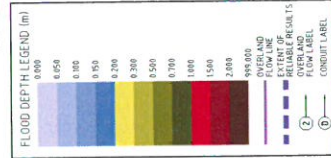




8th November 1984 - WITH AMPLIFICATION

1:1000

| CONDUIT LABEL | CONDUIT DIMENSION (m) | STONY WATER CHANNEL | LOCATION                              | $Q (m^3/s)$ | $V (m/s)$ | STORM DURATION (min) | OVERLAND FLOW LABEL | LOCATION       | $Q (m^3/s)$ |
|---------------|-----------------------|---------------------|---------------------------------------|-------------|-----------|----------------------|---------------------|----------------|-------------|
| A             | 3.6 x 2.1             | 300                 | HAY STREET                            | 34.1        | 4.5       | 120                  | 1                   | HAY STREET     | 21.8        |
| B             | 3.1 x 2.0             | 300                 | HAY STREET                            | 12.9        | 2.2       | 120                  | 2                   | HARBOUR STREET | 9.6         |
| H             | 4.3 x 2.4             | 300                 | HAY STREET                            | 24.8        | 2.4       | 120                  | 3                   | HAY STREET     | 11.0        |
|               |                       |                     | BETWEEN LC AND CAR PARK/THE BOULEVARD |             |           |                      | 6                   |                | 8.4         |
|               |                       |                     | HARBOUR STREET                        |             |           |                      | 7                   |                | 5.4         |
|               |                       |                     | LITTLE PIER STREET                    |             |           |                      | 8                   |                | 4.6         |



## NOTES

- THE TIDE LEVEL IN COCKLE BAY ADOPTED IN THE MODELLING IS 0.3m AND ESTIMATED FROM FORT DENISON TIDE LEVEL INFORMATION DURING THE STORM EVENT. THE TIDE WAS DECLINING DURING THE RAINFALL EVENT.
- BASED ON SYDNEY WATER WORKS AS EXECUTED DRAWINGS FOR THE DARLING HARBOUR AMPLIFICATION IT APPEARS THAT THE 4.3m x 2.4m CHANNEL (LACKEY-HAY ST AMP 300 MAIN CHANNEL) WAS NOT CONSTRUCTED AT THE TIME OF THE STORM EVENT.
- THE DEM ADOPTED FOR THE NOVEMBER 1984 MODEL USED THE EXISTING SURFACE (AS DEFINED IN THE ACCOMPANYING REPORT) TO APPROXIMATE THE GROUND LEVELS.

## TABLE NOTES

- FLOW IS PEAK FOR MODELLED DESIGN CONDITION
- VELOCITY IS AT CORRESPONDING DESIGN FLOW

## DARLING HARBOUR LIVE



- NOTES:
- ALL DIMENSIONS IN METRES UNLESS NOTED OTHERWISE
  - ALL COORDINATES TO MSL, ALL LEVELS TO AHD
  - CONTRACT SPECIFICATIONS AND DRAWINGS
  - PREDICTED BOUNDARIES ARE INDICATIVE ONLY AND ARE SUBJECT TO CHANGE



| REV | DATE       | DESCRIPTION   |
|-----|------------|---------------|
| 01  | 11/03/2013 | ISSUE FOR RFP |

**Lend Lease**

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**Hyder**

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SYDNEY NSW 2000  
TEL: (02) 9550 1000  
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**8th November 1984  
FLOOD ASSESSMENTS**

