was evident.
- ☒ Appropriately preserved sample containers have been used.
- ☒ All samples were received in good condition.
- ☒ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
- ☒ Appropriate sample containers have been used.
- ☒ Sample containers for volatile analysis received with zero headspace.
- ☒ Some samples have been subcontracted.

N/A Custody Seals intact (if used).

### Contact notes

If you have any questions with respect to these samples please contact:

Nibha Vaidya on Phone : +61 (2) 9900 8400 or by e.mail: NibhaVaidya@eurofins.com

Results will be delivered electronically via e.mail to Rohan Hammond - rhammond@jbsg.com.au.

010651

## CHAIN OF CUSTODY

[illegible]



## Alena Bounkeua

---

**From:** Nibha Vaidya  
**Sent:** Friday, 20 January 2017 8:28 PM  
**To:** !AU04\_CAU001\_EnviroSampleNSW  
**Subject:** FW: WALSHS BAY (52304) - Report 531205

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

FYI

Kind Regards,

Nibha Vaidya  
Phone : +61 2 9900 8415  
Mobile : +61 499 900 805  
Email : [NibhaVaidya@eurofins.com](mailto:NibhaVaidya@eurofins.com)

---

**From:** Sumi Dorairaj [<mailto:Sdorairaj@jbsq.com.au>]  
**Sent:** Friday, 20 January 2017 8:18 PM  
**To:** Nibha Vaidya; Nicola Wells  
**Cc:** Rohan Hammond  
**Subject:** Re: WALSHS BAY (52304) - Report 531205

Hi Nibha, thanks for the information. Please remove jbh02-0.6-0.7 from the requested analysis for this project. Thanks , Sumi

Sent from my Samsung GALAXY S5 on the Telstra 4G network

----- Original message -----

**From:** Nibha Vaidya  
**Date:** 20/01/2017 6:55 PM (GMT+10:00)  
**To:** Nicola Wells  
**Cc:** Rohan Hammond , Sumi Dorairaj  
**Subject:** WALSHS BAY (52304) - Report 531205

Hi Nicola,

We have received the attached batch of samples. As indicated in the COC, 'JBH02-0.6-0.7' has a very limited sample and therefore, if we were to carry out all of the requested tests, the LORs may have to be raised. Will that be okay with you?

Further, if you would like this sample crushed and pulverised prior to analysis, it will have to be sent out and therefore, 3 day TAT will not be achievable. Please let me know how you would like us to proceed.

Kind Regards,

Nibha Vaidya  
**Analytical Services Manager**

**Eurofins | mgt**

Unit F3, Parkview Building  
16 Mars Road  
LANE COVE WEST NSW 2066  
AUSTRALIA  
Phone : +61 2 9900 8415  
Mobile : +61 499 900 805  
Fax : +61 2 9420 2977

Email : [NibhaVaidya@eurofins.com](mailto:NibhaVaidya@eurofins.com)

Website : [www.eurofins.com.au/environmental-testing](http://www.eurofins.com.au/environmental-testing)

*Are you on TOP of PFASs? Find out more by reading Eurofins | mgt's Environote by clicking [here](#)*

Click [here](#) to report this email as spam.

ScannedByWebsenseForEurofins

## Rupan Virk

---

**From:** Nibha Vaidya  
**Sent:** Tuesday, 24 January 2017 10:12 AM  
**To:** IAU04\_CAU001\_EnviroSampleNSW  
**Subject:** FW: WALSHS BAY (52304) - Report 531205

*Rupan  
24/01  
10:12 AM*

FYI

Kind Regards,

Nibha Vaidya  
Phone : +61 2 9900 8415  
Mobile : +61 499 900 805  
Email : [NibhaVaidya@eurofins.com](mailto:NibhaVaidya@eurofins.com)

---

**From:** Sumi Dorairaj [<mailto:Sdorairaj@jbsg.com.au>]  
**Sent:** Tuesday, 24 January 2017 9:49 AM  
**To:** Nibha Vaidya; Nicola Wells  
**Cc:** Rohan Hammond  
**Subject:** RE: WALSHS BAY (52304) - Report 531205

Hi Nibha,

Please go with TRH, heavy metals, PAHs and SVOCS if you can on the RB20170120 sample. We are not concerned if the LORs need to be raised as long as the reason is noted on the analysis certificate.

Thanks, Sumi



**Sumi Dorairaj** | Environmental Consultant | JBS&G  
Sydney | Melbourne | Adelaide | Perth | Brisbane  
Level 1, 50 Margaret Street Sydney NSW 2000  
T: 02 8245 0300 | M: 0427 782 127 | [www.jbsg.com.au](http://www.jbsg.com.au)

Contaminated Land | Groundwater Remediation | Auditing and Compliance | Assessments and Approvals | Occupational Hygiene and Monitoring

If you would like to send through large electronic files (>25MB), please use JBS&G's secure internet-based file delivery system located at <http://dropbox.yousendit.com/JBS&G>. Place 'Sumi Dorairaj - Sydney' in the subject.

This email message is intended only for the addressee(s) and contains information that may be confidential and/or copyright. If you are not the intended recipient please delete this email immediately. Use, disclosure or reproduction of this email by anyone other than the intended recipient(s) is strictly prohibited. No representation is made that this email or any attachments are free of viruses and the recipient is responsible for undertaking appropriate virus scanning. Any advice provided in or attached to this email is subject to limitations.

---

**From:** Nibha Vaidya [<mailto:NibhaVaidya@eurofins.com>]  
**Sent:** Tuesday, January 24, 2017 9:36 AM  
**To:** Sumi Dorairaj <[Sdorairaj@jbsg.com.au](mailto:Sdorairaj@jbsg.com.au)>; Nicola Wells <[NWells@jbsg.com.au](mailto:NWells@jbsg.com.au)>  
**Cc:** Rohan Hammond <[RHammond@jbsg.com.au](mailto:RHammond@jbsg.com.au)>  
**Subject:** RE: WALSHS BAY (52304) - Report 531205

Hi Sumi,

## Certificate of Analysis

**JBS & G Australia (NSW & WA) P/L**  
**Level 1, 50 Margaret St**  
**Sydney**  
**NSW 2000**



**NATA Accredited**  
**Accreditation Number 1261**  
**Site Number 18217**

Accredited for compliance with ISO/IEC 17025 – Testing  
The results of the tests, calibrations and/or  
measurements included in this document are traceable  
to Australian/national standards.

**Attention:** **Rohan Hammond**

**Report** **531195-A**  
Project name **WALSH BAY**  
Project ID **52304**  
Received Date **Jan 20, 2017**

Client Sample ID			QV01_FRONT	QV01_BACK	JBH06_AIR_F	JBH06_AIR_B
Sample Matrix			Air	Air	RONT	ACK
Eurofins   mgt Sample No.			S17-Ja11438	S17-Ja11439	S17-Ja11440	S17-Ja11441
Date Sampled			Jan 20, 2017	Jan 20, 2017	Jan 20, 2017	Jan 20, 2017
Test/Reference	LOR	Unit				
<b>VOCs in Ambient Air by GC/MS</b>						
Naphthalene	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethane	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloropropene	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dibromo-3-chloropropane	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dibromoethane	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloropropane	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichloropropane	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
2-Chlorotoluene	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
2.2-Dichloropropane	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
4-Chlorotoluene	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
Benzene	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
Bromochloromethane	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
Bromodichloromethane	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
Bromoform	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
Carbon Tetrachloride	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
Dibromochloromethane	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
Dibromomethane	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
Ethylbenzene	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
n-Butylbenzene	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
n-Propylbenzene	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
p-Isopropyltoluene	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			QV01_FRONT Air	QV01_BACK Air	JBH06_AIR_F RONT Air	JBH06_AIR_B ACK Air
Sample Matrix			S17-Ja11438	S17-Ja11439	S17-Ja11440	S17-Ja11441
Eurofins   mgt Sample No.			Jan 20, 2017	Jan 20, 2017	Jan 20, 2017	Jan 20, 2017
Date Sampled						
Test/Reference	LOR	Unit				
<b>VOCs in Ambient Air by GC/MS</b>						
sec-Butylbenzene	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
Styrene	5	Total ug	< 5	< 5	< 5	< 5
tert-Butylbenzene	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
Tetrachloroethene	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethene	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl chloride	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
Xylenes - Total	1.5	Total ug	< 1.5	< 1.5	< 1.5	< 1.5
Fluorobenzene (surr.)	1	%	99	91	91	92
4-Bromofluorobenzene (surr.)	1	%	99	95	92	92
Dibromofluoromethane (surr.)	1	%	101	90	94	92
1.2-Dichlorobenzene	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichlorobenzene	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trichlorobenzene	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5
Hexachlorobutadiene	0.5	Total ug	< 0.5	< 0.5	< 0.5	< 0.5

### Sample History

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

A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results (regarding both quality and NATA accreditation).

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

### Description

VOCs in Ambient Air by GC/MS

### Testing Site

Melbourne

### Extracted

Jan 20, 2017

### Holding Time

14 Day

- Method: LTM-ORG-2030 VOCs in Ambient Air by GC/MS



**Company Name:** JBS & G Australia (NSW & WA) P/L  
**Address:** Level 1, 50 Margaret St  
 Sydney  
 NSW 2000  
**Project Name:** WALSH BAY  
**Project ID:** 52304

**Order No.:**  
**Report #:** 531195  
**Phone:** 02 8245 0300  
**Fax:**

**Received:** Jan 20, 2017 5:05 PM  
**Due:** Jan 25, 2017  
**Priority:** 3 Day  
**Contact Name:** Rohan Hammond

**Eurofins | mgt Analytical Services Manager : Nibha Vaidya**

### Sample Detail

VOCs in Ambient Air by GC/MS

Melbourne Laboratory - NATA Site # 1254 & 14271						X
Sydney Laboratory - NATA Site # 18217						
Brisbane Laboratory - NATA Site # 20794						
Perth Laboratory - NATA Site # 18217						
Internal Laboratory						
Sample ID	Sample Date	Sampling Time	Matrix	LAB ID		
QV01_FRONT	Jan 20, 2017		Air	S17-Ja11438	X	
QV01_BACK	Jan 20, 2017		Air	S17-Ja11439	X	
JBH06_AIR_FRONT	Jan 20, 2017		Air	S17-Ja11440	X	
JBH06_AIR_BACK	Jan 20, 2017		Air	S17-Ja11441	X	
Total Counts						4

## Internal Quality Control Review and Glossary

### 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 LORs are matrix dependant. Quoted LORs 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 Advice.

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 RPD

### Units

**mg/kg:** milligrams per Kilogram

**ug/l:** micrograms per litre

**ppb:** Parts per billion

**org/100ml:** Organisms per 100 millilitres

**MPN/100mL:** Most Probable Number of organisms per 100 millilitres

**mg/l:** milligrams per litre

**ppm:** Parts per million

**%:** Percentage

**NTU:** Nephelometric Turbidity Units

### Terms

<b>Dry</b>	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
<b>LOR</b>	Limit of Reporting.
<b>SPIKE</b>	Addition of the analyte to the sample and reported as percentage recovery.
<b>RPD</b>	Relative Percent Difference between two Duplicate pieces of analysis.
<b>LCS</b>	Laboratory Control Sample - reported as percent recovery
<b>CRM</b>	Certified Reference Material - reported as percent recovery
<b>Method Blank</b>	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.
<b>Surr - Surrogate</b>	The addition of a like compound to the analyte target and reported as percentage recovery.
<b>Duplicate</b>	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
<b>Batch Duplicate</b>	A second piece of analysis from a sample outside of the clients batch of samples but run within the laboratory batch of analysis.
<b>Batch SPIKE</b>	Spike recovery reported on a sample from outside of the clients batch of samples but run within the laboratory batch of analysis.
<b>USEPA</b>	United States Environmental Protection Agency
<b>APHA</b>	American Public Health Association
<b>TCLP</b>	Toxicity Characteristic Leaching Procedure
<b>COC</b>	Chain of Custody
<b>SRA</b>	Sample Receipt Advice
<b>CP</b>	Client Parent - QC was performed on samples pertaining to this report
<b>NCP</b>	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within
<b>TEQ</b>	Toxic Equivalency Quotient

### 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 0-30%

Surrogate Recoveries: Recoveries must lie between 50-150%-Phenols & PFASs 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, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene 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 Aroclor 1260 in Matrix Spikes and LCS.
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 RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

## Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
<b>Method Blank</b>							
<b>VOCs in Ambient Air by GC/MS</b>							
Naphthalene	Total ug	< 0.5			0.5	Pass	
1.1-Dichloroethane	Total ug	< 0.5			0.5	Pass	
1.1-Dichloroethene	Total ug	< 0.5			0.5	Pass	
1.1-Dichloropropene	Total ug	< 0.5			0.5	Pass	
1.1.1-Trichloroethane	Total ug	< 0.5			0.5	Pass	
1.1.1.2-Tetrachloroethane	Total ug	< 0.5			0.5	Pass	
1.1.2-Trichloroethane	Total ug	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	Total ug	< 0.5			0.5	Pass	
1.2-Dibromo-3-chloropropane	Total ug	< 0.5			0.5	Pass	
1.2-Dibromoethane	Total ug	< 0.5			0.5	Pass	
1.2-Dichloroethane	Total ug	< 0.5			0.5	Pass	
1.2-Dichloropropane	Total ug	< 0.5			0.5	Pass	
1.2.3-Trichloropropane	Total ug	< 0.5			0.5	Pass	
1.2.4-Trimethylbenzene	Total ug	< 0.5			0.5	Pass	
1.3-Dichloropropane	Total ug	< 0.5			0.5	Pass	
1.3.5-Trimethylbenzene	Total ug	< 0.5			0.5	Pass	
2-Chlorotoluene	Total ug	< 0.5			0.5	Pass	
2.2-Dichloropropane	Total ug	< 0.5			0.5	Pass	
4-Chlorotoluene	Total ug	< 0.5			0.5	Pass	
Benzene	Total ug	< 0.5			0.5	Pass	
Bromochloromethane	Total ug	< 0.5			0.5	Pass	
Bromodichloromethane	Total ug	< 0.5			0.5	Pass	
Bromoform	Total ug	< 0.5			0.5	Pass	
Carbon Tetrachloride	Total ug	< 0.5			0.5	Pass	
Chlorobenzene	Total ug	< 0.5			0.5	Pass	
Chloroform	Total ug	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	Total ug	< 0.5			0.5	Pass	
cis-1.3-Dichloropropene	Total ug	< 0.5			0.5	Pass	
Dibromochloromethane	Total ug	< 0.5			0.5	Pass	
Dibromomethane	Total ug	< 0.5			0.5	Pass	
Ethylbenzene	Total ug	< 0.5			0.5	Pass	
Isopropyl benzene (Cumene)	Total ug	< 0.5			0.5	Pass	
n-Butylbenzene	Total ug	< 0.5			0.5	Pass	
n-Propylbenzene	Total ug	< 0.5			0.5	Pass	
p-Isopropyltoluene	Total ug	< 0.5			0.5	Pass	
sec-Butylbenzene	Total ug	< 0.5			0.5	Pass	
Styrene	Total ug	< 5			5	Pass	
tert-Butylbenzene	Total ug	< 0.5			0.5	Pass	
Tetrachloroethene	Total ug	< 0.5			0.5	Pass	
Toluene	Total ug	< 0.5			0.5	Pass	
trans-1.3-Dichloropropene	Total ug	< 0.5			0.5	Pass	
Trichloroethene	Total ug	< 0.5			0.5	Pass	
Trichlorofluoromethane	Total ug	< 0.5			0.5	Pass	
Vinyl chloride	Total ug	< 0.5			0.5	Pass	
Xylenes - Total	Total ug	< 1.5			1.5	Pass	
1.2-Dichlorobenzene	Total ug	< 0.5			0.5	Pass	
1.2.3-Trichlorobenzene	Total ug	< 0.5			0.5	Pass	
1.2.4-Trichlorobenzene	Total ug	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	Total ug	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	Total ug	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Hexachlorobutadiene	Total ug	< 0.5			0.5	Pass	
<b>LCS - % Recovery</b>							
<b>VOCs in Ambient Air by GC/MS</b>							
Naphthalene	%	92			70-130	Pass	
1.1-Dichloroethene	%	89			70-130	Pass	
1.1-Dichloropropene	%	98			75-125	Pass	
1.1.1-Trichloroethane	%	96			70-130	Pass	
1.2-Dibromo-3-chloropropane	%	91			75-125	Pass	
1.2-Dichloroethane	%	86			70-130	Pass	
Benzene	%	91			70-130	Pass	
Ethylbenzene	%	97			70-130	Pass	
Toluene	%	94			70-130	Pass	
Trichloroethene	%	89			70-130	Pass	
Xylenes - Total	%	95			70-130	Pass	
1.2-Dichlorobenzene	%	87			70-130	Pass	
1.2.3-Trichlorobenzene	%	89			70-130	Pass	
1.2.4-Trichlorobenzene	%	90			70-130	Pass	
1.4-Dichlorobenzene	%	96			70-130	Pass	

## Comments

### Sample Integrity

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

## Authorised By

Nibha Vaidya	Analytical Services Manager
Joseph Edouard	Senior Analyst-Organic (VIC)
Harry Bacalis	Senior Analyst-Volatile (VIC)
Alex Petridis	Senior Analyst-Organic (VIC)



**Glenn Jackson**

**National Operations Manager**

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

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

Measurement uncertainty of test data is available on request or please [click here](#).

