

## **Appendix 3 – Preliminary Contamination and Groundwater Assessment Report – 16-20 Princess Street**



**LETTER REPORT**

**TO**

**BRIGHTON AUSTRALIA**

**ON**

**PRELIMINARY CONTAMINATION & GROUNDWATER ASSESSMENT**

**FOR**

**PLANNING PROPOSAL**

**AT**

**16-20 PRINCESS STREET, BRIGHTON-LE-SANDS NSW**

**Job No: MPG 2038**

**Report No: ENV AA**

**Our Ref No: 507**

Postal Address: 1/78 Owen Street

Glendenning NSW 2761

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ABN: 44 106 976 738

Job No: MPG 2038  
Report No: ENV AA  
Our Ref: 507

Brighton Australia  
65 The Grand Parade  
Brighton Le Sands NSW 2216

Attention: Mr Alex Scionti

**Preliminary Contamination & Groundwater Assessment  
16-20 Princess Street, Brighton-Le-Sands NSW**

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All enquiries regarding this project are to be directed to the undersigned.

| Document Status                                                                                                                                 |                                                                                                                                              |             |
|-------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| Author                                                                                                                                          | Reviewer                                                                                                                                     |             |
|                                                              |                                                         |             |
| Craig Ridley<br><i>B. App. Sci. (Environmental Health)</i><br>Environmental Consultant<br><i>Compaction &amp; Soil Testing Services Pty Ltd</i> | Prakash Chandra<br><i>MIE Aust. Assoc. Dip. Civil Eng.</i><br>Geotechnical Director<br><i>Compaction &amp; Soil Testing Services Pty Ltd</i> |             |
| Revision Number                                                                                                                                 | Status                                                                                                                                       | Date        |
| 0                                                                                                                                               | Final                                                                                                                                        | 27 May 2014 |



## 1 Introduction

Compaction & Soil Testing Services Pty Ltd (CSTS) was engaged to undertake a limited desktop study of the properties known as 16-20 Princess Street, Brighton-Le-Sands NSW, hereinafter referred to as *'the Site'*.

## 2 Objective

The objective of the assessment was to provide a preliminary indication of the potential for soil contamination to be present within the site, approximate depth to groundwater and general advice regarding dewatering the site for the excavation of basement levels.

## 3 Scope of Works

In order to achieve the objectives, consultants from CSTS undertook the following scope of works;

- Review of readily available historic and current aerial photography,
- Review of readily available geology and acid sulfate soil risk maps,
- Review of readily available groundwater information held within the National Resource Atlas,
- Review of Contaminated Land Register and sites notified to the NSW EPA,
- Conduct non-intrusive site inspection.

## 4 Site Information

The site is rectangular in shape, and covers an area of approximately 1,000m<sup>2</sup> and is bound by Princess Street to the North, an access lane to the South, existing apartment block to the west and an apartment block under construction to the east. The site has an overall gentle slope (1.5°) from a high point (Approx 12.9m AHD) in the North-east to a low point (Approx 11.8m AHD) in the South-west.

The site is currently occupied by a brick duplex, and a second brick duplex, though the eastern half of the second duplex (14 Princess Street) has been demolished. The buildings appear to be relatively well maintained, though slightly overgrown. The easternmost building (No.: 16) appears to contain a Site Office in the rear of the property, whilst the building has been taped off to prevent access. Based on the appearance of the existing buildings, the site has been used for residential purposes for a long period of time, with the buildings appearing consistent with the 1943 aerial image.

## 5 Potential Contamination

### 5.1 Aerial Imagery Review

#### 5.1.1 Aerial Photograph 1943

The site and immediately surrounding area appears to contain duplex dwellings. Princess Street and an access laneway are present to the North and South respectively. A large tall building (possibly factory or office building), approximately 50m South-east of the site is observed. The general area appears to consist of residential properties.

## 5.1.2 Aerial Photograph 2014

The site appears relatively unchanged since the 1943 imagery. The neighbouring properties have been redeveloped into apartments, with the property immediately east in the process of development. The general area appears to have undergone significant redevelopment into high-rise residential properties with commercial developments included. A large hotel (Novotel) is observed approximately 80m east of the site.