STATUS: PRELIMINARY ONLY

SCALE: 1:1000

PROJECT: SICEEP DARLING HARBOUR PROJECT PRECINCT

DRAWING NUMBER: AA004399

DRAWING TITLE: WP-FL

APPROVED: JH

REVIEW: 01

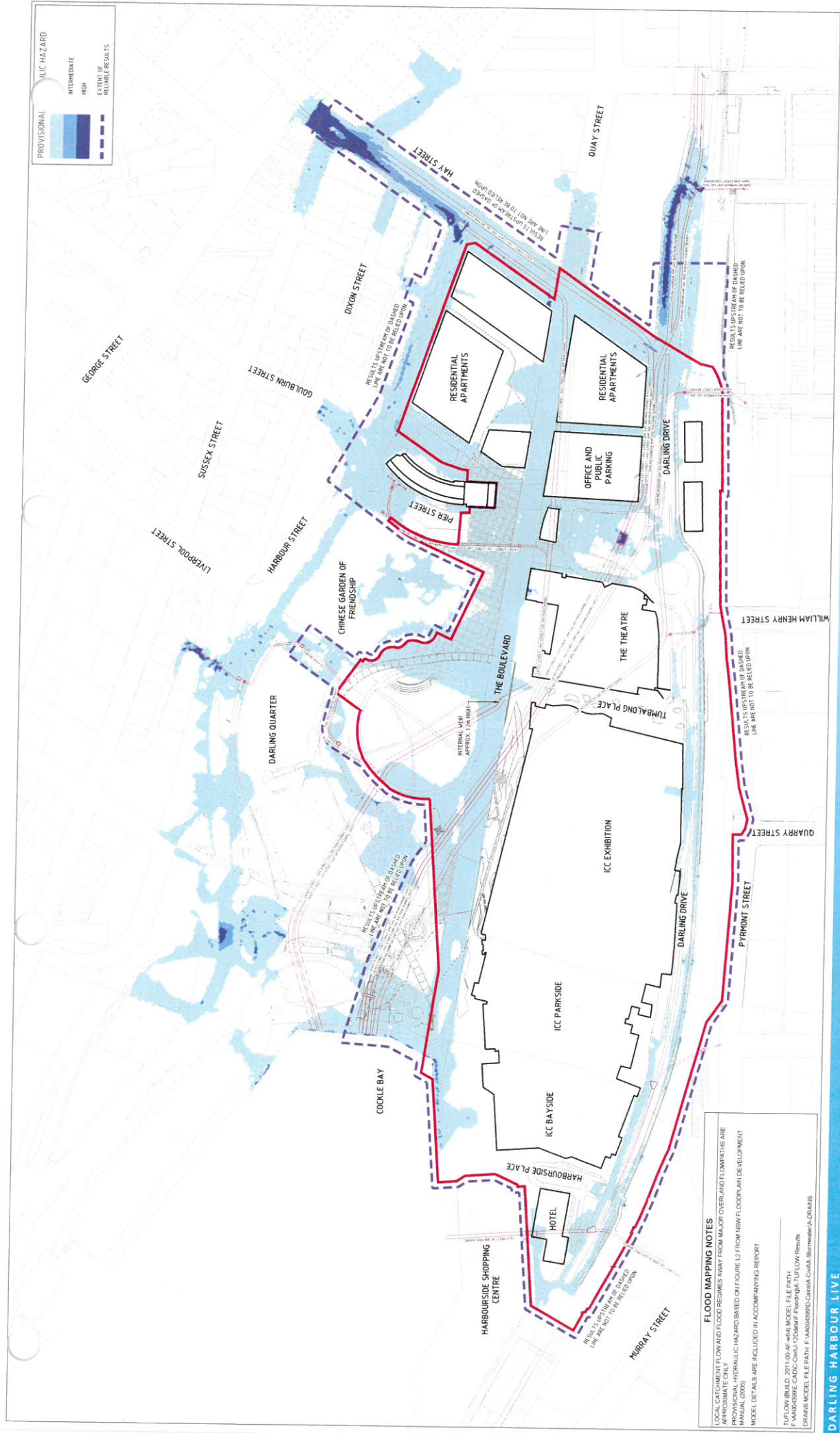












**FLOOD MAPPING NOTES**

1. LOCAL CATCHMENT FLOOD REGIMES AWAY FROM MAJOR OVERLAND FLOWPATHS ARE APPROXIMATED TO AHA ALL LEVELS TO AND ABOVE 1.5m AHD.

2. PROVISIONAL HYDRAULIC HAZARD BASED ON FIGURE 12 FROM NSW FLOODPLAIN DEVELOPMENT MANUAL (2008).

3. CONTRACTS, SPECIFICATIONS AND DRAWINGS ARE INDICATIVE ONLY AND ARE SUBJECT TO CHANGE.

4. MODEL DETAILS ARE INCLUDED IN ACCOMPANYING REPORT.

TUFLOW (BUILD 2011-09-06) 464-6 MODEL FILE PATH  
F:\VANDAS999\CAD\CD\12\Darling Harbour\TUFLOW Results  
DRAINS MODEL FILE PATH F:\VANDAS999\CAD\CD\12\Darling Harbour\TUFLOW Results