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**Company Name:** JBS & G Australia (NSW & WA) P/L  
**Address:** Level 1, 50 Margaret St  
 Sydney  
 NSW 2000  
**Project Name:** WALSH BAY  
**Project ID:** 52304

**Order No.:**  
**Report #:** 531195  
**Phone:** 02 8245 0300  
**Fax:**

**Received:** Jan 20, 2017 5:05 PM  
**Due:** Jan 25, 2017  
**Priority:** 3 Day  
**Contact Name:** Rohan Hammond

**Eurofins | mgt Analytical Services Manager : Nibha Vaidya**

### Sample Detail

VOCs in Ambient Air by GC/MS

Melbourne Laboratory - NATA Site # 1254 & 14271						X
Sydney Laboratory - NATA Site # 18217						
Brisbane Laboratory - NATA Site # 20794						
Perth Laboratory - NATA Site # 18217						
Internal Laboratory						
Sample ID	Sample Date	Sampling Time	Matrix	LAB ID		
QV01_FRONT	Jan 20, 2017		Air	S17-Ja11438	X	
QV01_BACK	Jan 20, 2017		Air	S17-Ja11439	X	
JBH06_AIR_FRONT	Jan 20, 2017		Air	S17-Ja11440	X	
JBH06_AIR_BACK	Jan 20, 2017		Air	S17-Ja11441	X	
Total Counts						4



## Sample Receipt Advice

Company name: **JBS & G Australia (NSW & WA) P/L**

Contact name: **Rohan Hammond**

Project name: **WALSH BAY**

Project ID: **52304**

COC number: **Not provided**

Turn around time: **3 Day**

Date/Time received: **Jan 20, 2017 5:05 PM**

Eurofins | mgt reference: **531195**

### Sample information

- ☒ A detailed list of analytes logged into our LIMS, is included in the attached summary table.
- ☒ Sample Temperature of a random sample selected from the batch as recorded by Eurofins | mgt  
Sample Receipt : 28 degrees Celsius.
- ☒ All samples have been received as described on the above COC.
- ☒ COC has been completed correctly.
- ☒ Attempt to chill was evident.
- ☒ Appropriately preserved sample containers have been used.
- ☒ All samples were received in good condition.
- ☒ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
- ☒ Appropriate sample containers have been used.
- ☒ Some samples have been subcontracted.
- N/A Custody Seals intact (if used).

### Contact notes

If you have any questions with respect to these samples please contact:

Nibha Vaidya on Phone : +61 (2) 9900 8400 or by e.mail: NibhaVaidya@eurofins.com

Results will be delivered electronically via e.mail to Rohan Hammond - rhammond@jbsg.com.au.

010652

## CHAIN OF CUSTODY

[illegible]



12 Ashley Street, Chatswood, NSW 2067  
tel: +61 2 9910 6200

email: [sydney@envirolab.com.au](mailto:sydney@envirolab.com.au)  
[envirolab.com.au](http://envirolab.com.au)

Envirolab Services Pty Ltd - Sydney | ABN 37 112 535 645

## CERTIFICATE OF ANALYSIS

160571

### Client:

**JBS & G (NSW & WA) Pty Ltd**

Level 1, 50 Margaret St

Sydney

NSW 2000

**Attention:** R Hammond, S Dorairaj

### Sample log in details:

Your Reference:

**52304, Walsh Bay**

No. of samples:

1 soil

Date samples received / completed instructions received

20/01/17

/ 20/01/17

### Analysis Details:

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

***Please refer to the last page of this report for any comments relating to the results.***

### Report Details:

Date results requested by: / Issue Date:

25/01/17

/ 25/01/17

Date of Preliminary Report:

Not Issued

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Accredited for compliance with ISO/IEC 17025 - Testing

**Tests not covered by NATA are denoted with \*.**

### Results Approved By:

David Springer  
General Manager



Envirolab Reference: 160571

Revision No: R 00

Page 1 of 31

VOCs in soil		
Our Reference:	UNITS	160571-1
Your Reference	-----	QC20170119
	-	
Date Sampled	-----	19/01/2017
Type of sample		soil
Date extracted	-	23/01/2017
Date analysed	-	24/01/2017
Dichlorodifluoromethane	mg/kg	<1
Chloromethane	mg/kg	<1
Vinyl Chloride	mg/kg	<1
Bromomethane	mg/kg	<1
Chloroethane	mg/kg	<1
Trichlorofluoromethane	mg/kg	<1
1,1-Dichloroethene	mg/kg	<1
trans-1,2-dichloroethene	mg/kg	<1
1,1-dichloroethane	mg/kg	<1
cis-1,2-dichloroethene	mg/kg	<1
bromochloromethane	mg/kg	<1
chloroform	mg/kg	<1
2,2-dichloropropane	mg/kg	<1
1,2-dichloroethane	mg/kg	<1
1,1,1-trichloroethane	mg/kg	<1
1,1-dichloropropene	mg/kg	<1
Cyclohexane	mg/kg	<1
carbon tetrachloride	mg/kg	<1
Benzene	mg/kg	<0.2
dibromomethane	mg/kg	<1
1,2-dichloropropane	mg/kg	<1
trichloroethene	mg/kg	<1
bromodichloromethane	mg/kg	<1
trans-1,3-dichloropropene	mg/kg	<1
cis-1,3-dichloropropene	mg/kg	<1
1,1,2-trichloroethane	mg/kg	<1
Toluene	mg/kg	<0.5
1,3-dichloropropane	mg/kg	<1
dibromochloromethane	mg/kg	<1
1,2-dibromoethane	mg/kg	<1
tetrachloroethene	mg/kg	<1
1,1,1,2-tetrachloroethane	mg/kg	<1
chlorobenzene	mg/kg	<1
Ethylbenzene	mg/kg	<1
bromoform	mg/kg	<1
m+p-xylene	mg/kg	<2
styrene	mg/kg	<1
1,1,2,2-tetrachloroethane	mg/kg	<1
o-Xylene	mg/kg	<1

VOCs in soil Our Reference: Your Reference	UNITS ----- -	160571-1 QC20170119
Date Sampled Type of sample	-----	19/01/2017 soil
1,2,3-trichloropropane	mg/kg	<1
isopropylbenzene	mg/kg	<1
bromobenzene	mg/kg	<1
n-propyl benzene	mg/kg	<1
2-chlorotoluene	mg/kg	<1
4-chlorotoluene	mg/kg	<1
1,3,5-trimethyl benzene	mg/kg	<1
tert-butyl benzene	mg/kg	<1
1,2,4-trimethyl benzene	mg/kg	<1
1,3-dichlorobenzene	mg/kg	<1
sec-butyl benzene	mg/kg	<1
1,4-dichlorobenzene	mg/kg	<1
4-isopropyl toluene	mg/kg	<1
1,2-dichlorobenzene	mg/kg	<1
n-butyl benzene	mg/kg	<1
1,2-dibromo-3-chloropropane	mg/kg	<1
1,2,4-trichlorobenzene	mg/kg	<1
hexachlorobutadiene	mg/kg	<1
1,2,3-trichlorobenzene	mg/kg	<1
Surrogate Dibromofluorometha	%	97
Surrogate aaa-Trifluorotoluene	%	72
Surrogate Toluene-d8	%	99
Surrogate 4-Bromofluorobenzene	%	120

SVOCs in Soil		
Our Reference:	UNITS	160571-1
Your Reference	-----	QC20170119
	-	
Date Sampled	-----	19/01/2017
Type of sample		soil
Date extracted	-	23/01/2017
Date analysed	-	23/01/2017
Phenol	mg/kg	<0.5
Bis-(2-chloroethyl) ether	mg/kg	<1
2-Chlorophenol	mg/kg	<0.5
1,3-Dichlorobenzene	mg/kg	<0.5
1,4-Dichlorobenzene	mg/kg	<0.5
2-Methylphenol	mg/kg	<0.5
1,2-Dichlorobenzene	mg/kg	<0.5
Bis (2-chloroisopropyl) ether	mg/kg	<1
3/4-Methylphenol	mg/kg	<1
N-nitrosodi-n-propylamine	mg/kg	<1
Hexachloroethane	mg/kg	<0.5
Nitrobenzene	mg/kg	<1
Isophorone	mg/kg	<1
2,4-Dimethylphenol	mg/kg	<0.5
2-Nitrophenol	mg/kg	<0.5
Bis(2-chloroethoxy) methane	mg/kg	<1
2,4-Dichlorophenol	mg/kg	<0.5
1,2,4-Trichlorobenzene	mg/kg	<0.5
Naphthalene	mg/kg	<0.5
4-Chloroaniline	mg/kg	<1
Hexachlorobutadiene	mg/kg	<0.5
4-Chloro-3-methylphenol	mg/kg	<5
2-Methylnaphthalene	mg/kg	<0.5
Hexachlorocyclopentadiene	mg/kg	<2
2,4,6-trichlorophenol	mg/kg	<0.5
2,4,5-trichlorophenol	mg/kg	<0.5
2-Chloronaphthalene	mg/kg	<0.5
2-nitroaniline	mg/kg	<1
Dimethylphthalate	mg/kg	<1
2,6-Dinitrotoluene	mg/kg	<1
Acenaphthylene	mg/kg	<0.5
3-Nitroaniline	mg/kg	<1
Acenaphthene	mg/kg	<0.5
2,4-dinitrophenol	mg/kg	<10
4-nitrophenol	mg/kg	<10
Dibenzofuran	mg/kg	<1
diethylphthalate	mg/kg	<1
4-chlorophenylphenylether	mg/kg	<1
4-nitroaniline	mg/kg	<1
Fluorene	mg/kg	<0.5



SVOCs in Soil		
Our Reference:	UNITS	160571-1
Your Reference	-----	QC20170119
	-	
Date Sampled	-----	19/01/2017
Type of sample		soil
2-methyl-4,6-dinitrophenol	mg/kg	<10
azobenzene	mg/kg	<1
4-bromophenylphenylether	mg/kg	<1
hexachlorobenzene	mg/kg	<0.5
pentachlorophenol	mg/kg	<5
Phenanthrene	mg/kg	1
Anthracene	mg/kg	<0.5
carbazole	mg/kg	<1
di-n-butylphthalate	mg/kg	<1
Fluoranthene	mg/kg	5.0
Pyrene	mg/kg	5
butylbenzylphthalate	mg/kg	<1
bis(2-ethylhexyl)phthalate	mg/kg	<1
Benzo(a)anthracene	mg/kg	3
Chrysene	mg/kg	3
di-n-octylphthalate	mg/kg	<1
Benzo(b+j+k)fluoranthene	mg/kg	5
Benzo(a)pyrene	mg/kg	3
Indeno(1,2,3-c,d)pyrene	mg/kg	1
Dibenzo(a,h)anthracene	mg/kg	<0.5
Benzo(g,h,i)perylene	mg/kg	1
ethylmethanesulfonate	mg/kg	<1
aniline	mg/kg	<1
pentachloroethane	mg/kg	<0.5
benzyl alcohol	mg/kg	<1
acetophenone	mg/kg	<1
N-nitrosomorpholine	mg/kg	<1
N-nitrosopiperidine	mg/kg	<1
2,6-dichlorophenol	mg/kg	<0.5
hexachloropropene-1	mg/kg	<0.5
N-nitroso-n-butylamine	mg/kg	<1
safrole	mg/kg	<1
1,2,4,5-tetrachlorobenzene	mg/kg	<0.5
cis and trans iso-safrole	mg/kg	<1
1,3-dinitrobenzene	mg/kg	<1
pentachlorobenzene	mg/kg	<0.5
1-naphthylamine	mg/kg	<1
2,3,4,6-tetrachlorophenol	mg/kg	<0.5
2-naphthylamine	mg/kg	<1
5-nitro-o-toluidine	mg/kg	<1
diphenylamine	mg/kg	<1
phenacetin	mg/kg	<1

SVOCs in Soil	UNITS	160571-1
Our Reference:	-----	QC20170119
Your Reference	-	
Date Sampled	-----	19/01/2017
Type of sample		soil
pentachloronitrobenzene	mg/kg	<1
dinoseb	mg/kg	<1
methapyrilene	mg/kg	<1
p-dimethylaminoazobenzene	mg/kg	<1
2-acetylaminofluorene	mg/kg	<0.5
7,12-dimethylbenz(a)anthracene	mg/kg	<0.5
3-methylcholanthrene	mg/kg	<0.5
a-BHC	mg/kg	<0.5
b-BHC	mg/kg	<0.5
g-BHC	mg/kg	<0.5
d-BHC	mg/kg	<0.5
Heptachlor	mg/kg	<0.5
Aldrin	mg/kg	<0.5
Heptachlor Epoxide	mg/kg	<0.5
g-Chlordane	mg/kg	<0.5
a-Chlordane	mg/kg	<0.5
Endosulfan I	mg/kg	<0.5
p,p'-DDE	mg/kg	<0.5
Dieldrin	mg/kg	<0.5
Endrin	mg/kg	<0.5
p,p'-DDD	mg/kg	<0.5
Endosulfan II	mg/kg	<0.5
Endrin Aldehyde	mg/kg	<0.5
p,p'-DDT	mg/kg	<0.5
Endrin Ketone	mg/kg	<0.5
Endosulfan Sulphate	mg/kg	<0.5
Methoxychlor	mg/kg	<1
Surrogate 2-fluorophenol	%	75
Surrogate Phenol-d <sub>6</sub>	%	50
Surrogate Nitrobenzene-d <sub>5</sub>	%	65
Surrogate 2-fluorobiphenyl	%	101
Surrogate 2,4,6-Tribromophenol	%	83
Surrogate p-Terphenyl-d <sub>14</sub>	%	94

vTRH(C6-C10)/BTEXN in Soil		
Our Reference:	UNITS	160571-1
Your Reference	-----	QC20170119
	-	
Date Sampled	-----	19/01/2017
Type of sample		soil
Date extracted	-	23/01/2017
Date analysed	-	24/01/2017
TRHC <sub>6</sub> - C <sub>9</sub>	mg/kg	<25
TRHC <sub>6</sub> - C <sub>10</sub>	mg/kg	<25
vTPHC <sub>6</sub> - C <sub>10</sub> less BTEX (F1)	mg/kg	<25
Benzene	mg/kg	<0.2
Toluene	mg/kg	<0.5
Ethylbenzene	mg/kg	<1
m+p-xylene	mg/kg	<2
o-Xylene	mg/kg	<1
Total +ve Xylenes	mg/kg	<1
naphthalene	mg/kg	<1
Surrogate aaa-Trifluorotoluene	%	72

svTRH (C10-C40) in Soil		
Our Reference:	UNITS	160571-1
Your Reference	-----	QC20170119
	-	
Date Sampled	-----	19/01/2017
Type of sample		soil
Date extracted	-	23/01/2017
Date analysed	-	24/01/2017
TRHC <sub>10</sub> - C <sub>14</sub>	mg/kg	<50
TRHC <sub>15</sub> - C <sub>28</sub>	mg/kg	<100
TRHC <sub>29</sub> - C <sub>36</sub>	mg/kg	<100
TRH>C <sub>10</sub> -C <sub>16</sub>	mg/kg	<50
TRH>C <sub>10</sub> - C <sub>16</sub> less Naphthalene (F2)	mg/kg	<50
TRH>C <sub>16</sub> -C <sub>34</sub>	mg/kg	150
TRH>C <sub>34</sub> -C <sub>40</sub>	mg/kg	<100
Total +ve TRH (>C10-C40)	mg/kg	150
Surrogate o-Terphenyl	%	93