## 5.2 Regulatory Notices Search

A search of the Contaminated Land Register for Notices issued under the *CLM Act 1997* did not return any results regarding this site. The site is also not included in the *List of NSW contaminated sites notified to the EPA*. The nearest notified site is a service station approximately 285m North-east of the site. The service station has previously been regulated, though the contamination within the service station (and area of impact) is not considered significant enough to warrant regulatory intervention.

## 6 Soil

### 6.1 Geology

Reference to the Sydney 1:100,000 Geological Sheet 9130 (Herbert C, 1983) indicates the general area of the site is underlain by coarse quartz sand with varying amounts of shell fragments. This is confirmed by reviewing the driller's logs for the groundwater bores in Section 7.1. The driller's logs identified the area as underlain by unconsolidated sands.

### 6.2 Acid Sulfate Soil Risk

CSTS has reviewed the NSW DLWC (1997) *Botany Bay – Acid Sulfate Soil Risk Map – Edition Two* to determine the potential for Acid Sulfate Soils. Based on this review, the site is within an area of low probability of encountering Acid Sulfate Soils at depths greater than 3m bgl. The general area (Brighton-Le-Sands) has been identified as Aeolian Sand-plains with elevations in excess of 4m AHD.

## 7 Groundwater

### 7.1 Groundwater Condition

Information pertaining to groundwater condition was determined by review of information held within the National Resource Atlas. Four (4) groundwater bores were reviewed. From the centre of the site, the bores were located approximately 150m North-east (GW106899), 100m North (GW107350), 140m West (GW105629) and 190m South-west (GW110845) of the site. Groundwater was encountered at 6.10m bgl, 5.80m bgl, 4.27m bgl and 5.49m bgl respectively. Based on the available information, groundwater within the site is expected to be encountered approximately 4-6m bgl.

### 7.2 Dewatering

Based on the predicted groundwater levels, CSTS is of the opinion that dewatering of groundwater for excavation will be required. Depending on the excavation and construction method, a possible method of dewatering could include the installation of 'sheet piles' to act as a cut-off wall. Spears would then be placed within the excavation and progressively dewatered during excavation, to minimise the potential for oxidation of acid sulfate soils, if encountered. The extracted water could then be reinjected beyond the cut-off walls. Treatment of the water may be required prior to reinjection.

# Compaction & Soil Testing Services Pty Limited

CSTS notes that approval from the NSW Office of Water may be required and should be contacted for further information.

Due to the predicted groundwater levels, the basement construction will likely be required to be 'Tanked' to eliminate the requirement for continued, permanent dewatering processes.

## 8 Conclusions

- The site has remained generally unchanged since 1947, and has been used for residential purposes,
- The site appears to have low potential for significant soil contamination to be present,
- Deep excavations within the site may encounter Acid Sulfate Soils,
- Groundwater will likely be encountered during excavation and require a dewatering management plan to be prepared.

## 9 Limitations

CSTS has relied on information provided and produced by others. CSTS has made no effort to substantiate the information provided or used and accepts no responsibility for the accuracy of the information.