0 30 60 90 120 150m

1:1500

- NOTES**
1. ALL DIMENSIONS IN METRES UNLESS NOTED OTHERWISE
  2. ALL COORDINATES TO AHA ALL LEVELS TO AND ABOVE 1.5m AHD
  3. CONTRACTS, SPECIFICATIONS AND DRAWINGS ARE INDICATIVE ONLY AND ARE SUBJECT TO CHANGE
  4. MODEL DETAILS ARE INCLUDED IN ACCOMPANYING REPORT

| NOTES |                                 |
|-------|---------------------------------|
| 1     | USE FOR DEVELOPMENT APPLICATION |
| 2     | DATE                            |
| 3     | 15/02/2013                      |
| 4     | DATE                            |

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**Hyder**

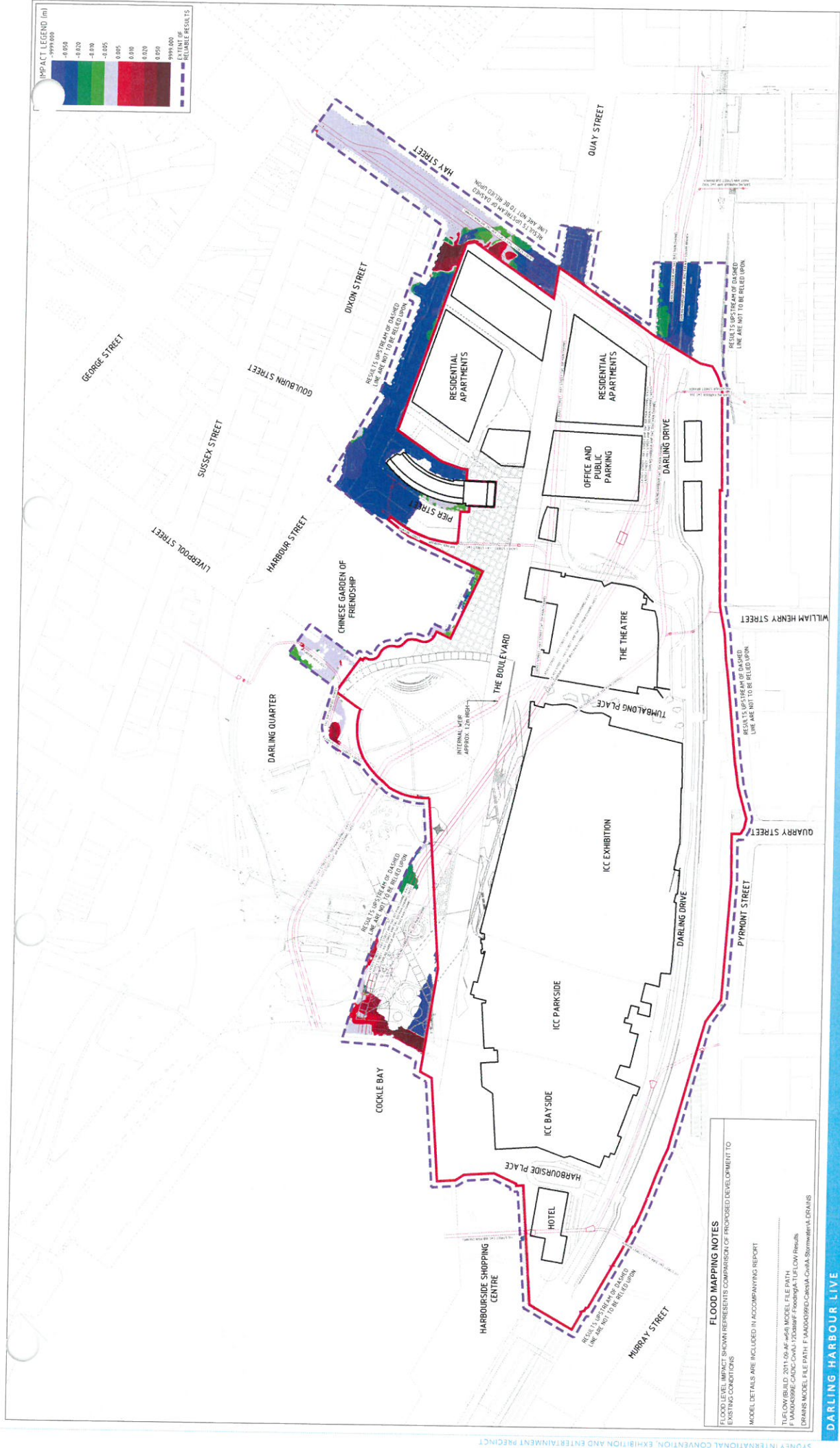
HYDER CONSULTING PTY LTD  
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|                |  |                                                                                                    |    |
|----------------|--|----------------------------------------------------------------------------------------------------|----|
| DRAWING TITLE  |  | 100 YEAR ARI PROPOSED DEVELOPMENT<br>PROVISIONAL HYDRAULIC HAZARD<br>WITHOUT CULVERT AMPLIFICATION |    |
| STATUS         |  | PRELIMINARY ONLY                                                                                   |    |
| SCALE @ A1     |  | 1:1500                                                                                             |    |
| PROJECT NUMBER |  | AA004399                                                                                           |    |
| DRAWN          |  | RD                                                                                                 | CM |
| CHECKED        |  | BC                                                                                                 | JH |
| APPROVED       |  |                                                                                                    |    |
| PROJECT NAME   |  | WP-FL-0603                                                                                         |    |
| REV            |  | 01                                                                                                 |    |