PAHs in Soil		
Our Reference:	UNITS	160571-1
Your Reference	-----	QC20170119
	-	
Date Sampled	-----	19/01/2017
Type of sample		soil
Date extracted	-	23/01/2017
Date analysed	-	23/01/2017
Naphthalene	mg/kg	<0.1
Acenaphthylene	mg/kg	0.7
Acenaphthene	mg/kg	<0.1
Fluorene	mg/kg	0.1
Phenanthrene	mg/kg	1.8
Anthracene	mg/kg	0.9
Fluoranthene	mg/kg	5.7
Pyrene	mg/kg	5.4
Benzo(a)anthracene	mg/kg	3.1
Chrysene	mg/kg	3.7
Benzo(b,j+k)fluoranthene	mg/kg	3.5
Benzo(a)pyrene	mg/kg	3.0
Indeno(1,2,3-c,d)pyrene	mg/kg	1.9
Dibenzo(a,h)anthracene	mg/kg	0.7
Benzo(g,h,i)perylene	mg/kg	2.3
Benzo(a)pyrene TEQ calc (zero)	mg/kg	4.6
Benzo(a)pyrene TEQ calc(half)	mg/kg	4.6
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	4.6
Total +ve PAH's	mg/kg	33
Surrogate <i>p</i> -Terphenyl-d14	%	98

Organochlorine Pesticides in soil		
Our Reference:	UNITS	160571-1
Your Reference	-----	QC20170119
	-	
Date Sampled	-----	19/01/2017
Type of sample		soil
Date extracted	-	23/01/2017
Date analysed	-	23/01/2017
HCB	mg/kg	<0.1
alpha-BHC	mg/kg	<0.1
gamma-BHC	mg/kg	<0.1
beta-BHC	mg/kg	<0.1
Heptachlor	mg/kg	<0.1
delta-BHC	mg/kg	<0.1
Aldrin	mg/kg	<0.1
Heptachlor Epoxide	mg/kg	<0.1
gamma-Chlordane	mg/kg	<0.1
alpha-chlordane	mg/kg	<0.1
Endosulfan I	mg/kg	<0.1
pp-DDE	mg/kg	<0.1
Dieldrin	mg/kg	<0.1
Endrin	mg/kg	<0.1
pp-DDD	mg/kg	<0.1
Endosulfan II	mg/kg	<0.1
pp-DDT	mg/kg	<0.1
Endrin Aldehyde	mg/kg	<0.1
Endosulfan Sulphate	mg/kg	<0.1
Methoxychlor	mg/kg	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1
Surrogate TCMX	%	113



Organophosphorus Pesticides		
Our Reference:	UNITS	160571-1
Your Reference	-----	QC20170119
	-	
Date Sampled	-----	19/01/2017
Type of sample		soil
Date extracted	-	23/01/2017
Date analysed	-	23/01/2017
Azinphos-methyl (Guthion)	mg/kg	<0.1
Bromophos-ethyl	mg/kg	<0.1
Chlorpyriphos	mg/kg	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1
Diazinon	mg/kg	<0.1
Dichlorvos	mg/kg	<0.1
Dimethoate	mg/kg	<0.1
Ethion	mg/kg	<0.1
Fenitrothion	mg/kg	<0.1
Malathion	mg/kg	<0.1
Parathion	mg/kg	<0.1
Ronnel	mg/kg	<0.1
Surrogate TCMX	%	113

PCBs in Soil		
Our Reference:	UNITS	160571-1
Your Reference	-----	QC20170119
	-	
Date Sampled	-----	19/01/2017
Type of sample		soil
Date extracted	-	23/01/2017
Date analysed	-	23/01/2017
Aroclor 1016	mg/kg	<0.1
Aroclor 1221	mg/kg	<0.1
Aroclor 1232	mg/kg	<0.1
Aroclor 1242	mg/kg	<0.1
Aroclor 1248	mg/kg	<0.1
Aroclor 1254	mg/kg	<0.1
Aroclor 1260	mg/kg	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1
Surrogate TCLMX	%	113

Acid Extractable metals in soil		
Our Reference:	UNITS	160571-1
Your Reference	-----	QC20170119
	-	
Date Sampled	-----	19/01/2017
Type of sample		soil
Date prepared	-	23/01/2017
Date analysed	-	24/01/2017
Arsenic	mg/kg	<4
Cadmium	mg/kg	<0.4
Chromium	mg/kg	5
Copper	mg/kg	45
Lead	mg/kg	65
Mercury	mg/kg	<0.1
Nickel	mg/kg	5
Zinc	mg/kg	57

Moisture		
Our Reference:	UNITS	160571-1
Your Reference	-----	QC20170119
	-	
Date Sampled	-----	19/01/2017
Type of sample		soil
Date prepared	-	23/01/2017
Date analysed	-	24/01/2017
Moisture	%	19

Asbestos ID - soils		
Our Reference:	UNITS	160571-1
Your Reference	-----	QC20170119
	-	
Date Sampled	-----	19/01/2017
Type of sample		soil
Date analysed	-	24/01/2017
Sample mass tested	g	Approx.75g
Sample Description	-	Beige coarse-grained soil & rocks
Asbestos ID in soil	-	No asbestos detected at reporting limit of 0.1g/kg
		Organic fibres detected
Trace Analysis	-	No asbestos detected

MethodID	Methodology Summary
Org-014	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.
Org-012	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS.
Org-016	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.
Org-016	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater. Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and is therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.
Org-003	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.
Org-003	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID.  F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.  Note, the Total +ve TRH PQL is reflective of the lowest individual PQL and is therefore "Total +ve TRH" is simply a sum of the positive individual TRH fractions (>C10-C40).
Org-012	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013. For soil results:- 1. 'TEQ PQL' values are assuming all contributing PAHs reported as <PQL are actually at the PQL. This is the most conservative approach and can give false positive TEQs given that PAHs that contribute to the TEQ calculation may not be present. 2. 'TEQ zero' values are assuming all contributing PAHs reported as <PQL are zero. This is the least conservative approach and is more susceptible to false negative TEQs when PAHs that contribute to the TEQ calculation are present but below PQL. 3. 'TEQ half PQL' values are assuming all contributing PAHs reported as <PQL are half the stipulated PQL. Hence a mid-point between the most and least conservative approaches above. Note, the Total +ve PAHs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PAHs" is simply a sum of the positive individual PAHs.
Org-005	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC with dual ECD's.
Org-005	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC with dual ECD's. Note, the Total +ve reported DDD+DDE+DDT PQL is reflective of the lowest individual PQL and is therefore simply a sum of the positive individually report DDD+DDE+DDT.
Org-008	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC with dual ECD's.
Org-006	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD.
Org-006	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD.



MethodID	Methodology Summary
	Note, the Total +ve PCBs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PCBs" is simply a sum of the positive individual PCBs.
Metals-020	Determination of various metals by ICP-AES.
Metals-021	Determination of Mercury by Cold Vapour AAS.
Inorg-008	Moisture content determined by heating at 105+/-5 °C for a minimum of 12 hours.
ASB-001	Asbestos ID - Qualitative identification of asbestos in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques including Synthetic Mineral Fibre and Organic Fibre as per Australian Standard 4964-2004.

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
VOCs in soil						Base II Duplicate II %RPD		
Date extracted	-			23/01/2017	[NT]	[NT]	LCS-3	23/01/2017
Date analysed	-			24/01/2017	[NT]	[NT]	LCS-3	24/01/2017
Dichlorodifluoromethane	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
Chloromethane	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
Vinyl Chloride	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
Bromomethane	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
Chloroethane	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
Trichlorofluoromethane	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
1,1-Dichloroethene	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
trans-1,2-dichloroethene	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
1,1-dichloroethane	mg/kg	1	Org-014	<1	[NT]	[NT]	LCS-3	91%
cis-1,2-dichloroethene	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
bromochloromethane	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
chloroform	mg/kg	1	Org-014	<1	[NT]	[NT]	LCS-3	92%
2,2-dichloropropane	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
1,2-dichloroethane	mg/kg	1	Org-014	<1	[NT]	[NT]	LCS-3	87%
1,1,1-trichloroethane	mg/kg	1	Org-014	<1	[NT]	[NT]	LCS-3	79%
1,1-dichloropropene	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
Cyclohexane	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
carbon tetrachloride	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
Benzene	mg/kg	0.2	Org-014	<0.2	[NT]	[NT]	[NR]	[NR]
dibromomethane	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
1,2-dichloropropane	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
trichloroethene	mg/kg	1	Org-014	<1	[NT]	[NT]	LCS-3	86%
bromodichloromethane	mg/kg	1	Org-014	<1	[NT]	[NT]	LCS-3	89%
trans-1,3-dichloropropene	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
cis-1,3-dichloropropene	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
1,1,2-trichloroethane	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
Toluene	mg/kg	0.5	Org-014	<0.5	[NT]	[NT]	[NR]	[NR]
1,3-dichloropropane	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
dibromochloromethane	mg/kg	1	Org-014	<1	[NT]	[NT]	LCS-3	93%
1,2-dibromoethane	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
tetrachloroethene	mg/kg	1	Org-014	<1	[NT]	[NT]	LCS-3	90%
1,1,1,2-tetrachloroethane	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
chlorobenzene	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
Ethylbenzene	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
bromoform	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
m+p-xylene	mg/kg	2	Org-014	<2	[NT]	[NT]	[NR]	[NR]
styrene	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
1,1,2,2-tetrachloroethane	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
o-Xylene	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
1,2,3-trichloropropane	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]

QUALITYCONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
VOCs in soil						Base II Duplicate II %RPD		
isopropylbenzene	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
bromobenzene	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
n-propyl benzene	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
2-chlorotoluene	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
4-chlorotoluene	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
1,3,5-trimethyl benzene	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
tert-butyl benzene	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
1,2,4-trimethyl benzene	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
1,3-dichlorobenzene	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
sec-butyl benzene	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
1,4-dichlorobenzene	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
4-isopropyl toluene	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
1,2-dichlorobenzene	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
n-butyl benzene	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
1,2-dibromo-3-chloropropane	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
1,2,4-trichlorobenzene	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
hexachlorobutadiene	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
1,2,3-trichlorobenzene	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
Surrogate Dibromofluorometha	%		Org-014	93	[NT]	[NT]	LCS-3	111%
Surrogate aaa-Trifluorotoluene	%		Org-014	73	[NT]	[NT]	LCS-3	90%
Surrogate Toluene-d8	%		Org-014	100	[NT]	[NT]	LCS-3	117%
Surrogate 4-Bromofluorobenzene	%		Org-014	121	[NT]	[NT]	LCS-3	115%

**Client Reference: 52304, Walsh Bay**

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
SVOCs in Soil						Base    Duplicate    %RPD		
Date extracted	-			23/01/2017	160571-1	23/01/2017    23/01/2017	LCS-3	23/01/2017
Date analysed	-			23/01/2017	160571-1	23/01/2017    23/01/2017	LCS-3	23/01/2017
Phenol	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	LCS-3	40%
Bis-(2-chloroethyl) ether	mg/kg	1	Org-012	<1	160571-1	<1    <1	[NR]	[NR]
2-Chlorophenol	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	LCS-3	78%
1,3-Dichlorobenzene	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	[NR]	[NR]
1,4-Dichlorobenzene	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	LCS-3	70%
2-Methylphenol	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	[NR]	[NR]
1,2-Dichlorobenzene	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	[NR]	[NR]
Bis (2-chloroisopropyl) ether	mg/kg	1	Org-012	<1	160571-1	<1    <1	[NR]	[NR]
3/4-Methylphenol	mg/kg	1	Org-012	<1	160571-1	<1    <1	[NR]	[NR]
N-nitrosodi-n-propylamine	mg/kg	1	Org-012	<1	160571-1	<1    <1	[NR]	[NR]
Hexachloroethane	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	[NR]	[NR]
Nitrobenzene	mg/kg	1	Org-012	<1	160571-1	<1    <1	[NR]	[NR]
Isophorone	mg/kg	1	Org-012	<1	160571-1	<1    <1	[NR]	[NR]
2,4-Dimethylphenol	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	[NR]	[NR]
2-Nitrophenol	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	[NR]	[NR]
Bis(2-chloroethoxy ) methane	mg/kg	1	Org-012	<1	160571-1	<1    <1	[NR]	[NR]
2,4-Dichlorophenol	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	[NR]	[NR]
1,2,4-Trichlorobenzene	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	[NR]	[NR]
Naphthalene	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	[NR]	[NR]
4-Chloroaniline	mg/kg	1	Org-012	<1	160571-1	<1    <1	[NR]	[NR]
Hexachlorobutadiene	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	[NR]	[NR]
4-Chloro-3-methylphenol	mg/kg	5	Org-012	<5	160571-1	<5    <5	[NR]	[NR]
2-Methylnaphthalene	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	[NR]	[NR]
Hexachlorocyclopentadiene	mg/kg	2	Org-012	<2	160571-1	<2    <2	[NR]	[NR]
2,4,6-trichlorophenol	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	[NR]	[NR]
2,4,5-trichlorophenol	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	[NR]	[NR]
2-Chloronaphthalene	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	[NR]	[NR]
2-nitroaniline	mg/kg	1	Org-012	<1	160571-1	<1    <1	[NR]	[NR]
Dimethylphthalate	mg/kg	1	Org-012	<1	160571-1	<1    <1	LCS-3	74%
2,6-Dinitrotoluene	mg/kg	1	Org-012	<1	160571-1	<1    <1	[NR]	[NR]
Acenaphthylene	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	[NR]	[NR]
3-Nitroaniline	mg/kg	1	Org-012	<1	160571-1	<1    <1	[NR]	[NR]
Acenaphthene	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	LCS-3	78%
2,4-dinitrophenol	mg/kg	10	Org-012	<10	160571-1	<10    <10	[NR]	[NR]
4-nitrophenol	mg/kg	10	Org-012	<10	160571-1	<10    <10	LCS-3	83%
Dibenzofuran	mg/kg	1	Org-012	<1	160571-1	<1    <1	[NR]	[NR]
diethylphthalate	mg/kg	1	Org-012	<1	160571-1	<1    <1	LCS-3	73%
4-chlorophenylphenylether	mg/kg	1	Org-012	<1	160571-1	<1    <1	[NR]	[NR]