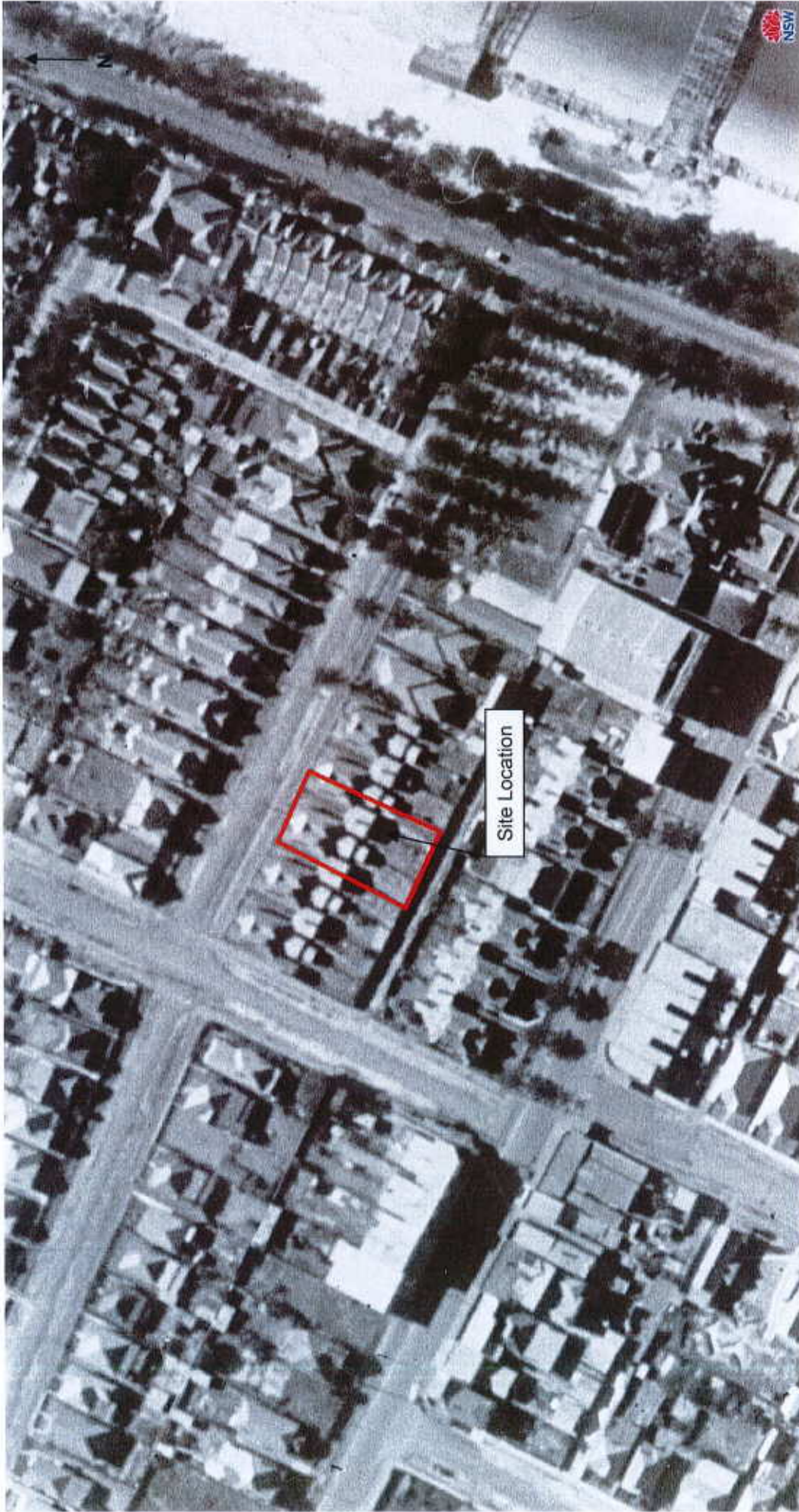
CSTS has only conducted a non-intrusive assessment of the site. The site inspection was conducted from the site boundary only. Factors that may influence the report may not have been observable from the site boundary. Should conditions within the site vary from the expected, this office should be contacted immediately. The conclusions of this report may vary depending on additional information which may become available.

This report has been prepared for an expressed purpose and for the express use of Morris Property Group and any third party they deem necessary. Reliance upon information held within this report by others is done so at own risk. This report has not been prepared in accordance with NSW OEH *Guidelines for Consultants Reporting on Contaminated Sites 2011*, and has been prepared only to assess the potential risks based on readily available information. CSTS makes no warranties, implied or otherwise, regarding the accuracy of information used within this report.

Should you have any further queries regarding this report, please do not hesitate to contact our office.