[illegible]





**FLOOD MAPPING NOTES**

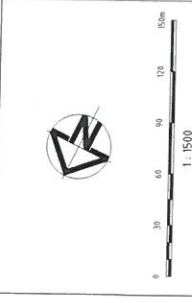
FLOOD LEVEL IMPACT SHOWN REPRESENTS COMPARISON OF PROPOSED DEVELOPMENT TO EXISTING CONDITIONS

MODEL DETAILS ARE INCLUDED IN ACCOMPANYING REPORT

TURLOW (BUILD 2011-09-06) MODEL FILE PATH: F:\A0004399-00-CAD-Civil\1200m\A1 Flood\A1 Flood\Results

DRAINS MODEL FILE PATH: F:\A0004399-00-CAD-Civil\1200m\A1 Flood\A1 Flood\Drains

- NOTES**
- 1. ALL DIMENSIONS IN METRES UNLESS NOTED OTHERWISE
  - 2. THIS DRAWING MUST BE USED IN CONJUNCTION WITH ALL RELEVANT CONTRACTS, SPECIFICATIONS AND DRAWINGS
  - 3. BOUNDARIES ARE INDICATIVE ONLY AND ARE SUBJECT TO CHANGE



| REVISIONS |                                   | DESCRIPTION | DATE       |
|-----------|-----------------------------------|-------------|------------|
| 1         | ISSUE FOR DEVELOPMENT APPLICATION |             | 11/06/2013 |
| 2         |                                   |             |            |
| 3         |                                   |             |            |
| 4         |                                   |             |            |
| 5         |                                   |             |            |
| 6         |                                   |             |            |
| 7         |                                   |             |            |
| 8         |                                   |             |            |
| 9         |                                   |             |            |
| 10        |                                   |             |            |

**CLIENT**

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**100 YEAR ARI PROPOSED DEVELOPMENT FLOOD LEVEL IMPACT WITHOUT CULVERT AMPLIFICATION INCLUDING POTENTIAL CLIMATE CHANGE**

**STATUS**

|                  |
|------------------|
| PRELIMINARY ONLY |
| SCALE @ A1       |
| 1:1500           |
| PROJECT NUMBER   |
| AA004399         |
| WIP-FL-0612      |
| REV              |
| 01               |