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QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
SVOCs in Soil						Base    Duplicate    %RPD		
4-nitroaniline	mg/kg	1	Org-012	<1	160571-1	<1    <1	[NR]	[NR]
Fluorene	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	[NR]	[NR]
2-methyl-4,6-dinitrophenol	mg/kg	10	Org-012	<10	160571-1	<10    <10	[NR]	[NR]
azobenzene	mg/kg	1	Org-012	<1	160571-1	<1    <1	[NR]	[NR]
4-bromophenylphenylether	mg/kg	1	Org-012	<1	160571-1	<1    <1	[NR]	[NR]
hexachlorobenzene	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	[NR]	[NR]
pentachlorophenol	mg/kg	5	Org-012	<5	160571-1	<5    <5	[NR]	[NR]
Phenanthrene	mg/kg	0.5	Org-012	<0.5	160571-1	1    1    RPD: 0	[NR]	[NR]
Anthracene	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    0.7	[NR]	[NR]
carbazole	mg/kg	1	Org-012	<1	160571-1	<1    <1	[NR]	[NR]
di-n-butylphthalate	mg/kg	1	Org-012	<1	160571-1	<1    <1	[NR]	[NR]
Fluoranthene	mg/kg	0.5	Org-012	<0.5	160571-1	5.0    8.6    RPD: 53	[NR]	[NR]
Pyrene	mg/kg	0.5	Org-012	<0.5	160571-1	5    8.8    RPD: 55	LCS-3	79%
butylbenzylphthalate	mg/kg	1	Org-012	<1	160571-1	<1    <1	[NR]	[NR]
bis(2-ethylhexyl) phthalate	mg/kg	1	Org-012	<1	160571-1	<1    <1	[NR]	[NR]
Benzo(a)anthracene	mg/kg	0.5	Org-012	<0.5	160571-1	3    6.2    RPD: 70	[NR]	[NR]
Chrysene	mg/kg	0.5	Org-012	<0.5	160571-1	3    5.7    RPD: 62	[NR]	[NR]
di-n-octylphthalate	mg/kg	1	Org-012	<1	160571-1	<1    <1	[NR]	[NR]
Benzo(b+j+k) fluoranthene	mg/kg	1	Org-012	<1	160571-1	5    9    RPD: 57	[NR]	[NR]
Benzo(a)pyrene	mg/kg	0.5	Org-012	<0.5	160571-1	3    5    RPD: 50	[NR]	[NR]
Indeno(1,2,3-c,d)pyrene	mg/kg	0.5	Org-012	<0.5	160571-1	1    2    RPD: 67	[NR]	[NR]
Dibenzo(a,h)anthracene	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    0.6	[NR]	[NR]
Benzo(g,h,i)perylene	mg/kg	0.5	Org-012	<0.5	160571-1	1    2    RPD: 67	[NR]	[NR]
ethylmethanesulfonate	mg/kg	1	Org-012	<1	160571-1	<1    <1	[NR]	[NR]
aniline	mg/kg	1	Org-012	<1	160571-1	<1    <1	[NR]	[NR]
pentachloroethane	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	[NR]	[NR]
benzyl alcohol	mg/kg	1	Org-012	<1	160571-1	<1    <1	[NR]	[NR]
acetophenone	mg/kg	1	Org-012	<1	160571-1	<1    <1	[NR]	[NR]
N-nitrosomorpholine	mg/kg	1	Org-012	<1	160571-1	<1    <1	[NR]	[NR]
N-nitrosopiperidine	mg/kg	1	Org-012	<1	160571-1	<1    <1	[NR]	[NR]
2,6-dichlorophenol	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	[NR]	[NR]
hexachloropropene-1	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	[NR]	[NR]
N-nitroso-n-butylamine	mg/kg	1	Org-012	<1	160571-1	<1    <1	[NR]	[NR]
safrrole	mg/kg	1	Org-012	<1	160571-1	<1    <1	[NR]	[NR]
1,2,4,5-tetrachlorobenzene	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	[NR]	[NR]
cis and trans iso-safrrole	mg/kg	1	Org-012	<1	160571-1	<1    <1	[NR]	[NR]
1,3-dinitrobenzene	mg/kg	1	Org-012	<1	160571-1	<1    <1	[NR]	[NR]
pentachlorobenzene	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	[NR]	[NR]
1-naphthylamine	mg/kg	1	Org-012	<1	160571-1	<1    <1	[NR]	[NR]
2,3,4,6-tetrachlorophenol	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	[NR]	[NR]
2-naphthylamine	mg/kg	1	Org-012	<1	160571-1	<1    <1	[NR]	[NR]
5-nitro-o-toluidine	mg/kg	1	Org-012	<1	160571-1	<1    <1	[NR]	[NR]

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QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
SVOCs in Soil						Base    Duplicate    %RPD		
diphenylamine	mg/kg	1	Org-012	<1	160571-1	<1    <1	[NR]	[NR]
phenacetin	mg/kg	1	Org-012	<1	160571-1	<1    <1	[NR]	[NR]
pentachloronitrobenzene	mg/kg	1	Org-012	<1	160571-1	<1    <1	[NR]	[NR]
dinoseb	mg/kg	1	Org-012	<1	160571-1	<1    <1	[NR]	[NR]
methapyriline	mg/kg	1	Org-012	<1	160571-1	<1    <1	[NR]	[NR]
p-dimethylaminoazobenzen e	mg/kg	1	Org-012	<1	160571-1	<1    <1	[NR]	[NR]
2-acetylaminofluorene	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	[NR]	[NR]
7,12-dimethylbenz(a) anthracene	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	[NR]	[NR]
3-methylcholanthrene	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	[NR]	[NR]
a-BHC	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	[NR]	[NR]
b-BHC	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	[NR]	[NR]
g-BHC	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	[NR]	[NR]
d-BHC	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	[NR]	[NR]
Heptachlor	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	[NR]	[NR]
Aldrin	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	LCS-3	86%
Heptachlor Epoxide	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	[NR]	[NR]
g-Chlordane	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	[NR]	[NR]
a-Chlordane	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	[NR]	[NR]
Endosulfan I	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	[NR]	[NR]
p,p'-DDE	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	[NR]	[NR]
Dieldrin	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	LCS-3	89%
Endrin	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	[NR]	[NR]
p,p'-DDD	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	[NR]	[NR]
Endosulfan II	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	[NR]	[NR]
Endrin Aldehyde	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	[NR]	[NR]
p,p'-DDT	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	[NR]	[NR]
Endrin Ketone	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	[NR]	[NR]
Endosulfan Sulphate	mg/kg	0.5	Org-012	<0.5	160571-1	<0.5    <0.5	[NR]	[NR]
Methoxychlor	mg/kg	1	Org-012	<1	160571-1	<1    <1	[NR]	[NR]
Surrogate 2-fluorophenol	%		Org-012	76	160571-1	75    80    RPD: 6	LCS-3	81%
Surrogate Phenol-d <sub>6</sub>	%		Org-012	53	160571-1	50    53    RPD: 6	LCS-3	62%
Surrogate Nitrobenzene-d <sub>5</sub>	%		Org-012	86	160571-1	65    60    RPD: 8	LCS-3	89%
Surrogate 2-fluorobiphenyl	%		Org-012	87	160571-1	101    113    RPD: 11	LCS-3	90%
Surrogate 2,4,6-Tribromophenol	%		Org-012	59	160571-1	83    92    RPD: 10	LCS-3	57%
Surrogate p-Terphenyl-d <sub>14</sub>	%		Org-012	95	160571-1	94    95    RPD: 1	LCS-3	93%



QUALITYCONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
vTRH(C6-C10)/BTEXN in Soil						Base II Duplicate II %RPD		
Date extracted	-			23/01/2017	[NT]	[NT]	LCS-3	23/01/2017
Date analysed	-			24/01/2017	[NT]	[NT]	LCS-3	24/01/2017
TRHC <sub>6</sub> - C <sub>9</sub>	mg/kg	25	Org-016	<25	[NT]	[NT]	LCS-3	93%
TRHC <sub>6</sub> - C <sub>10</sub>	mg/kg	25	Org-016	<25	[NT]	[NT]	LCS-3	93%
Benzene	mg/kg	0.2	Org-016	<0.2	[NT]	[NT]	LCS-3	95%
Toluene	mg/kg	0.5	Org-016	<0.5	[NT]	[NT]	LCS-3	95%
Ethylbenzene	mg/kg	1	Org-016	<1	[NT]	[NT]	LCS-3	88%
m+p-xylene	mg/kg	2	Org-016	<2	[NT]	[NT]	LCS-3	93%
o-Xylene	mg/kg	1	Org-016	<1	[NT]	[NT]	LCS-3	92%
naphthalene	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
Surrogate aaa-Trifluorotoluene	%		Org-016	73	[NT]	[NT]	LCS-3	90%
QUALITYCONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
svTRH (C10-C40) in Soil						Base II Duplicate II %RPD		
Date extracted	-			23/01/2017	[NT]	[NT]	LCS-3	23/01/2017
Date analysed	-			23/01/2017	[NT]	[NT]	LCS-3	23/01/2017
TRHC <sub>10</sub> - C <sub>14</sub>	mg/kg	50	Org-003	<50	[NT]	[NT]	LCS-3	113%
TRHC <sub>15</sub> - C <sub>28</sub>	mg/kg	100	Org-003	<100	[NT]	[NT]	LCS-3	117%
TRHC <sub>28</sub> - C <sub>36</sub>	mg/kg	100	Org-003	<100	[NT]	[NT]	LCS-3	106%
TRH>C <sub>10</sub> -C <sub>16</sub>	mg/kg	50	Org-003	<50	[NT]	[NT]	LCS-3	113%
TRH>C <sub>16</sub> -C <sub>34</sub>	mg/kg	100	Org-003	<100	[NT]	[NT]	LCS-3	117%
TRH>C <sub>34</sub> -C <sub>40</sub>	mg/kg	100	Org-003	<100	[NT]	[NT]	LCS-3	106%
Surrogate o-Terphenyl	%		Org-003	96	[NT]	[NT]	LCS-3	101%
QUALITYCONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PAHs in Soil						Base II Duplicate II %RPD		
Date extracted	-			23/01/2017	[NT]	[NT]	LCS-3	23/01/2017
Date analysed	-			23/01/2017	[NT]	[NT]	LCS-3	23/01/2017
Naphthalene	mg/kg	0.1	Org-012	<0.1	[NT]	[NT]	LCS-3	98%
Acenaphthylene	mg/kg	0.1	Org-012	<0.1	[NT]	[NT]	[NR]	[NR]
Acenaphthene	mg/kg	0.1	Org-012	<0.1	[NT]	[NT]	[NR]	[NR]
Fluorene	mg/kg	0.1	Org-012	<0.1	[NT]	[NT]	LCS-3	99%
Phenanthrene	mg/kg	0.1	Org-012	<0.1	[NT]	[NT]	LCS-3	107%
Anthracene	mg/kg	0.1	Org-012	<0.1	[NT]	[NT]	[NR]	[NR]
Fluoranthene	mg/kg	0.1	Org-012	<0.1	[NT]	[NT]	LCS-3	97%
Pyrene	mg/kg	0.1	Org-012	<0.1	[NT]	[NT]	LCS-3	97%
Benzo(a)anthracene	mg/kg	0.1	Org-012	<0.1	[NT]	[NT]	[NR]	[NR]
Chrysene	mg/kg	0.1	Org-012	<0.1	[NT]	[NT]	LCS-3	102%
Benzo(b,j,k)fluoranthene	mg/kg	0.2	Org-012	<0.2	[NT]	[NT]	[NR]	[NR]

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QUALITYCONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PAHs in Soil						Base II Duplicate II %RPD		
Benzo(a)pyrene	mg/kg	0.05	Org-012	<0.05	[NT]	[NT]	LCS-3	87%
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-012	<0.1	[NT]	[NT]	[NR]	[NR]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-012	<0.1	[NT]	[NT]	[NR]	[NR]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-012	<0.1	[NT]	[NT]	[NR]	[NR]
Surrogate p-Terphenyl-d14	%		Org-012	86	[NT]	[NT]	LCS-3	124%
QUALITYCONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Organochlorine Pesticides in soil						Base II Duplicate II %RPD		
Date extracted	-			23/01/2017	[NT]	[NT]	LCS-3	23/01/2017
Date analysed	-			23/01/2017	[NT]	[NT]	LCS-3	23/01/2017
HCB	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NR]	[NR]
alpha-BHC	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	LCS-3	102%
gamma-BHC	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NR]	[NR]
beta-BHC	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	LCS-3	110%
Heptachlor	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	LCS-3	107%
delta-BHC	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NR]	[NR]
Aldrin	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	LCS-3	102%
Heptachlor Epoxide	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	LCS-3	107%
gamma-Chlordane	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NR]	[NR]
alpha-chlordane	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NR]	[NR]
Endosulfan I	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NR]	[NR]
pp-DDE	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	LCS-3	110%
Dieldrin	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	LCS-3	114%
Endrin	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	LCS-3	110%
pp-DDD	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	LCS-3	100%
Endosulfan II	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NR]	[NR]
pp-DDT	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NR]	[NR]
Endrin Aldehyde	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NR]	[NR]
Endosulfan Sulphate	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	LCS-3	107%
Methoxychlor	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NR]	[NR]
Surrogate TCMX	%		Org-005	110	[NT]	[NT]	LCS-3	126%

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QUALITYCONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Organophosphorus Pesticides						Base II Duplicate II %RPD		
Date extracted	-			23/01/2017	[NT]	[NT]	LCS-3	23/01/2017
Date analysed	-			23/01/2017	[NT]	[NT]	LCS-3	23/01/2017
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-008	<0.1	[NT]	[NT]	[NR]	[NR]
Bromophos-ethyl	mg/kg	0.1	Org-008	<0.1	[NT]	[NT]	[NR]	[NR]
Chlorpyrifos	mg/kg	0.1	Org-008	<0.1	[NT]	[NT]	LCS-3	103%
Chlorpyrifos-methyl	mg/kg	0.1	Org-008	<0.1	[NT]	[NT]	[NR]	[NR]
Diazinon	mg/kg	0.1	Org-008	<0.1	[NT]	[NT]	[NR]	[NR]
Dichlorvos	mg/kg	0.1	Org-008	<0.1	[NT]	[NT]	LCS-3	76%
Dimethoate	mg/kg	0.1	Org-008	<0.1	[NT]	[NT]	[NR]	[NR]
Ethion	mg/kg	0.1	Org-008	<0.1	[NT]	[NT]	LCS-3	89%
Fenitrothion	mg/kg	0.1	Org-008	<0.1	[NT]	[NT]	LCS-3	98%
Malathion	mg/kg	0.1	Org-008	<0.1	[NT]	[NT]	LCS-3	104%
Parathion	mg/kg	0.1	Org-008	<0.1	[NT]	[NT]	LCS-3	108%
Ronnel	mg/kg	0.1	Org-008	<0.1	[NT]	[NT]	LCS-3	122%
Surrogate TCMX	%		Org-008	110	[NT]	[NT]	LCS-3	106%
QUALITYCONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PCBs in Soil						Base II Duplicate II %RPD		
Date extracted	-			23/01/2017	[NT]	[NT]	LCS-3	23/01/2017
Date analysed	-			23/01/2017	[NT]	[NT]	LCS-3	23/01/2017
Aroclor 1016	mg/kg	0.1	Org-006	<0.1	[NT]	[NT]	[NR]	[NR]
Aroclor 1221	mg/kg	0.1	Org-006	<0.1	[NT]	[NT]	[NR]	[NR]
Aroclor 1232	mg/kg	0.1	Org-006	<0.1	[NT]	[NT]	[NR]	[NR]
Aroclor 1242	mg/kg	0.1	Org-006	<0.1	[NT]	[NT]	[NR]	[NR]
Aroclor 1248	mg/kg	0.1	Org-006	<0.1	[NT]	[NT]	[NR]	[NR]
Aroclor 1254	mg/kg	0.1	Org-006	<0.1	[NT]	[NT]	LCS-3	123%
Aroclor 1260	mg/kg	0.1	Org-006	<0.1	[NT]	[NT]	[NR]	[NR]
Surrogate TCLMX	%		Org-006	110	[NT]	[NT]	LCS-3	106%