## 10 Attachments

- 1943 Aerial Photograph
- 2014 Aerial Photograph
- Groundwater Bore Summary Reports

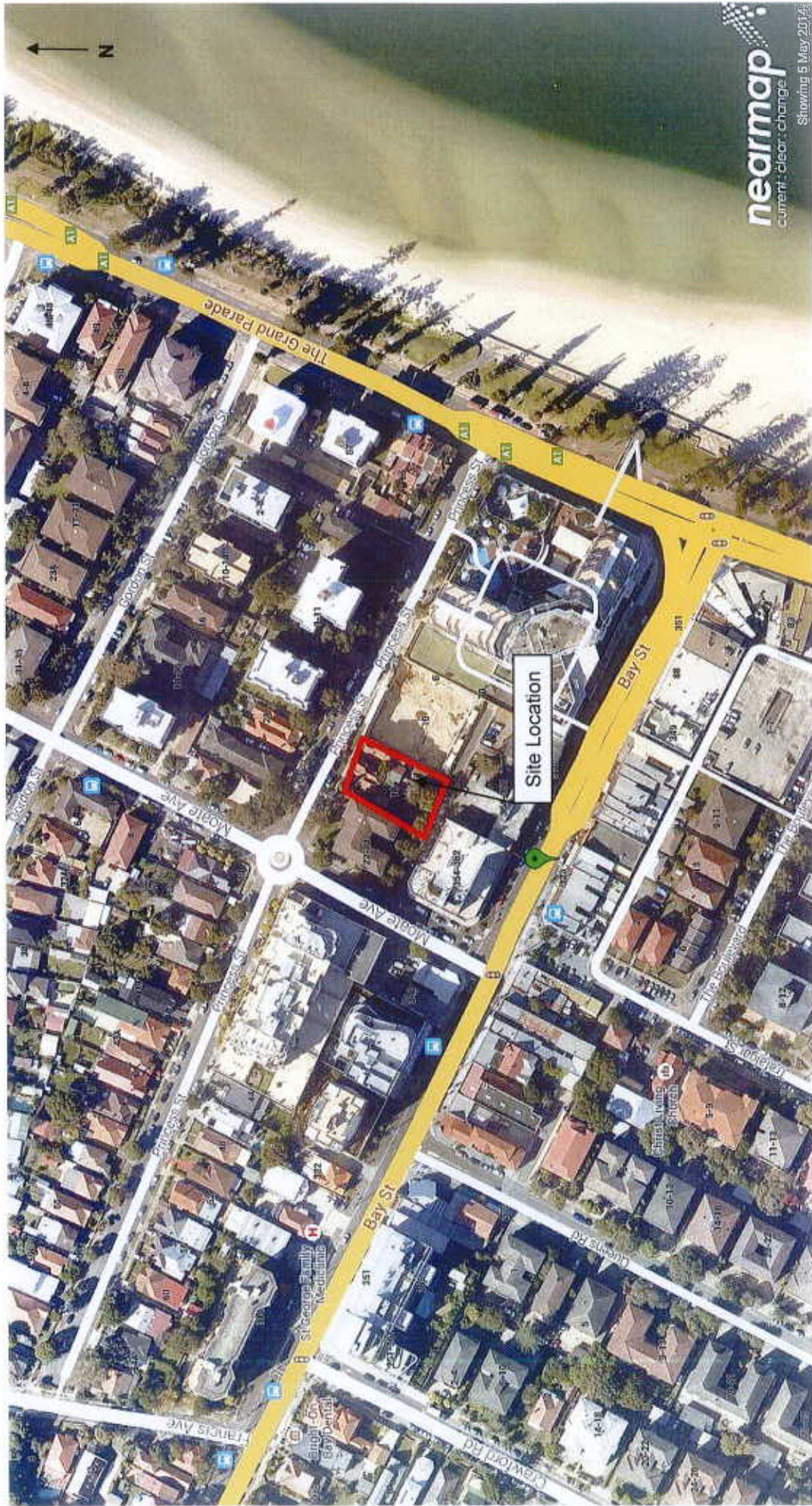


Sourced: <http://maps.six.nsw.gov.au> 23/05/2014  
Imagery Date: 1943

# Compaction and Soil Testing Services Pty Ltd

**Notes:** This drawing has been produced using a base plan provided by others to which additional information e.g.: density test, DCP and Test Pit locations or notes have been added. Some or all the information shown on the plan may not be relevant at the time of producing this drawing.