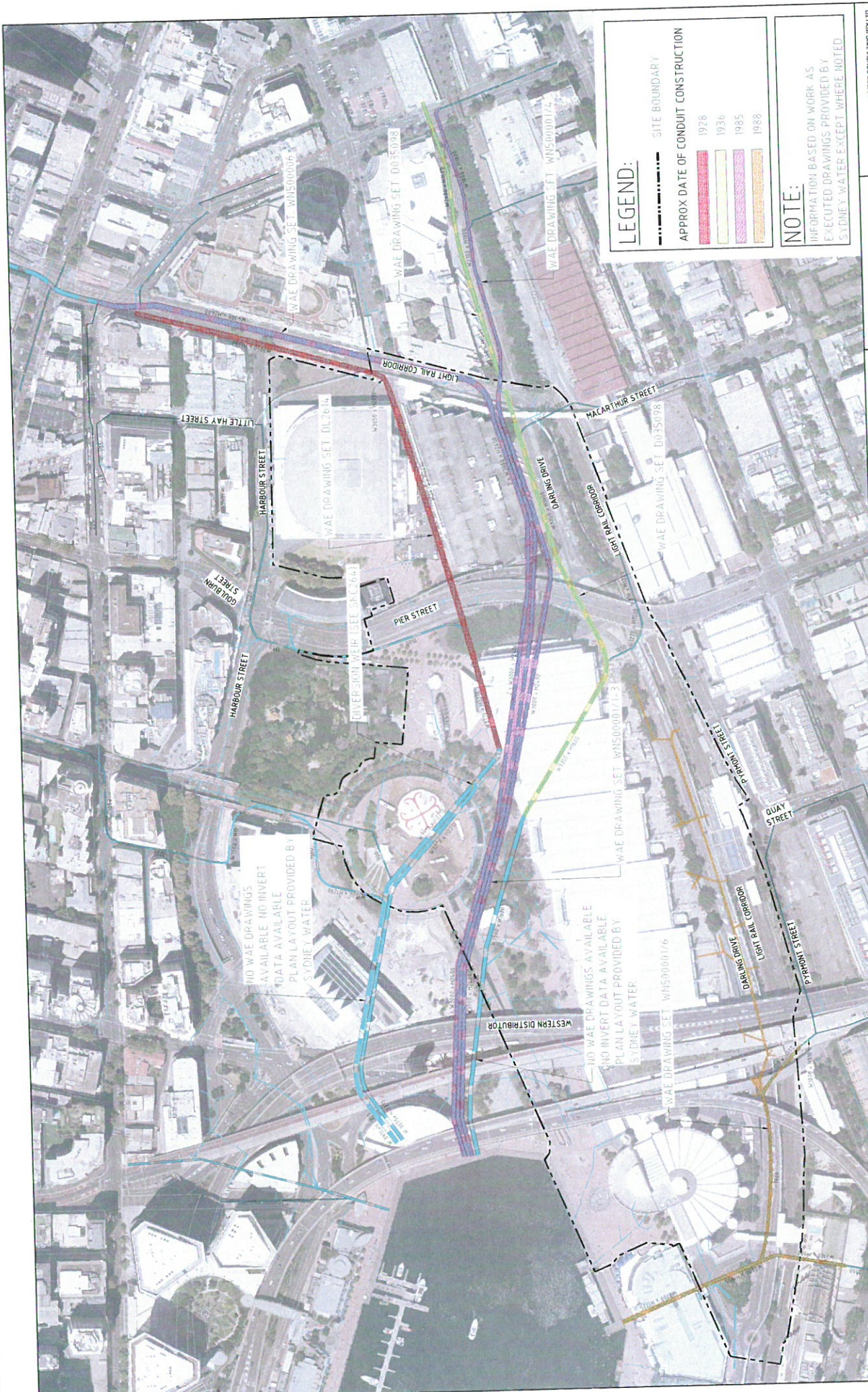


## APPENDIX D

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# SYDNEY WATER CLOSED CONDUIT SYSTEMS





**LEGEND:**

— SITE BOUNDARY

APPROX DATE OF CONDUIT CONSTRUCTION

- 1928
- 1936
- 1985
- 1988

**NOTE:**

INFORMATION BASED ON WORK AS  
EXECUTED DRAWINGS PROVIDED BY  
SYDNEY WATER EXCEPT WHERE NOTED

**PRELIMINARY**

NOT TO BE USED FOR CONSTRUCTION

|        |          |
|--------|----------|
| Scale  | 1:1500   |
| Sheet  | A1       |
| Height | AHD      |
| Level  | Original |
| Grid   | Original |

**SICEEP**

DARLING HARBOUR  
PROJECT PRECINCT

**SYDNEY WATER CLOSED  
CONDUIT INFORMATION**

**Lend Lease**

0 30 60 90 120 150m

1:1500

North Arrow

DATE: 24/04/2015

BY: [Signature]

FOR: [Signature]