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QUALITYCONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Acid Extractable metals in soil						Base II Duplicate II %RPD		
Date prepared	-			23/01/2017	[NT]	[NT]	LCS-3	23/01/2017
Date analysed	-			24/01/2017	[NT]	[NT]	LCS-3	24/01/2017
Arsenic	mg/kg	4	Metals-020	<4	[NT]	[NT]	LCS-3	91%
Cadmium	mg/kg	0.4	Metals-020	<0.4	[NT]	[NT]	LCS-3	88%
Chromium	mg/kg	1	Metals-020	<1	[NT]	[NT]	LCS-3	95%
Copper	mg/kg	1	Metals-020	<1	[NT]	[NT]	LCS-3	96%
Lead	mg/kg	1	Metals-020	<1	[NT]	[NT]	LCS-3	88%
Mercury	mg/kg	0.1	Metals-021	<0.1	[NT]	[NT]	LCS-3	99%
Nickel	mg/kg	1	Metals-020	<1	[NT]	[NT]	LCS-3	92%
Zinc	mg/kg	1	Metals-020	<1	[NT]	[NT]	LCS-3	88%
QUALITYCONTROL SVOCs in Soil	UNITS	Dup. Sm#		Duplicate Base + Duplicate + %RPD		Spike Sm#	Spike % Recovery	
Date extracted	-	[NT]		[NT]		160571-1	23/01/2017	
Date analysed	-	[NT]		[NT]		160571-1	23/01/2017	
Phenol	mg/kg	[NT]		[NT]		160571-1	45%	
Bis-(2-chloroethyl) ether	mg/kg	[NT]		[NT]		[NR]	[NR]	
2-Chlorophenol	mg/kg	[NT]		[NT]		160571-1	26%	
1,3-Dichlorobenzene	mg/kg	[NT]		[NT]		[NR]	[NR]	
1,4-Dichlorobenzene	mg/kg	[NT]		[NT]		160571-1	81%	
2-Methylphenol	mg/kg	[NT]		[NT]		[NR]	[NR]	
1,2-Dichlorobenzene	mg/kg	[NT]		[NT]		[NR]	[NR]	
Bis (2-chloroisopropyl) ether	mg/kg	[NT]		[NT]		[NR]	[NR]	
3/4-Methylphenol	mg/kg	[NT]		[NT]		[NR]	[NR]	
N-nitrosodi-n-propylamine	mg/kg	[NT]		[NT]		[NR]	[NR]	
Hexachloroethane	mg/kg	[NT]		[NT]		[NR]	[NR]	
Nitrobenzene	mg/kg	[NT]		[NT]		[NR]	[NR]	
Isophorone	mg/kg	[NT]		[NT]		[NR]	[NR]	
2,4-Dimethylphenol	mg/kg	[NT]		[NT]		[NR]	[NR]	
2-Nitrophenol	mg/kg	[NT]		[NT]		[NR]	[NR]	
Bis(2-chloroethoxy ) methane	mg/kg	[NT]		[NT]		[NR]	[NR]	
2,4-Dichlorophenol	mg/kg	[NT]		[NT]		[NR]	[NR]	
1,2,4-Trichlorobenzene	mg/kg	[NT]		[NT]		[NR]	[NR]	
Naphthalene	mg/kg	[NT]		[NT]		[NR]	[NR]	
4-Chloroaniline	mg/kg	[NT]		[NT]		[NR]	[NR]	
Hexachlorobutadiene	mg/kg	[NT]		[NT]		[NR]	[NR]	
4-Chloro-3-methylphenol	mg/kg	[NT]		[NT]		[NR]	[NR]	
2-Methylnaphthalene	mg/kg	[NT]		[NT]		[NR]	[NR]	
Hexachlorocyclopentadiene	mg/kg	[NT]		[NT]		[NR]	[NR]	
2,4,6-trichlorophenol	mg/kg	[NT]		[NT]		[NR]	[NR]	

QUALITY CONTROL SVOCs in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
2,4,5-trichlorophenol	mg/kg	[NT]	[NT]	[NR]	[NR]
2-Chloronaphthalene	mg/kg	[NT]	[NT]	[NR]	[NR]
2-nitroaniline	mg/kg	[NT]	[NT]	[NR]	[NR]
Dimethylphthalate	mg/kg	[NT]	[NT]	160571-1	76%
2,6-Dinitrotoluene	mg/kg	[NT]	[NT]	[NR]	[NR]
Acenaphthylene	mg/kg	[NT]	[NT]	[NR]	[NR]
3-Nitroaniline	mg/kg	[NT]	[NT]	[NR]	[NR]
Acenaphthene	mg/kg	[NT]	[NT]	160571-1	76%
2,4-dinitrophenol	mg/kg	[NT]	[NT]	[NR]	[NR]
4-nitrophenol	mg/kg	[NT]	[NT]	160571-1	102%
Dibenzofuran	mg/kg	[NT]	[NT]	[NR]	[NR]
diethylphthalate	mg/kg	[NT]	[NT]	160571-1	73%
4-chlorophenylphenylether	mg/kg	[NT]	[NT]	[NR]	[NR]
4-nitroaniline	mg/kg	[NT]	[NT]	[NR]	[NR]
Fluorene	mg/kg	[NT]	[NT]	[NR]	[NR]
2-methyl-4,6-dinitrophenol	mg/kg	[NT]	[NT]	[NR]	[NR]
azobenzene	mg/kg	[NT]	[NT]	[NR]	[NR]
4-bromophenylphenylether	mg/kg	[NT]	[NT]	[NR]	[NR]
hexachlorobenzene	mg/kg	[NT]	[NT]	[NR]	[NR]
pentachlorophenol	mg/kg	[NT]	[NT]	[NR]	[NR]
Phenanthrene	mg/kg	[NT]	[NT]	[NR]	[NR]
Anthracene	mg/kg	[NT]	[NT]	[NR]	[NR]
carbazole	mg/kg	[NT]	[NT]	[NR]	[NR]
di-n-butylphthalate	mg/kg	[NT]	[NT]	[NR]	[NR]
Fluoranthene	mg/kg	[NT]	[NT]	[NR]	[NR]
Pyrene	mg/kg	[NT]	[NT]	160571-1	140%
butylbenzylphthalate	mg/kg	[NT]	[NT]	[NR]	[NR]
bis(2-ethylhexyl)phthalate	mg/kg	[NT]	[NT]	[NR]	[NR]
Benzo(a)anthracene	mg/kg	[NT]	[NT]	[NR]	[NR]
Chrysene	mg/kg	[NT]	[NT]	[NR]	[NR]
di-n-octylphthalate	mg/kg	[NT]	[NT]	[NR]	[NR]
Benzo(b+j+k)fluoranthene	mg/kg	[NT]	[NT]	[NR]	[NR]
Benzo(a)pyrene	mg/kg	[NT]	[NT]	[NR]	[NR]
Indeno(1,2,3-c,d)pyrene	mg/kg	[NT]	[NT]	[NR]	[NR]
Dibenzo(a,h)anthracene	mg/kg	[NT]	[NT]	[NR]	[NR]
Benzo(g,h,i)perylene	mg/kg	[NT]	[NT]	[NR]	[NR]
ethylmethanesulfonate	mg/kg	[NT]	[NT]	[NR]	[NR]
aniline	mg/kg	[NT]	[NT]	[NR]	[NR]
pentachloroethane	mg/kg	[NT]	[NT]	[NR]	[NR]
benzyl alcohol	mg/kg	[NT]	[NT]	[NR]	[NR]
acetophenone	mg/kg	[NT]	[NT]	[NR]	[NR]
N-nitrosomorpholine	mg/kg	[NT]	[NT]	[NR]	[NR]

QUALITY CONTROL SVOCs in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
N-nitrosopiperidine	mg/kg	[NT]	[NT]	[NR]	[NR]
2,6-dichlorophenol	mg/kg	[NT]	[NT]	[NR]	[NR]
hexachloropropene-1	mg/kg	[NT]	[NT]	[NR]	[NR]
N-nitroso-n-butylamine	mg/kg	[NT]	[NT]	[NR]	[NR]
safole	mg/kg	[NT]	[NT]	[NR]	[NR]
1,2,4,5-tetrachlorobenzene	mg/kg	[NT]	[NT]	[NR]	[NR]
cis and trans iso-safole	mg/kg	[NT]	[NT]	[NR]	[NR]
1,3-dinitrobenzene	mg/kg	[NT]	[NT]	[NR]	[NR]
pentachlorobenzene	mg/kg	[NT]	[NT]	[NR]	[NR]
1-naphthylamine	mg/kg	[NT]	[NT]	[NR]	[NR]
2,3,4,6-tetrachlorophenol	mg/kg	[NT]	[NT]	[NR]	[NR]
2-naphthylamine	mg/kg	[NT]	[NT]	[NR]	[NR]
5-nitro-o-toluidine	mg/kg	[NT]	[NT]	[NR]	[NR]
diphenylamine	mg/kg	[NT]	[NT]	[NR]	[NR]
phenacetin	mg/kg	[NT]	[NT]	[NR]	[NR]
pentachloronitrobenzene	mg/kg	[NT]	[NT]	[NR]	[NR]
dinoseb	mg/kg	[NT]	[NT]	[NR]	[NR]
methapyrilene	mg/kg	[NT]	[NT]	[NR]	[NR]
p- dimethylaminoazobenzene	mg/kg	[NT]	[NT]	[NR]	[NR]
2-acetylaminofluorene	mg/kg	[NT]	[NT]	[NR]	[NR]
7,12-dimethylbenz(a) anthracene	mg/kg	[NT]	[NT]	[NR]	[NR]
3-methylcholanthrene	mg/kg	[NT]	[NT]	[NR]	[NR]
a-BHC	mg/kg	[NT]	[NT]	[NR]	[NR]
b-BHC	mg/kg	[NT]	[NT]	[NR]	[NR]
g-BHC	mg/kg	[NT]	[NT]	[NR]	[NR]
d-BHC	mg/kg	[NT]	[NT]	[NR]	[NR]
Heptachlor	mg/kg	[NT]	[NT]	[NR]	[NR]
Aldrin	mg/kg	[NT]	[NT]	160571-1	88%
Heptachlor Epoxide	mg/kg	[NT]	[NT]	[NR]	[NR]
g-Chlordane	mg/kg	[NT]	[NT]	[NR]	[NR]
a-Chlordane	mg/kg	[NT]	[NT]	[NR]	[NR]
Endosulfan I	mg/kg	[NT]	[NT]	[NR]	[NR]
p,p'-DDE	mg/kg	[NT]	[NT]	[NR]	[NR]
Dieldrin	mg/kg	[NT]	[NT]	160571-1	101%
Endrin	mg/kg	[NT]	[NT]	[NR]	[NR]
p,p'-DDD	mg/kg	[NT]	[NT]	[NR]	[NR]
Endosulfan II	mg/kg	[NT]	[NT]	[NR]	[NR]
Endrin Aldehyde	mg/kg	[NT]	[NT]	[NR]	[NR]
p,p'-DDT	mg/kg	[NT]	[NT]	[NR]	[NR]
Endrin Ketone	mg/kg	[NT]	[NT]	[NR]	[NR]



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QUALITY CONTROL SVOCs in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Endosulfan Sulphate	mg/kg	[NT]	[NT]	[NR]	[NR]
Methoxychlor	mg/kg	[NT]	[NT]	[NR]	[NR]
Surrogate 2-fluorophenol	%	[NT]	[NT]	160571-1	99%
Surrogate Phenol-d <sub>6</sub>	%	[NT]	[NT]	160571-1	70%
Surrogate Nitrobenzene-d <sub>5</sub>	%	[NT]	[NT]	160571-1	91%
Surrogate 2-fluorobiphenyl	%	[NT]	[NT]	160571-1	90%
Surrogate 2,4,6-Tribromophenol	%	[NT]	[NT]	160571-1	90%
Surrogate p-Terphenyl-d <sub>14</sub>	%	[NT]	[NT]	160571-1	91%

**Report Comments:**

Asbestos: A portion of the supplied sample was sub-sampled for asbestos analysis according to Envirolab procedures. We cannot guarantee that this sub-sample is indicative of the entire sample. Envirolab recommends supplying 40-50g of sample in its own container.

Note: Samples 160571-1 were sub-sampled from jars provided by the client.

**SVOC\_S\_SCAN:**

The RPD for duplicate results is accepted due to the non homogenous nature of the sample/s.

Asbestos ID was analysed by Approved Identifier: Paul Ching

Asbestos ID was authorised by Approved Signatory: Paul Ching

INS: Insufficient sample for this test

NR: Test not required

<: Less than

PQL: Practical Quantitation Limit

RPD: Relative Percent Difference

>: Greater than

NT: Not tested

NA: Test not required

LCS: Laboratory Control Sample

### **Quality Control Definitions**

**Blank:** This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.

**Duplicate:** This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.

**Matrix Spike:** A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.

**LCS (Laboratory Control Sample):** This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.

**Surrogate Spike:** Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

### **Laboratory Acceptance Criteria**

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: <5xPQL - any RPD is acceptable; >5xPQL - 0-50% RPD is acceptable.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals; 60-140% for organics (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Measurement Uncertainty estimates are available for most tests upon request.



IMSO FormsO13 – Chain of Custody - Generic

## **Appendix I    Tabulated Quality Assurance/Quality Control**



Field Duplicates (SOIL)  
Filter: ALL

<b>SDG</b>	531205	531205	
<b>Field ID</b>	JBH06_0.75-0.85	QA20170119	<b>RPD</b>
<b>Sampled Date/Time</b>	19/01/2017	19/01/2017	

Method_T	ChemName	Units	EQL			
OPP	EPN	mg/kg	0.2	<0.2	<0.2	0
	Demeton-S	mg/kg	0.2	<0.2	<0.2	0
Heavy Met	Arsenic (T)	mg/kg	2 (Primary): 4 (Interlab)	<2.0	<2.0	0
	Cadmium	mg/kg	0.4	<0.4	<0.4	0
	Chromium	mg/kg	5 (Primary): 1 (Interlab)	5.0	6.8	31
	Copper	mg/kg	5 (Primary): 1 (Interlab)	89.0	26.0	110
	Lead	mg/kg	5 (Primary): 1 (Interlab)	42.0	170.0	121
	Mercury (I)	mg/kg	0.1	<0.1	<0.1	0
	Nickel	mg/kg	5 (Primary): 1 (Interlab)	7.9	<5.0	45
	Zinc	mg/kg	5 (Primary): 1 (Interlab)	52.0	81.0	44
al						
NA	Hexachloro	mg/kg	0.5	<0.5	<0.5	0
VOC	1,1,1,2-tetr	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<0.5	0
	1,1,1-trichl	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<0.5	0
	1,1,2-trichl	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<0.5	0
	1,1,2,2-tetr	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<0.5	0
	1,1-dichlor	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<0.5	0
	1,2,3-trichl	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<0.5	0
	1,2-dichlor	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<0.5	0
	1,2-dichlor	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<0.5	0
	1,3-dichlor	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<0.5	0
	Bromochlor	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<0.5	0
	Bromodich	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<0.5	0
	Carbon tetr	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<0.5	0
	Chloroetha	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<0.5	0
	Chloroform	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<0.5	0
	Chloromet	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<0.5	0
	dibromochl	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<0.5	0
	Dichlorodif	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<0.5	0
	Dichlorome	mg/kg	0.5	0.8	<0.5	46
	Trichloroflu	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<0.5	0
	1,1-Dichlor	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<0.5	0
	3-chloroprop	mg/kg	0.5	<0.5	<0.5	0
	4-chlorotol	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<0.5	0
	cis-1,2-dich	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<0.5	0
	cis-1,3-dich	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<0.5	0
	Tetrachloro	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<0.5	0
	trans-1,2-d	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<0.5	0
	trans-1,3-d	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<0.5	0
	Trichloroet	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<0.5	0
	Vinyl Chlor	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<0.5	0
Organic	C6-C9 Fra	mg/kg	20 (Primary): 25 (Interlab)	<20.0	<20.0	0
TPH	C10-C14 F	mg/kg	20 (Primary): 50 (Interlab)	<20.0	<20.0	0
	C15-C28 F	mg/kg	50 (Primary): 100 (Interlab)	260.0	150.0	54
	C29-C36 F	mg/kg	50 (Primary): 100 (Interlab)	66.0	<50.0	28
	C10-C36 F	mg/kg	50	326.0	150.0	74
Organic	>C10-C16	mg/kg	50	<50.0	<50.0	0

Filter: ALL



Field Duplicates (SOIL)