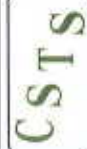
|           |            |                                                                           |                |           |
|-----------|------------|---------------------------------------------------------------------------|----------------|-----------|
| Drawn:    | CR         | 1943 Aerial Photograph<br>16-20 Princess Street<br>Brighton-Le-Sands, NSW | Drawing<br>No: | ENVAA_001 |
| Approved: | NG         |                                                                           |                |           |
| Date:     | 23/05/2014 |                                                                           |                |           |
| Scale:    | NTS        |                                                                           | Job No:        | MPG 2038  |



Sourced: [www.nearmap.com](http://www.nearmap.com) 23/05/2014  
 Imagery Date: 05/05/2014

### Compaction and Soil Testing Services Pty Ltd

**Notes:** This drawing has been produced using a base plan provided by others to which additional information e.g.: density test, DCP and Test Pit locations or notes have been added. Some or all the information shown on the plan may not be relevant at the time of producing this drawing.



Drawing No: ENVAA\_002  
 Job No: MPG 2038

2014 Aerial Photograph  
 16-20 Princess Street  
 Brighton-Le-Sands, NSW

Drawn: CR  
 Approved: NG  
 Date: 23/05/2014  
 Scale: NTS

# Groundwater Works Summary

For information on the meaning of fields please see [Glossary](#)  
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[Print Report](#)

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

## Work Requested -- GW105629

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

|                        |                 |
|------------------------|-----------------|
| GROUNDWATER NUMBER     | GW105629        |
| LIC-NUM                | 10WA113397      |
| AUTHORISED-PURPOSES    | DOMESTIC        |
| INTENDED-PURPOSES      | DOMESTIC        |
| WORK-TYPE              | Spear           |
| WORK-STATUS            | Supply Obtained |
| CONSTRUCTION-METHOD    | Jetted - Water  |
| OWNER-TYPE             | Private         |
| COMMENCE-DATE          |                 |
| COMPLETION-DATE        | 2003-11-19      |
| FINAL-DEPTH (metres)   | 7.93            |
| DRILLED-DEPTH (metres) | 7.93            |
| CONTRACTOR-NAME        |                 |
| DRILLER-NAME           |                 |
| PROPERTY               | BUNYAN          |
| GWMA                   | -               |
| GW-ZONE                | -               |
| STANDING-WATER-LEVEL   | 4.27            |
| SALINITY               |                 |
| YIELD                  | 1.50            |

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

|                  |                                     |
|------------------|-------------------------------------|
| REGION           | 10 - SYDNEY SOUTH COAST             |
| RIVER-BASIN      | 213 - SYDNEY COAST - GEORGES RIVER  |
| AREA-DISTRICT    |                                     |
| CMA-MAP          | 9130-3S                             |
| GRID-ZONE        | 56/1                                |
| SCALE            | 1:25,000                            |
| ELEVATION        |                                     |
| ELEVATION-SOURCE | (Unknown)                           |
| NORTHING         | 6240848.00                          |
| EASTING          | 329353.00                           |
| LATITUDE         | 33 57' 33"                          |
| LONGITUDE        | 151 9' 11"                          |
| GS-MAP           |                                     |
| AMG-ZONE         | 56                                  |
| COORD-SOURCE     | GIS - Geographic Information System |
| REMARK           |                                     |