**HYDER CONSULTING PTY LTD**

Level 15, 141 Walker St  
North Sydney NSW 2060

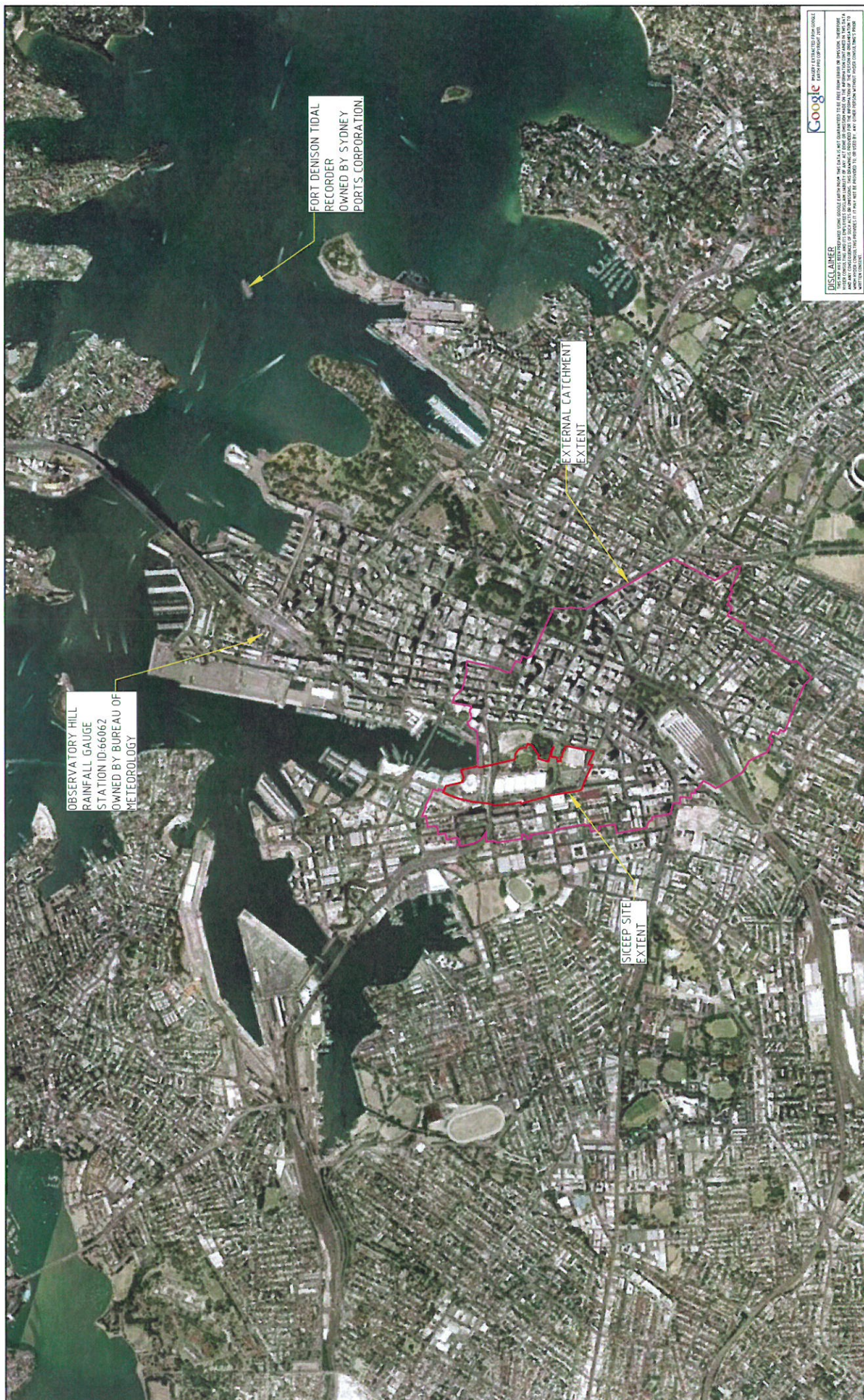
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Project No: SKC266 - 04399 - P1













### PRELIMINARY

NOT TO BE USED FOR CONSTRUCTION

| Series        |       | Current Issue Signatures |      |
|---------------|-------|--------------------------|------|
| NTS           | Drawn | Designed                 | A.N. |
| A1            |       | G.D.                     |      |
| Original Size |       | Checked                  |      |
| Reprint       |       | Approved                 |      |
| Grid          |       |                          |      |

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## SICEEP DARLING HARBOUR PROJECT PRECINCT

DRAWING No. SKC280 —  
 SCALE 1:1000  
 DATE 22/04/2013

P1 ISSUE FOR INFORMATION

## RECORD AND GAUGE STATION LOCATIONS

Drawing No. SKC280 —  
 SCALE 1:1000  
 DATE 22/04/2013

P1 ISSUE FOR INFORMATION

## RECORD AND GAUGE STATION LOCATIONS

Drawing No. SKC280 —  
 SCALE 1:1000  
 DATE 22/04/2013