Filter: ALL

SDG	531205	531205	
Field ID	JBH06_0.75-0.85	QA20170119	RPD
Sampled Date/Time	19/01/2017	19/01/2017	

	>C16-C34	mg/kg	100	330.0	200.0	49
	>C34-C40	mg/kg	100	<100.0	<100.0	0
	C6-C10 Fra	mg/kg	20 (Primary): 25 (Interlab	<20.0	<20.0	0
	C6 - C10 le	mg/kg	20 (Primary): 25 (Interlab	<20.0	<20.0	0
	>C10 - C16	mg/kg	50	<50.0	<50.0	0
VOC	Benzene	mg/kg	0.1 (Primary): 0.2 (Interlab	<0.1	<0.1	0
	Ethylbenze	mg/kg	0.1 (Primary): 1 (Interlab	<0.1	<0.1	0
	Toluene	mg/kg	0.1 (Primary): 0.5 (Interlab	<0.1	<0.1	0
	Xylene (m	mg/kg	0.2 (Primary): 2 (Interlab	<0.2	<0.2	0
	Xylene (o	mg/kg	0.1 (Primary): 1 (Interlab	<0.1	<0.1	0
	Xylene (To	mg/kg	0.3 (Primary): 1 (Interlab	<0.3	<0.3	0
Organic	Naphthaler	mg/kg	0.5 (Primary): 1 (Interlab	<0.5	<0.5	0
PAH	Acenaphth	mg/kg	0.5 (Primary): 0.1 (Interlab	0.7	<0.5	33
	Acenaphth	mg/kg	0.5 (Primary): 0.1 (Interlab	<0.5	<0.5	0
	Anthracene	mg/kg	0.5 (Primary): 0.1 (Interlab	<b>3.2</b>	<b>1.0</b>	<b>105</b>
	Benz(a)ant	mg/kg	0.5 (Primary): 0.1 (Interlab	6.6	4.3	42
	Benzo(a)py	mg/kg	0.5 (Primary): 0.05 (Interlab	5.3	3.8	33
	Benzo(a)py	mg/kg	0.5	7.8	5.1	42
	Benzo(a)py	mg/kg	0.5	7.8	5.4	36
	Benzo(a)py	mg/kg	0.5	7.8	5.6	33
	Benzo(b,j)f	mg/kg	0.5	5.1	4.5	13
	Benzo(g,h,i)	mg/kg	0.5 (Primary): 0.1 (Interlab	2.6	2.1	21
	Benzo(k)flu	mg/kg	0.5	4.0	2.1	62
	Chrysene	mg/kg	0.5 (Primary): 0.1 (Interlab	5.1	3.2	46
	Dibenz(a,h)	mg/kg	0.5 (Primary): 0.1 (Interlab	0.6	<0.5	18
	Fluoranthene	mg/kg	0.5 (Primary): 0.1 (Interlab	<b>16.0</b>	<b>6.6</b>	<b>83</b>
	Fluorene	mg/kg	0.5 (Primary): 0.1 (Interlab	1.1	<0.5	75
	Indeno(1,2,3-cd)	mg/kg	0.5 (Primary): 0.1 (Interlab	2.3	1.8	24
	Naphthaler	mg/kg	0.5 (Primary): 1 (Interlab	<0.5	<0.5	0
	Phenanthrene	mg/kg	0.5 (Primary): 0.1 (Interlab	<b>14.0</b>	<b>1.0</b>	<b>173</b>
	Pyrene	mg/kg	0.5 (Primary): 0.1 (Interlab	<b>13.0</b>	<b>6.8</b>	<b>63</b>
	PAHs (Total)	mg/kg	0.5	<b>79.6</b>	<b>37.2</b>	<b>73</b>
VOC	1,2,4-trime	mg/kg	0.5 (Primary): 1 (Interlab	<0.5	<0.5	0
	1,3,5-trime	mg/kg	0.5 (Primary): 1 (Interlab	<0.5	<0.5	0
	Bromobenz	mg/kg	0.5 (Primary): 1 (Interlab	<0.5	<0.5	0
	Isopropylbe	mg/kg	0.5 (Primary): 1 (Interlab	<0.5	<0.5	0
	Styrene	mg/kg	0.5 (Primary): 1 (Interlab	<0.5	<0.5	0
	1,2-dibrom	mg/kg	0.5 (Primary): 1 (Interlab	<0.5	<0.5	0
	2-Butanone	mg/kg	0.5	<0.5	<0.5	0
	4-Methyl-2	mg/kg	0.5	<0.5	<0.5	0
	Bromoform	mg/kg	0.5 (Primary): 1 (Interlab	<0.5	<0.5	0
	Bromomet	mg/kg	0.5 (Primary): 1 (Interlab	<0.5	<0.5	0
	Dibromome	mg/kg	0.5 (Primary): 1 (Interlab	<0.5	<0.5	0
	Iodometha	mg/kg	0.5	<0.5	<0.5	0
NA	1,2,4,5-tetr	mg/kg	0.5	<0.5	<0.5	0
	1,2,4-trichl	mg/kg	0.5 (Primary): 1 (Interlab	<0.5	<0.5	0
	1,2-Dichlor	mg/kg	0.5 (Primary): 1 (Interlab	<0.5	<0.5	0
	1,3-dichlor	mg/kg	0.5 (Primary): 1 (Interlab	<0.5	<0.5	0

Filter: ALL

Field Duplicates (SOIL)

Filter: ALL

SDG	531205	531205	
Field ID	JBH06_0.75-0.85	QA20170119	RPD
Sampled Date/Time	19/01/2017	19/01/2017	

	Dichlorvos	mg/kg	0.2 (Primary): 0.1 (Interl	<0.2	<0.2	0
	Dimethoate	mg/kg	0.2 (Primary): 0.1 (Interl	<0.2	<0.2	0
	Disulfoton	mg/kg	0.2	<0.2	<0.2	0
	Ethion	mg/kg	0.2 (Primary): 0.1 (Interl	<0.2	<0.2	0
	Ethoprophos	mg/kg	0.2	<0.2	<0.2	0
	Fenitrothion	mg/kg	0.2 (Primary): 0.1 (Interl	<0.2	<0.2	0
	Fensulfothion	mg/kg	0.2	<0.2	<0.2	0
	Fenthion	mg/kg	0.2	<0.2	<0.2	0
	Malathion	mg/kg	0.2 (Primary): 0.1 (Interl	<0.2	<0.2	0
	Merphos	mg/kg	0.2	<0.2	<0.2	0
	Mevinphos	mg/kg	0.2	<0.2	<0.2	0
	Monocrotophos	mg/kg	2	<2.0	<2.0	0
	Omethoate	mg/kg	2	<2.0	<2.0	0
	Parathion	mg/kg	0.2 (Primary): 0.1 (Interl	<0.2	<0.2	0
	Parathion methyl	mg/kg	0.2	<0.2	<0.2	0
	Phorate	mg/kg	0.2	<0.2	<0.2	0
	Pirimiphos	mg/kg	0.2	<0.2	<0.2	0
	Pyrazophos	mg/kg	0.2	<0.2	<0.2	0
	Ronnel	mg/kg	0.2 (Primary): 0.1 (Interl	<0.2	<0.2	0
	Sulprofos	mg/kg	0.2	<0.2	<0.2	0
	Terbufos	mg/kg	0.2	<0.2	<0.2	0
	Tetrachlorvos	mg/kg	0.2	<0.2	<0.2	0
	Tokuthion	mg/kg	0.2	<0.2	<0.2	0
	Trichloronate	mg/kg	0.2	<0.2	<0.2	0
Asbestos	Approx. Sa	G		94.0	106.0	12
	Asbestos f	%w/w		0.0	0.0	0
	Asbestos f	%w/w		0.0	0.0	0
	Mass ACM	G		0.0	0.0	0
	Mass Asbe	G		0.0	0.0	0
	Mass FA	G		0.0	0.0	0
	Mass Asbe	G		0.0	0.0	0
	Mass AF	G		0.0	0.0	0
	Mass Asbe	G		0.0	0.0	0
	Mass Asbe	G		0.0	0.0	0
	Synthetic F	COMMENT		1.0	1.0	0
	ACM - Con	COMMENT		1.0	1.0	0
	AF - Comn	COMMENT		1.0	1.0	0
	FA - Comn	COMMENT		1.0	1.0	0
	Organic Fil	COMMENT		1.0	1.0	0
	Respirable	COMMENT		1.0	1.0	0
Inorganic	% Moisture	%	1	15.0	16.0	6
VOC	2-Propanol	mg/kg	0.5	<b>4.2</b>	<b>&lt;0.5</b>	<b>157</b>

\*RPDs have only been considered where a concentration is greater than 1 times the EQL.

\*\*High RPDs are in bold (Acceptable RPDs for each EQL multiplier range are: 80 (1-10 x EQL); 50 (10-

\*\*\*Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. A

Field Duplicates (SOIL)

Filter: ALL

SDG	531205	531205	
Field ID	JBH06_0.75-0.85	QA20170119	RPD
Sampled Date/Time	19/01/2017	19/01/2017	

	1,4-dichloro	mg/kg	0.5 (Primary): 1 (Interlab	<0.5	<0.5	0
	Hexachloro	mg/kg	0.5 (Primary): 0.1 (Interlab	<0.5	<0.5	0
	Pentachloro	mg/kg	0.5	<0.5	<0.5	0
OCP	Hexachloro	mg/kg	0.05 (Primary): 0.5 (Interlab	<0.05	<0.05	0
VOC	1,2-Dichloro	mg/kg	0.5 (Primary): 1 (Interlab	<0.5	<0.5	0
	1,3-dichloro	mg/kg	0.5 (Primary): 1 (Interlab	<0.5	<0.5	0
	1,4-dichloro	mg/kg	0.5 (Primary): 1 (Interlab	<0.5	<0.5	0
	Chlorobenz	mg/kg	0.5 (Primary): 1 (Interlab	<0.5	<0.5	0
PCB	Aroclor 101	mg/kg	0.5 (Primary): 0.1 (Interlab	<0.5	<0.5	0
	Aroclor 122	mg/kg	0.1	<0.1	<0.1	0
	Aroclor 123	mg/kg	0.5 (Primary): 0.1 (Interlab	<0.5	<0.5	0
	Aroclor 124	mg/kg	0.5 (Primary): 0.1 (Interlab	<0.5	<0.5	0
	Aroclor 124	mg/kg	0.5 (Primary): 0.1 (Interlab	<0.5	<0.5	0
	Aroclor 125	mg/kg	0.5 (Primary): 0.1 (Interlab	<0.5	<0.5	0
	Aroclor 126	mg/kg	0.5 (Primary): 0.1 (Interlab	<0.5	<0.5	0
	PCBs (Total)	mg/kg	0.5 (Primary): 0.1 (Interlab	<0.5	<0.5	0
VOC	Carbon dis	mg/kg	0.5	<0.5	<0.5	0
NA	Hexachloro	mg/kg	0.5 (Primary): 1 (Interlab	<0.5	<0.5	0
	Hexachloro	mg/kg	1 (Primary): 2 (Interlab)	<1.0	<1.0	0
OCP	4,4-DDE	mg/kg	0.05 (Primary): 0.5 (Interlab	<0.05	<0.05	0
	Aldrin	mg/kg	0.05 (Primary): 0.5 (Interlab	<0.05	<0.05	0
	alpha-BHC	mg/kg	0.05 (Primary): 0.5 (Interlab	<0.05	<0.05	0
	beta-BHC	mg/kg	0.05 (Primary): 0.5 (Interlab	<0.05	<0.05	0
	DDD	mg/kg	0.05 (Primary): 0.5 (Interlab	<0.05	<0.05	0
	Dieldrin	mg/kg	0.05 (Primary): 0.5 (Interlab	<0.05	<0.05	0
	DDT	mg/kg	0.05 (Primary): 0.5 (Interlab	<0.05	<0.05	0
	Chlordane	mg/kg	0.1	<0.1	<0.1	0
	delta-BHC	mg/kg	0.05 (Primary): 0.5 (Interlab	<0.05	<0.05	0
	Endosulfar	mg/kg	0.05 (Primary): 0.5 (Interlab	<0.05	<0.05	0
	Endosulfar	mg/kg	0.05 (Primary): 0.5 (Interlab	<0.05	<0.05	0
	Endosulfar	mg/kg	0.05 (Primary): 0.5 (Interlab	<0.05	<0.05	0
	Endrin	mg/kg	0.05 (Primary): 0.5 (Interlab	<0.05	<0.05	0
	Endrin alde	mg/kg	0.05 (Primary): 0.5 (Interlab	<0.05	<0.05	0
	Endrin keto	mg/kg	0.05 (Primary): 0.5 (Interlab	<0.05	<0.05	0
	Heptachlor	mg/kg	0.05 (Primary): 0.5 (Interlab	<0.05	<0.05	0
	Heptachlor	mg/kg	0.05 (Primary): 0.5 (Interlab	<0.05	<0.05	0
	Lindane	mg/kg	0.05 (Primary): 0.5 (Interlab	<0.05	<0.05	0
	Methoxych	mg/kg	0.2 (Primary): 1 (Interlab	<0.2	<0.2	0
	Toxaphene	mg/kg	1	<1.0	<1.0	0
OPP	Azinphos n	mg/kg	0.2 (Primary): 0.1 (Interlab	<0.2	<0.2	0
	Chlorfenvir	mg/kg	0.2	<0.2	<0.2	0
	Chlorpyrifo	mg/kg	0.2 (Primary): 0.1 (Interlab	<0.2	<0.2	0
	Chlorpyrifo	mg/kg	0.2 (Primary): 0.1 (Interlab	<0.2	<0.2	0
	Coumapho	mg/kg	2	<2.0	<2.0	0
	Demeton-C	mg/kg	0.2	<0.2	<0.2	0
	Diazinon	mg/kg	0.2 (Primary): 0.1 (Interlab	<0.2	<0.2	0

Filter: ALL

Field Duplicates (SOIL)  
Filter: ALL

<b>SDG</b>	531205	ENVIROLAB 2017-01-20T00:00:00
<b>Field ID</b>	JBH06_0.75-0.85	QC20170119
<b>Sampled Date/Time</b>	19/01/2017	19/01/2017
		<b>RPD</b>

Method_T	ChemName	Units	EQL			
OPP	EPN	mg/kg	0.2	<0.2		
	Demeton-S	mg/kg	0.2	<0.2		
Heavy Met	Arsenic (T)	mg/kg	2 (Primary): 4 (Interlab)	<2.0	<4.0	0
	Cadmium	mg/kg	0.4	<0.4	<0.4	0
	Chromium	mg/kg	5 (Primary): 1 (Interlab)	5.0	5.0	0
	Copper	mg/kg	5 (Primary): 1 (Interlab)	89.0	45.0	66
	Lead	mg/kg	5 (Primary): 1 (Interlab)	42.0	65.0	43
	Mercury (I)	mg/kg	0.1	<0.1	<0.1	0
	Nickel	mg/kg	5 (Primary): 1 (Interlab)	7.9	5.0	45
	Zinc	mg/kg	5 (Primary): 1 (Interlab)	52.0	57.0	9
al						
NA	Hexachloro	mg/kg	0.5	<0.5	<0.5	0
VOC	1,1,1,2-tetr	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<1.0	0
	1,1,1-trichl	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<1.0	0
	1,1,2-trichl	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<1.0	0
	1,1,2,2-tetr	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<1.0	0
	1,1-dichlor	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<1.0	0
	1,2,3-trichl	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<1.0	0
	1,2-dichlor	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<1.0	0
	1,2-dichlor	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<1.0	0
	1,3-dichlor	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<1.0	0
	Bromochlor	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<1.0	0
	Bromodichl	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<1.0	0
	Carbon tetr	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<1.0	0
	Chloroetha	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<1.0	0
	Chloroform	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<1.0	0
	Chloromet	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<1.0	0
	dibromochl	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<1.0	0
	Dichlorodif	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<1.0	0
	Dichlorome	mg/kg	0.5	0.8		
	Trichloroflu	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<1.0	0
	1,1-Dichlor	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<1.0	0
	3-chloroprop	mg/kg	0.5	<0.5		
	4-chlorotol	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<1.0	0
	cis-1,2-dich	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<1.0	0
	cis-1,3-dich	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<1.0	0
	Tetrachloro	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<1.0	0
	trans-1,2-d	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<1.0	0
	trans-1,3-d	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<1.0	0
	Trichloroet	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<1.0	0
	Vinyl Chlor	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<1.0	0
Organic	C6-C9 Fra	mg/kg	20 (Primary): 25 (Interlab)	<20.0	<25.0	0
TPH	C10-C14 F	mg/kg	20 (Primary): 50 (Interlab)	<20.0	<50.0	0
	C15-C28 F	mg/kg	50 (Primary): 100 (Interlab)	260.0	<100.0	89
	C29-C36 F	mg/kg	50 (Primary): 100 (Interlab)	66.0	<100.0	0
	C10-C36 F	mg/kg	50	326.0		
Organic	>C10-C16	mg/kg	50	<50.0	<50.0	0