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

|        |            |
|--------|------------|
| COUNTY | CUMBERLAND |
|--------|------------|

PARISH ST GEORGE  
PORTION-LOT-DP 70//6770

**Licensed (top)**

COUNTY CUMBERLAND  
PARISH ST GEORGE  
PORTION-LOT-DP 70 6770

**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<br>(metres) | DEPTH-TO<br>(metres) | OD<br>(mm) | ID<br>(mm) | INTERVAL | DETAIL                               |
|---------|---------|----------------|-----------------|------------------------|----------------------|------------|------------|----------|--------------------------------------|
| 1       |         | Hole           | Hole            | 0.00                   | 7.93                 | 100        |            |          | Jetted -<br>Water                    |
| 1       | 1       | Casing         | Stainless Steel | 0.00                   | 6.93                 | 42         | 38         |          | Glued<br>Stainless<br>Steel;         |
| 1       | 1       | Opening        | Screen          | 6.93                   | 7.93                 | 42         | 38         |          | (Unknown);<br>SL: 60mm;<br>(Unknown) |

**Water Bearing Zones (top)**

| FROM-DEPTH<br>(metres) | TO-DEPTH<br>(metres) | THICKNESS<br>(metres) | ROCK-CAT-DESC | S-W-L | D-D-L | YIELD | TEST-HOLE-DEPTH<br>(metres) | DURATION | SALINITY |
|------------------------|----------------------|-----------------------|---------------|-------|-------|-------|-----------------------------|----------|----------|
| 4.27                   | 7.93                 | 3.66                  |               | 4.27  |       | 1.00  |                             |          |          |

**Drillers Log (top)**

| FROM | TO   | THICKNESS | DESC | GEO-MATERIAL                         | COMMENT |
|------|------|-----------|------|--------------------------------------|---------|
| 0.00 | 7.93 | 7.93      |      | sand, unconsolidated with sea shells |         |

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# Groundwater Works Summary

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## Work Requested -- GW106899

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

|                        |                   |
|------------------------|-------------------|
| GROUNDWATER NUMBER     | GW106899          |
| LIC-NUM                | 10WA113717        |
| AUTHORISED-PURPOSES    | DOMESTIC          |
| INTENDED-PURPOSES      | DOMESTIC          |
| WORK-TYPE              | Spear             |
| WORK-STATUS            | Supply Obtained   |
| CONSTRUCTION-METHOD    | Jetted - Water    |
| OWNER-TYPE             | Private           |
| COMMENCE-DATE          |                   |
| COMPLETION-DATE        | 2005-11-22        |
| FINAL-DEPTH (metres)   | 9.46              |
| DRILLED-DEPTH (metres) | 9.46              |
| CONTRACTOR-NAME        |                   |
| DRILLER-NAME           |                   |
| PROPERTY               | STRATA PLAN 13286 |
| GWMA                   | -                 |
| GW-ZONE                | -                 |
| STANDING-WATER-LEVEL   | 6.10              |
| SALINITY               |                   |
| YIELD                  | 1.00              |

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

|                  |                                     |
|------------------|-------------------------------------|
| REGION           | 10 - SYDNEY SOUTH COAST             |
| RIVER-BASIN      | 213 - SYDNEY COAST - GEORGES RIVER  |
| AREA-DISTRICT    |                                     |
| CMA-MAP          | 9130-3S                             |
| GRID-ZONE        | 56/1                                |
| SCALE            | 1:25,000                            |
| ELEVATION        |                                     |
| ELEVATION-SOURCE |                                     |
| NORTHING         | 6240861.00                          |
| EASTING          | 329673.00                           |
| LATITUDE         | 33 57' 32"                          |
| LONGITUDE        | 151 9' 24"                          |
| GS-MAP           |                                     |
| AMG-ZONE         | 56                                  |
| COORD-SOURCE     | GIS - Geographic Information System |
| REMARK           |                                     |

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

COUNTY CUMBERLAND  
 PARISH ST GEORGE  
 PORTION-LOT-DP SP 13286

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

COUNTY CUMBERLAND  
 PARISH ST GEORGE  
 PORTION-LOT-DP 13286

### 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<br>(metres) | DEPTH-TO<br>(metres) | OD<br>(mm) | ID<br>(mm) | INTERVAL | DETAIL                                               |
|---------|---------|----------------|----------------|------------------------|----------------------|------------|------------|----------|------------------------------------------------------|
| 1       |         | Hole           | Hole           | 0.00                   | 9.46                 | 100        |            |          | Jetted -<br>Water                                    |
| 1       | 1       | Casing         | PVC Class 9    | 0.00                   | 8.46                 | 100        | 100        |          | Glued<br>Stainless<br>Steel; A:<br>.01mm;<br>Screwed |
| 1       | 1       | Opening        | Screen         | 8.46                   | 9.46                 | 50         |            |          |                                                      |

