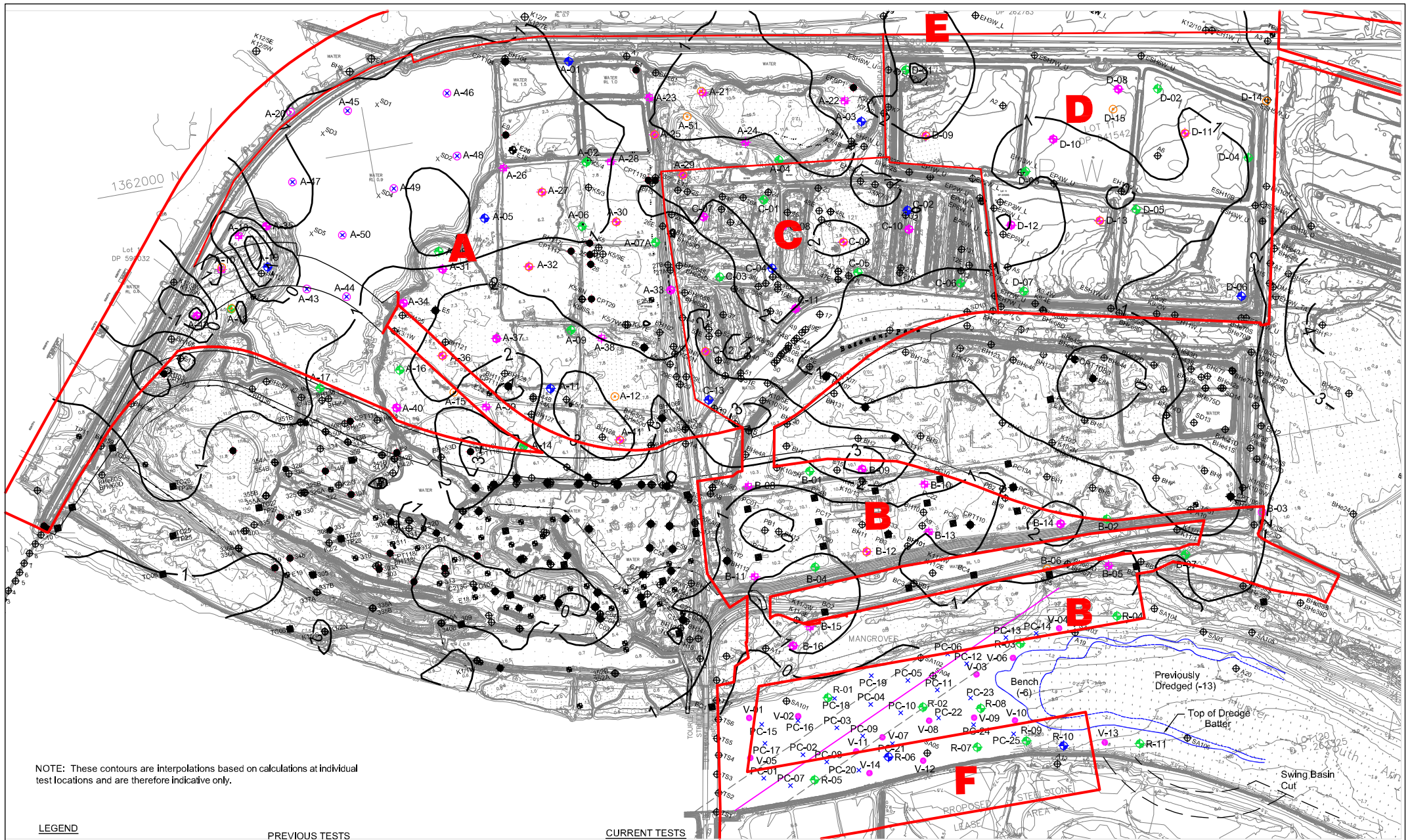




NOTE: These contours are interpolations based on calculations at individual test locations and are therefore indicative only.

LEGEND

- NCIG RAILWAY EASEMENT
- 2009 SURFACE CONTOUR (m AHD)
- BOUNDARY OF T4 SITE

PREVIOUS TESTS

- APPROXIMATE LOCATION OF TEST PIT
- ◆ APPROXIMATE LOCATION OF CONE PENETRATION TEST
- APPROXIMATE LOCATION OF PIEZOCON PENETRATION TEST
- ⊕ APPROXIMATE LOCATION OF BORE
- X APPROXIMATE LOCATION OF SEDIMENT SAMPLE

CURRENT TESTS

- ⊕ 'DEEP' BORE
- ⊕ 'SHALLOW' BORE
- CPT (Standard)
- CPTu (Piezocene)