Filter: ALL

Field Blanks (WATER)  
Filter: ALL

<b>SD6</b>	531205	531205
<b>Field ID</b>	RB20170120	TB20170120
<b>Sampled Date/Time</b>	20/01/2017	20/01/2017
<b>Sample Type</b>	Rinsate	Trip_B

Method_Type	ChemName	Units	EQL		
Heavy Metal	Arsenic (Total)	mg/l	0.001	<0.001	
	Cadmium	mg/l	0.0002	<0.0002	
	Chromium (Total)	mg/l	0.001	<0.001	
	Copper	mg/l	0.001	<0.001	
	Lead	mg/l	0.001	<0.001	
	Mercury (Inorganic)	mg/l	0.0001	<0.0001	
	Nickel	mg/l	0.001	<0.001	
	Zinc	mg/l	0.005	<0.005	
NA	Hexachloroethane	mg/l	0.002	<0.002	
	1,2,4,5-tetrachlorobenzene	mg/l	0.002	<0.002	
	1,2,4-trichlorobenzene	mg/l	0.002	<0.002	
	1,2-Dichlorobenzene	mg/l	0.002	<0.002	
	1,3-dichlorobenzene	mg/l	0.002	<0.002	
	1,4-dichlorobenzene	mg/l	0.002	<0.002	
	Hexachlorobenzene	mg/l	0.002	<0.002	
	Pentachlorobenzene	mg/l	0.002	<0.002	
	Hexachlorobutadiene	mg/l	0.002	<0.002	
	Hexachlorocyclopentadiene	mg/l	0.004	<0.004	
Organic	trans-1,2-dichloroethene	mg/l	0.001		
	C6-C9 Fraction	mg/l	0.02	<0.02	
	>C10-C16 Fraction	mg/l	0.05	<0.05	
	>C16-C34 Fraction	mg/l	0.1	<0.1	
	>C34-C40 Fraction	mg/l	0.1	<0.1	
	C6-C10 Fraction	mg/l	0.02	<0.02	
	C6 - C10 less BTEX (F1)	mg/l	0.02	<0.02	
	>C10 - C16 less Naphthalene (F2)	mg/l	0.05	<0.05	
	Naphthalene	mg/l	0.01	<0.01	
PAH	Acenaphthene	mg/l	0.001	<0.001	
	Acenaphthylene	mg/l	0.001	<0.001	
	Anthracene	mg/l	0.001	<0.001	
	Benz(a)anthracene	mg/l	0.001	<0.001	
	Benzo(a)pyrene	mg/l	0.001	<0.001	
	Benzo(b,j)fluoranthene	mg/l	0.001	<0.001	
	Benzo(g,h,i)perylene	mg/l	0.001	<0.001	
	Benzo(k)fluoranthene	mg/l	0.001	<0.001	
	Chrysene	mg/l	0.001	<0.001	
	Dibenz(a,h)anthracene	mg/l	0.001	<0.001	
	Fluoranthene	mg/l	0.001	<0.001	
	Fluorene	mg/l	0.001	<0.001	
	Indeno(1,2,3-c,d)pyrene	mg/l	0.001	<0.001	
	Naphthalene	mg/l	0.001	<0.001	
	Phenanthrene	mg/l	0.001	<0.001	
	Pyrene	mg/l	0.001	<0.001	
	PAHs (Total)	mg/l	0.001	<0.001	
SVOC	Hexachloroethane	mg/l	0.002		
	1,2,4,5-tetrachlorobenzene	mg/l	0.002		
	1,2,4-trichlorobenzene	mg/l	0.002		
	1,2-Dichlorobenzene	mg/l	0.002		
	1,3-dichlorobenzene	mg/l	0.002		
	1,4-dichlorobenzene	mg/l	0.002		
	Hexachlorobenzene	mg/l	0.002		
	Pentachlorobenzene	mg/l	0.002		
	Hexachlorobutadiene	mg/l	0.002		
	Hexachlorocyclopentadiene	mg/l	0.004		
TPH	C10-C14 Fraction	mg/l	0.05	<0.05	
	C15-C28 Fraction	mg/l	0.1	<0.1	
	C29-C36 Fraction	mg/l	0.1	<0.1	
	C10-C36 Fraction (Total)	mg/l	0.1	<0.1	
VOC	1,1,1,2-tetrachloroethane	mg/l	0.001	<0.001	
	1,1,1-trichloroethane	mg/l	0.001	<0.001	
	1,1,2-trichloroethane	mg/l	0.001	<0.001	
	1,1,2,2-tetrachloroethane	mg/l	0.001	<0.001	
	1,1-dichloroethane	mg/l	0.001	<0.001	
	1,2,3-trichloropropane	mg/l	0.001	<0.001	
	1,2-dichloroethane	mg/l	0.001	<0.001	
	1,2-dichloropropane	mg/l	0.001	<0.001	
	1,3-dichloropropane	mg/l	0.001	<0.001	
	Bromochloromethane	mg/l	0.001	<0.001	
	Bromodichloromethane	mg/l	0.001	<0.001	
	Carbon tetrachloride	mg/l	0.001	<0.001	
	Chloroethane	mg/l	0.001	<0.001	
	Chloroform	mg/l	0.005	<0.005	
	Chloromethane	mg/l	0.001	<0.001	
	dibromochloromethane	mg/l	0.001	<0.001	
	Dichlorodifluoromethane	mg/l	0.001	<0.001	
	Dichloromethane	mg/l	0.001	<0.001	
	1,1-Dichloroethene	mg/l	0.001	<0.001	
	3-chloropropene	mg/l	0.001	<0.001	
	4-chlorotoluene	mg/l	0.001	<0.001	
	cis-1,2-dichloroethene	mg/l	0.001	<0.001	
	cis-1,3-dichloropropene	mg/l	0.001	<0.001	
	Tetrachloroethene	mg/l	0.001	<0.001	
	trans-1,2-dichloroethene	mg/l	0.001	<0.001	
	trans-1,3-dichloropropene	mg/l	0.001	<0.001	
	Trichloroethene	mg/l	0.001	<0.001	

Field Blanks (WATER)  
Filter: ALL

			SDG Field ID Sampled_Date/Time Sample Type	531205 RB20170120 20/01/2017 Rinsate	531205 TB20170120 20/01/2017 Trip_B
	Trichlorofluoromethane	mg/l	0.001	<0.001	
	Vinyl Chloride	mg/l	0.001	<0.001	
	Benzene	mg/l	0.001	<0.001	
	Ethylbenzene	mg/l	0.001	<0.001	
	Toluene	mg/l	0.001	<0.001	
	Xylene (m & p)	mg/l	0.002	<0.002	
	Xylene (o)	mg/l	0.001	<0.001	
	Xylene (Total)	mg/l	0.003	<0.003	
	Naphthalene	mg/l	0.01		
	1,2,4-trimethyl benzene	mg/l	0.001	<0.001	
	1,3,5-trimethyl benzene	mg/l	0.001	<0.001	
	Bromobenzene	mg/l	0.001	<0.001	
	Isopropylbenzene	mg/l	0.001	<0.001	
	Styrene	mg/l	0.001	<0.001	
	1,2-dibromoethane	mg/l	0.001	<0.001	
	2-Butanone (MEK)	mg/l	0.001	<0.001	
	4-Methyl-2-pentanone (MIBK)	mg/l	0.001	<0.001	
	Bromoform	mg/l	0.001	<0.001	
	Bromomethane	mg/l	0.001	<0.001	
	Dibromomethane	mg/l	0.001	<0.001	
	Iodomethane	mg/l	0.001	<0.001	
	1,2-Dichlorobenzene	mg/l	0.001	<0.001	
	1,3-dichlorobenzene	mg/l	0.001	<0.001	
	1,4-dichlorobenzene	mg/l	0.001	<0.001	
	Chlorobenzene	mg/l	0.001	<0.001	
	Carbon disulfide	mg/l	0.001	<0.001	
	2-Propanone (Acetone)	µg/l	1	<1	
Volatile	Benzene	mg/l	0.001		<0.001
	Ethylbenzene	mg/l	0.001		<0.001
	Toluene	mg/l	0.001		<0.001
	Xylene (m & p)	mg/l	0.002		<0.002
	Xylene (o)	mg/l	0.001		<0.001
	Xylene (Total)	mg/l	0.003		<0.003



Field Duplicates (SOIL)  
Filter: ALL

<b>SDG</b>	531205	ENVIROLAB 2017-01-20T00:00:00
<b>Field ID</b>	JBH06_0.75-0.85	QC20170119
<b>Sampled Date/Time</b>	19/01/2017	19/01/2017
		<b>RPD</b>

	>C16-C34	mg/kg	100	330.0	150.0	75
	>C34-C40	mg/kg	100	<100.0	<100.0	0
	C6-C10 Fra	mg/kg	20 (Primary): 25 (Interlab	<20.0	<25.0	0
	C6 - C10 le	mg/kg	20 (Primary): 25 (Interlab	<20.0	<25.0	0
	>C10 - C16	mg/kg	50	<50.0	<50.0	0
VOC	Benzene	mg/kg	0.1 (Primary): 0.2 (Interlab	<0.1	<0.2	0
	Ethylbenze	mg/kg	0.1 (Primary): 1 (Interlab	<0.1	<1.0	0
	Toluene	mg/kg	0.1 (Primary): 0.5 (Interlab	<0.1	<0.5	0
	Xylene (m	mg/kg	0.2 (Primary): 2 (Interlab	<0.2	<2.0	0
	Xylene (o)	mg/kg	0.1 (Primary): 1 (Interlab	<0.1	<1.0	0
	Xylene (To	mg/kg	0.3 (Primary): 1 (Interlab	<0.3	<1.0	0
Organic	Naphthaler	mg/kg	0.5 (Primary): 1 (Interlab	<0.5	<0.1	0
PAH	Acenaphth	mg/kg	0.5 (Primary): 0.1 (Interlab	<b>0.7</b>	<b>&lt;0.1</b>	<b>33</b>
	Acenaphth	mg/kg	0.5 (Primary): 0.1 (Interlab	<0.5	<0.5 - 0.7	33
	Anthracene	mg/kg	0.5 (Primary): 0.1 (Interlab	<b>3.2</b>	<b>&lt;0.5 - 0.9</b>	<b>146</b>
	Benz(a)ant	mg/kg	0.5 (Primary): 0.1 (Interlab	<b>6.6</b>	<b>3.0 - 3.1</b>	<b>75</b>
	Benzo(a)py	mg/kg	0.5 (Primary): 0.05 (Interlab	<b>5.3</b>	<b>3.0</b>	<b>55</b>
	Benzo(a)py	mg/kg	0.5	<b>7.8</b>	<b>4.6</b>	<b>52</b>
	Benzo(a)py	mg/kg	0.5	<b>7.8</b>	<b>4.6</b>	<b>52</b>
	Benzo(a)py	mg/kg	0.5	<b>7.8</b>	<b>4.6</b>	<b>52</b>
	Benzo(b,j)f	mg/kg	0.5	5.1		
	Benzo(g,h,i)	mg/kg	0.5 (Primary): 0.1 (Interlab	<b>2.6</b>	<b>1.0 - 2.3</b>	<b>89</b>
	Benzo(k)flu	mg/kg	0.5	4.0		
	Chrysene	mg/kg	0.5 (Primary): 0.1 (Interlab	<b>5.1</b>	<b>3.0 - 3.7</b>	<b>52</b>
	Dibenz(a,h)	mg/kg	0.5 (Primary): 0.1 (Interlab	0.6	<0.5 - 0.7	18
	Fluoranthene	mg/kg	0.5 (Primary): 0.1 (Interlab	<b>16.0</b>	<b>5.0 - 5.7</b>	<b>95</b>
	Fluorene	mg/kg	0.5 (Primary): 0.1 (Interlab	<b>1.1</b>	<b>&lt;0.5 - 0.1</b>	<b>75</b>
	Indeno(1,2,3-cd)	mg/kg	0.5 (Primary): 0.1 (Interlab	2.3	1.0 - 1.9	79
	Naphthalene	mg/kg	0.5 (Primary): 1 (Interlab	<0.5	<0.1	0
	Phenanthrene	mg/kg	0.5 (Primary): 0.1 (Interlab	<b>14.0</b>	<b>1.0 - 1.8</b>	<b>173</b>
	Pyrene	mg/kg	0.5 (Primary): 0.1 (Interlab	<b>13.0</b>	<b>5.0 - 5.4</b>	<b>89</b>
	PAHs (Total)	mg/kg	0.5	79.6		
VOC	1,2,4-trime	mg/kg	0.5 (Primary): 1 (Interlab	<0.5	<1.0	0
	1,3,5-trime	mg/kg	0.5 (Primary): 1 (Interlab	<0.5	<1.0	0
	Bromobenz	mg/kg	0.5 (Primary): 1 (Interlab	<0.5	<1.0	0
	Isopropylbe	mg/kg	0.5 (Primary): 1 (Interlab	<0.5	<1.0	0
	Styrene	mg/kg	0.5 (Primary): 1 (Interlab	<0.5	<1.0	0
	1,2-dibrom	mg/kg	0.5 (Primary): 1 (Interlab	<0.5	<1.0	0
	2-Butanone	mg/kg	0.5	<0.5		
	4-Methyl-2	mg/kg	0.5	<0.5		
	Bromoform	mg/kg	0.5 (Primary): 1 (Interlab	<0.5	<1.0	0
	Bromomet	mg/kg	0.5 (Primary): 1 (Interlab	<0.5	<1.0	0
	Dibromome	mg/kg	0.5 (Primary): 1 (Interlab	<0.5	<1.0	0
	Iodometha	mg/kg	0.5	<0.5		
NA	1,2,4,5-tetr	mg/kg	0.5	<0.5	<0.5	0
	1,2,4-trichl	mg/kg	0.5 (Primary): 1 (Interlab	<0.5	<0.5	0
	1,2-Dichlor	mg/kg	0.5 (Primary): 1 (Interlab	<0.5	<0.5	0
	1,3-dichlor	mg/kg	0.5 (Primary): 1 (Interlab	<0.5	<0.5	0

Filter: ALL

Field Duplicates (SOIL)

Filter: ALL

<b>SDG</b>	531205	ENVIROLAB 2017-01-20T00:00:00
<b>Field ID</b>	JBH06_0.75-0.85	QC20170119
<b>Sampled Date/Time</b>	19/01/2017	19/01/2017
		<b>RPD</b>