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

| FROM-DEPTH<br>(metres) | TO-DEPTH<br>(metres) | THICKNESS<br>(metres) | ROCK-CAT-DESC | S-W-L | D-D-L | YIELD | TEST-HOLE-DEPTH<br>(metres) | DURATION | SALINITY |
|------------------------|----------------------|-----------------------|---------------|-------|-------|-------|-----------------------------|----------|----------|
| 6.10                   | 9.46                 | 3.36                  |               | 6.10  |       | 1.00  |                             |          | Good     |

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

| FROM | TO   | THICKNESS | DESC | GEO-MATERIAL         | COMMENT |
|------|------|-----------|------|----------------------|---------|
| 0.00 | 9.46 | 9.46      |      | Sand, unconsolidated |         |

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# Groundwater Works Summary

For information on the meaning of fields please see [Glossary](#)

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## Work Requested -- GW107350

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

|                        |                 |
|------------------------|-----------------|
| GROUNDWATER NUMBER     | GW107350        |
| LIC-NUM                | 10WA113918      |
| AUTHORISED-PURPOSES    | DOMESTIC        |
| INTENDED-PURPOSES      | DOMESTIC        |
| WORK-TYPE              | Spear           |
| WORK-STATUS            | Supply Obtained |
| CONSTRUCTION-METHOD    | Jetted - Water  |
| OWNER-TYPE             | Private         |
| COMMENCE-DATE          |                 |
| COMPLETION-DATE        | 2005-09-24      |
| FINAL-DEPTH (metres)   | 9.46            |
| DRILLED-DEPTH (metres) | 9.46            |
| CONTRACTOR-NAME        |                 |
| DRILLER-NAME           |                 |
| PROPERTY               | STRATA PLAN 447 |
| GWMA                   | -               |
| GW-ZONE                | -               |
| STANDING-WATER-LEVEL   | 5.80            |
| SALINITY               |                 |
| YIELD                  | 1.00            |

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

|                  |                                     |
|------------------|-------------------------------------|
| REGION           | 10 - SYDNEY SOUTH COAST             |
| RIVER-BASIN      | 213 - SYDNEY COAST - GEORGES RIVER  |
| AREA-DISTRICT    |                                     |
| CMA-MAP          | 9130-3S                             |
| GRID-ZONE        | 56/1                                |
| SCALE            | 1:25,000                            |
| ELEVATION        |                                     |
| ELEVATION-SOURCE |                                     |
| NORTHING         | 6240889.00                          |
| EASTING          | 329606.00                           |
| LATITUDE         | 33 57' 31"                          |
| LONGITUDE        | 151 9' 21"                          |
| GS-MAP           |                                     |
| AMG-ZONE         | 56                                  |
| COORD-SOURCE     | GIS - Geographic Information System |
| REMARK           |                                     |

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

COUNTY CUMBERLAND  
PARISH ST GEORGE  
PORTION-LOT-DP SP447

#### Licensed (top)

COUNTY CUMBERLAND  
PARISH ST GEORGE  
PORTION-LOT-DP 447

#### 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<br>(metres) | DEPTH-TO<br>(metres) | OD<br>(mm) | ID<br>(mm) | INTERVAL | DETAIL                                      |
|---------|---------|----------------|----------------|------------------------|----------------------|------------|------------|----------|---------------------------------------------|
| 1       |         | Hole           | Hole           | 0.00                   | 9.46                 | 100        |            |          | Jetted -<br>Water                           |
| 1       | 1       | Casing         | PVC Class 12   | 0.00                   | 8.85                 | 42         |            |          | Glued                                       |
| 1       | 1       | Opening        | Screen         | 8.85                   | 9.45                 | 50         |            |          | Stainless<br>Steel; A:<br>.01mm;<br>Screwed |

#### Water Bearing Zones (top)

| FROM-DEPTH<br>(metres) | TO-DEPTH<br>(metres) | THICKNESS<br>(metres) | ROCK-CAT-DESC | S-W-L | D-D-L | YIELD | TEST-HOLE-DEPTH<br>(metres) | DURATION | SALINITY |
|------------------------|----------------------|-----------------------|---------------|-------|-------|-------|-----------------------------|----------|----------|
| 5.80                   | 9.46                 | 3.66                  |               | 5.80  |       | 1.00  |                             |          | Good     |

#### Drillers Log (top)

| FROM | TO   | THICKNESS | DESC | GEO-MATERIAL         | COMMENT |
|------|------|-----------|------|----------------------|---------|
| 0.00 | 9.46 | 9.46      |      | Sand, unconsolidated |         |

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# Groundwater Works Summary

For information on the meaning of fields please see [Glossary](#)  
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## Work Requested -- GW110845

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

|                        |                   |
|------------------------|-------------------|
| GROUNDWATER NUMBER     | GW110845          |
| LIC-NUM                | 10WA114294        |
| AUTHORISED-PURPOSES    | DOMESTIC          |
| INTENDED-PURPOSES      | DOMESTIC          |
| WORK-TYPE              | Spear             |
| WORK-STATUS            |                   |
| CONSTRUCTION-METHOD    | Jetted - Water    |
| OWNER-TYPE             | Private           |
| COMMENCE-DATE          |                   |
| COMPLETION-DATE        | 2006-11-06        |
| FINAL-DEPTH (metres)   | 8.54              |
| DRILLED-DEPTH (metres) | 8.54              |
| CONTRACTOR-NAME        |                   |
| DRILLER-NAME           |                   |
| PROPERTY               | STRATA PLAN 45176 |
| GWMA                   | -                 |
| GW-ZONE                | -                 |
| STANDING-WATER-LEVEL   | 5.49              |
| 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         | 6240643.00              |
| EASTING          | 329387.00               |
| LATITUDE         | 33 57' 39"              |
| LONGITUDE        | 151 9' 12"              |
| GS-MAP           |                         |
| AMG-ZONE         | 56                      |
| COORD-SOURCE     |                         |
| REMARK           |                         |

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

COUNTY CUMBERLAND  
 PARISH ST GEORGE  
 PORTION-LOT-DP //45176

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

COUNTY CUMBERLAND  
 PARISH ST GEORGE  
 PORTION-LOT-DP 1 45176

### 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<br>(metres) | DEPTH-TO<br>(metres) | OD<br>(mm) | ID<br>(mm) | INTERVAL | DETAIL                                               |
|---------|---------|----------------|----------------|------------------------|----------------------|------------|------------|----------|------------------------------------------------------|
| 1       |         | Hole           | Hole           | 0.00                   | 8.54                 | 100        |            |          | Jetted -<br>Water                                    |
| 1       | 1       | Casing         | PVC Class 9    | 0.00                   | 7.63                 | 100        |            |          | Glued<br>Stainless<br>Steel; A:<br>.01mm;<br>Screwed |
| 1       | 1       | Opening        | Screen         | 0.00                   | 0.00                 | 50         |            |          |                                                      |

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

| FROM-DEPTH<br>(metres) | TO-DEPTH<br>(metres) | THICKNESS<br>(metres) | ROCK-CAT-DESC | S-W-L | D-D-L | YIELD | TEST-HOLE-DEPTH<br>(metres) | DURATION | SALINITY |
|------------------------|----------------------|-----------------------|---------------|-------|-------|-------|-----------------------------|----------|----------|
| 5.49                   | 8.54                 | 3.05                  |               | 5.49  |       | 1.00  |                             |          | Good     |

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

| FROM | TO   | THICKNESS | DESC | GEO-MATERIAL            | COMMENT |
|------|------|-----------|------|-------------------------|---------|
| 0.00 | 8.54 | 8.54      |      | UNCONSOLIDATED ALL SAND |         |

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