	1,4-dichloro	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<0.5	0
	Hexachloro	mg/kg	0.5 (Primary): 0.1 (Interlab)	<0.5	<0.1	0
	Pentachloro	mg/kg	0.5	<0.5	<0.5	0
OCP	Hexachloro	mg/kg	0.05 (Primary): 0.5 (Interlab)	<0.05	<0.1	0
VOC	1,2-Dichloro	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<0.5	0
	1,3-dichloro	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<0.5	0
	1,4-dichloro	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<0.5	0
	Chlorobenz	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<1.0	0
PCB	Aroclor 101	mg/kg	0.5 (Primary): 0.1 (Interlab)	<0.5	<0.1	0
	Aroclor 122	mg/kg	0.1	<0.1	<0.1	0
	Aroclor 123	mg/kg	0.5 (Primary): 0.1 (Interlab)	<0.5	<0.1	0
	Aroclor 124	mg/kg	0.5 (Primary): 0.1 (Interlab)	<0.5	<0.1	0
	Aroclor 124	mg/kg	0.5 (Primary): 0.1 (Interlab)	<0.5	<0.1	0
	Aroclor 125	mg/kg	0.5 (Primary): 0.1 (Interlab)	<0.5	<0.1	0
	Aroclor 126	mg/kg	0.5 (Primary): 0.1 (Interlab)	<0.5	<0.1	0
	PCBs (Total)	mg/kg	0.5 (Primary): 0.1 (Interlab)	<0.5	<0.1	0
VOC	Carbon dis	mg/kg	0.5	<0.5		
NA	Hexachloro	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<0.5	0
	Hexachloro	mg/kg	1 (Primary): 2 (Interlab)	<1.0	<2.0	0
OCP	4,4-DDE	mg/kg	0.05 (Primary): 0.5 (Interlab)	<0.05	<0.1	0
	Aldrin	mg/kg	0.05 (Primary): 0.5 (Interlab)	<0.05	<0.1	0
	alpha-BHC	mg/kg	0.05 (Primary): 0.5 (Interlab)	<0.05	<0.1	0
	beta-BHC	mg/kg	0.05 (Primary): 0.5 (Interlab)	<0.05	<0.1	0
	DDD	mg/kg	0.05 (Primary): 0.5 (Interlab)	<0.05	<0.1	0
	Dieldrin	mg/kg	0.05 (Primary): 0.5 (Interlab)	<0.05	<0.1	0
	DDT	mg/kg	0.05 (Primary): 0.5 (Interlab)	<0.05	<0.1	0
	Chlordane	mg/kg	0.1	<0.1		
	delta-BHC	mg/kg	0.05 (Primary): 0.5 (Interlab)	<0.05	<0.1	0
	Endosulfar	mg/kg	0.05 (Primary): 0.5 (Interlab)	<0.05	<0.1	0
	Endosulfar	mg/kg	0.05 (Primary): 0.5 (Interlab)	<0.05	<0.1	0
	Endosulfar	mg/kg	0.05 (Primary): 0.5 (Interlab)	<0.05	<0.1	0
	Endrin	mg/kg	0.05 (Primary): 0.5 (Interlab)	<0.05	<0.1	0
	Endrin alde	mg/kg	0.05 (Primary): 0.5 (Interlab)	<0.05	<0.1	0
	Endrin keto	mg/kg	0.05 (Primary): 0.5 (Interlab)	<0.05	<0.5	0
	Heptachlor	mg/kg	0.05 (Primary): 0.5 (Interlab)	<0.05	<0.1	0
	Heptachlor	mg/kg	0.05 (Primary): 0.5 (Interlab)	<0.05	<0.1	0
	Lindane	mg/kg	0.05 (Primary): 0.5 (Interlab)	<0.05	<0.1	0
	Methoxych	mg/kg	0.2 (Primary): 1 (Interlab)	<0.2	<0.1	0
	Toxaphene	mg/kg	1	<1.0		
OPP	Azinphos n	mg/kg	0.2 (Primary): 0.1 (Interlab)	<0.2	<0.1	0
	Chlorfenvir	mg/kg	0.2	<0.2		
	Chlorpyrifo	mg/kg	0.2 (Primary): 0.1 (Interlab)	<0.2	<0.1	0
	Chlorpyrifo	mg/kg	0.2 (Primary): 0.1 (Interlab)	<0.2	<0.1	0
	Coumapho	mg/kg	2	<2.0		
	Demeton-C	mg/kg	0.2	<0.2		
	Diazinon	mg/kg	0.2 (Primary): 0.1 (Interlab)	<0.2	<0.1	0

Filter: ALL

Field Duplicates (SOIL)  
Filter: ALL

<b>SDG</b>	531205	ENVIROLAB 2017-01-20T00:00:00
<b>Field ID</b>	JBH06_0.75-0.85	QC20170119
<b>Sampled Date/Time</b>	19/01/2017	19/01/2017
		<b>RPD</b>

	Dichlorvos	mg/kg	0.2 (Primary): 0.1 (Interlab)	<0.2	<0.1	0
	Dimethoate	mg/kg	0.2 (Primary): 0.1 (Interlab)	<0.2	<0.1	0
	Disulfoton	mg/kg	0.2	<0.2		
	Ethion	mg/kg	0.2 (Primary): 0.1 (Interlab)	<0.2	<0.1	0
	Ethoprophos	mg/kg	0.2	<0.2		
	Fenitrothion	mg/kg	0.2 (Primary): 0.1 (Interlab)	<0.2	<0.1	0
	Fensulfothion	mg/kg	0.2	<0.2		
	Fenthion	mg/kg	0.2	<0.2		
	Malathion	mg/kg	0.2 (Primary): 0.1 (Interlab)	<0.2	<0.1	0
	Merphos	mg/kg	0.2	<0.2		
	Mevinphos	mg/kg	0.2	<0.2		
	Monocrotophos	mg/kg	2	<2.0		
	Omethoate	mg/kg	2	<2.0		
	Parathion	mg/kg	0.2 (Primary): 0.1 (Interlab)	<0.2	<0.1	0
	Parathion methyl	mg/kg	0.2	<0.2		
	Phorate	mg/kg	0.2	<0.2		
	Pirimiphos	mg/kg	0.2	<0.2		
	Pyrazophos	mg/kg	0.2	<0.2		
	Ronnel	mg/kg	0.2 (Primary): 0.1 (Interlab)	<0.2	<0.1	0
	Sulprofos	mg/kg	0.2	<0.2		
	Terbufos	mg/kg	0.2	<0.2		
	Tetrachlorvos	mg/kg	0.2	<0.2		
	Tokuthion	mg/kg	0.2	<0.2		
	Trichlorfon	mg/kg	0.2	<0.2		
Asbestos	Approx. Sample	G		94.0		
	Asbestos fibre	%w/w		0.0		
	Asbestos fibre	%w/w		0.0		
	Mass ACM	G		0.0		
	Mass Asbestos	G		0.0		
	Mass FA	G		0.0		
	Mass Asbestos	G		0.0		
	Mass AF	G		0.0		
	Mass Asbestos	G		0.0		
	Mass Asbestos	G		0.0		
	Synthetic Fibre	COMMEN		1.0		
	ACM - Contaminant	COMMEN		1.0		
	AF - Contaminant	COMMEN		1.0		
	FA - Contaminant	COMMEN		1.0		
	Organic Fibre	COMMEN		1.0		
	Respirable	COMMEN		1.0		
Inorganic	% Moisture	%	1	15.0		
VOC	2-Propanol	mg/kg	0.5	4.2		

\*RPDs have only been considered where a concentration is

\*\*High RPDs are in bold (Acceptable RPDs for each EQL m-30 x EQL); 30 (> 30 x EQL) )

\*\*\*Interlab Duplicates are matched on a per compound basis using methods in the row header relate to those used in the primary lab

## **Appendix J   Borelogs and Field Notes**





## JBH02

**Project Number:** 52304

**Client:** Infrastructure NSW

**Project Name:** Walsh Bay Arts Precinct SSDA

**Site Address:** Walsh Bay Arts Precinct, NSW

**Date:** 19/01/2017

**Logged By:** Rohan Hammond

**Contractor:** Perfect Concrete

**Total Hole Depth (mbgs):** 0.7

**Bore Diameter (mm):** 100

**Eastings (GDA 94):**

**Northings (GDA 94):**

**Zone/Area:**

**Reference Level:** AHD

**Elevation (m):**

Method	Depth (mbgs)	Contact (mbgs)	Graphic Log	Lithological Class	Lithological Description	Samples Tests Remarks	Additional Observations
Corer				Fill	Fill - CONCRETE - Slab 1		
	0.20			Fill	Fill - CONCRETE - Slab 2		
	0.40			Fill	Fill - CONCRETE - Slab 3		
	0.5						
Hand Auger	0.60			SANDSTONE	SANDSTONE - Bedrock	JBH02 0.6-0.7 PID = 0 ppm	
	0.70				Borehole JBH02 terminated at 0.7m		End of hole at 0.7m bgs. Refusal on sandstone bedrock.
	1.0						





# JBH03

Project Number: 52304

Client: Infrastructure NSW

Project Name: Walsh Bay Arts Precinct SSDA

Site Address: Walsh Bay Arts Precinct, NSW

Date: 20/01/2017

Logged By: Rohan Hammond

Contractor: Perfect Concrete

Total Hole Depth (mbgs): 0.6

Bore Diameter (mm): 100

Eastings (GDA 94):

Northings (GDA 94):

Zone/Area:

Reference Level: AHD

Elevation (m):

Method	Depth (mbgs)	Contact (mbgs)	Graphic Log	Lithological Class	Lithological Description	Samples Tests Remarks	Additional Observations
Coring				Fill	Fill - CONCRETE - Slab 1		
		0.15		Fill	Fill - CONCRETE - Slab 2		
		0.33		Fill	Fill - CONCRETE - Slab 3		
	0.5						
Hand Auger		0.50		SANDSTONE	SANDSTONE - Bedrock	JBH03 0.5-0.6 PID = 0 ppm	
		0.60			Borehole JBH03 terminated at 0.6m		End of hole at 0.6m bgs. Refusal on sandstone bedrock.
	1.0						



## JBH05

**Project Number:** 52304

**Client:** Infrastructure NSW

**Project Name:** Walsh Bay Arts Precinct SSDA

**Site Address:** Walsh Bay Arts Precinct, NSW

**Date:** 19/01/2017

**Logged By:** Rohan Hammond

**Contractor:** Perfect Concrete

**Total Hole Depth (mbgs):** 0.75

**Bore Diameter (mm):** 100

**Eastings (GDA 94):**

**Northings (GDA 94):**

**Zone/Area:**

**Reference Level:** AHD

**Elevation (m):**

Method	Depth (mbgs)	Contact (mbgs)	Graphic Log	Lithological Class	Lithological Description	Samples Tests Remarks	Additional Observations
Coring				Fill	Fill - CONCRETE - Slab 1		
		0.18			VOID		
	0.5	0.47		Fill	Fill - CONCRETE - Slab 2		
	1.0	0.75			Borehole JBH05 terminated at 0.75m		End of hole at 0.75m bgs. Equipment refusal - unable to penetrate slab at depth.



## JBH06

**Project Number:** 52304

**Client:** Infrastructure NSW

**Project Name:** Walsh Bay Arts Precinct SSDA

**Site Address:** Walsh Bay Arts Precinct, NSW

**Date:** 19/01/2017

**Logged By:** Rohan Hammond

**Contractor:** Perfect Concrete

**Total Hole Depth (mbgs):** 0.9

**Bore Diameter (mm):** 100

**Eastings (GDA 94):**

**Northings (GDA 94):**

**Zone/Area:**

**Reference Level:** AHD

**Elevation (m):**

Method	Depth (mbgs)	Contact (mbgs)	Graphic Log	Lithological Class	Lithological Description	Samples Tests Remarks	Additional Observations
Corer				Fill	Fill - CONCRETE - Slab 1		
	0.18				Subfloor VOID		
	0.47			Fill	Fill - CONCRETE - Slab 2		
Hand Auger	0.75			Fill	Fill - Gravelly SAND - Sandstone backfill, heterogeneous, damp, loose, coarse sand-boulders, well graded, no inclusions.	JBH06 0.75-0.85 PID = 0.3 ppm	
	0.90				Borehole JBH06 terminated at 0.9m		End of hole at 0.9m bgs. Refusal on sandstone bedrock.
	1.0						

## Gas Calibration Certificate

Instrument MX6  
Serial No. 15062D0-006  
Sensors O<sub>2</sub>, LEL, PID



**airmet**

Air-Met Scientific Pty Ltd  
1300 137 067

Item	Test	Pass	Comments			
Battery	Charge Condition	✓				
	Fuses	✓				
	Capacity	✓				
	Recharge OK?	✓				
Switch/keypad	Operation	✓				
Display	Intensity	✓				
	Operation (segments)	✓				
Grill Filter	Condition	✓				
	Seal	✓				
Pump	Operation					
	Filter					
	Flow					
	Valves, Diaphragm					
PCB	Condition	✓				
Connectors	Condition	✓				
Sensor	O <sub>2</sub> LEL PID	✓ ✓ ✓	Low	High	TWA	STEL
			19.5%	23.5%	N/A	N/A
			5%LEL	10%LEL	N/A	N/A
			50ppm	100ppm	10ppm	25ppm
Alarms	Beeper	✓				
	Settings	✓				
Software	Version					
Datalogger	Operation					
Download	Operation					
Other tests:						

## Certificate of Calibration

This is to certify that the above instrument has been calibrated to the following specifications:

Diffusion mode Aspirated mode

Sensor	Serial no	Calibration gas and concentration	Certified	Gas bottle No	Instrument Reading
O <sub>2</sub>		20.9% Vol O <sub>2</sub>		Fresh Air	20.9% O <sub>2</sub>
LEL		50% LEL (Mentane)	NATA	SY131	50% LEL Methane
PID		98ppm Isobutylene	NATA	SY137	97.4ppm

Calibrated by:

Sophie Boler

Calibration date:

19-Jan-17

Next calibration due:

18-Jul-17

### Vapour Purging Form



Project Number: 52204	Date: 20.1.17	Sampler/s. FH + NW
Site Address: Hick Green Rd	Sample Method: MX6 (300mL/min)	Weather: fine

## Field Measurements

[illegible]

## Appendix K Results Summary Tables











	Asbestos														
	Approx. Sample Mass	Asbestos from ACM in Soil	Mass ACM	Mass Asbestos in ACM	Asbestos from FA & AF in Soil	Mass FA	Mass Asbestos in FA	Mass AF	Mass Asbestos in AF	Mass Asbestos in FA & AF	Synthetic Fibres - Comment	ACM - Comment	AF - Comment	FA - Comment	Organic Fibres - Comment
	g	%w/w	g	g	%w/w	g	g	g	g	g	Comment	Comment	Comment	Comment	Comment
ECL															
NEPM 2013 EIL - Commercial Industrial (generic)															
NEPM 2013 EIL - Urban Residential (generic)															
NEPM 2013 ESL Commercial and Industrial, Coarse Soil															
NEPM 2013 Soil HII D															
NEPM 2013 Soil HSL D - Sensitive Setting															
NEPM 2013 Soil HSL D for Vapour Intrusion - Sand 0 to <2mm															

Sample ID	Location	Sample Depth	Sample Date	Lithological Type	Lab Report											
JBH01_0.24-0.25	JBH01	0.24-0.25	19/01/2017	Fill	531205	122	0	0	0	0	0	0	0	0	1 <sup>ns</sup>	1 <sup>ns</sup>
JBH03_0.5-0.6	JBH03	0.5-0.6	19/01/2017	Fill	531205	60	0	0	0	0	0	0	0	0	1 <sup>ns</sup>	1 <sup>ns</sup>
JBH06_0.75-0.85	JBH06	0.75-0.85	19/01/2017	Fill	531205	94	0	0	0	0	0	0	0	0	1 <sup>ns</sup>	1 <sup>ns</sup>
QA20170119	JBH06	0.75-0.85	19/01/2017	Fill	531205	106	0	0	0	0	0	0	0	0	1 <sup>ns</sup>	1 <sup>ns</sup>

Data Comments

#1 ESDAT Combined. Some Analytes are missing from this Combined Compound.

#2 ESDAT Combined with Non-Detect Multiplier of 0.5.

#3 No respirable fibres detected

#4 Organic fibres detected.

#5 ESDAT Combined.

#6 Nil



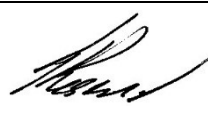
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3	Sumi Dorairaj	Joanne Rosner	Joanne Rosner		6/2/2017