- VIBROCORE
- ⊕ TEST PIT
- × PUSH CORE

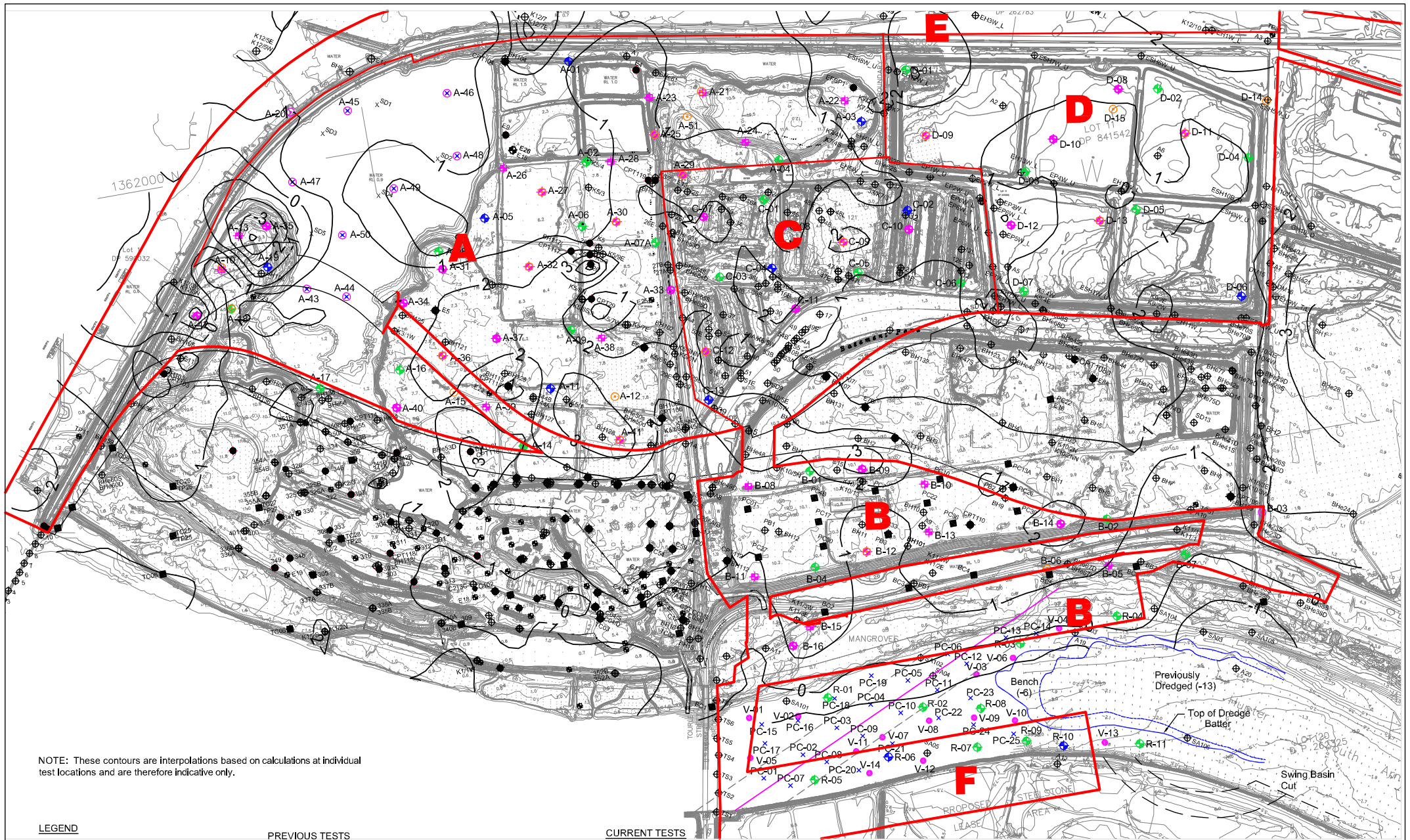
— 1 — CONTOUR OF BASE OF FILL LEVEL (NHTG)

0 50 100 150 200 300 400 600 800m

1:8000 @ A3

DRAWING ADAPTED FROM SURVEY PLAN BY CONNELL HATCH REF NO: HW00-00-C-61-800 DATED 29/3/06 AND SURVEY FROM PWCS REF KOORAGANG RAIL 0.5m CONTOURS 2009/4





NOTE: These contours are interpolations based on calculations at individual test locations and are therefore indicative only.

LEGEND

- NCIG RAILWAY EASEMENT
- 2009 SURFACE CONTOUR (m AHD)
- BOUNDARY OF T4 SITE

PREVIOUS TESTS

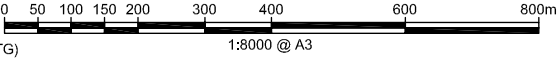
- APPROXIMATE LOCATION OF TEST PIT
- APPROXIMATE LOCATION OF CONE PENETRATION TEST
- APPROXIMATE LOCATION OF PIEZOCON PENETRATION TEST
- APPROXIMATE LOCATION OF BORE
- APPROXIMATE LOCATION OF SEDIMENT SAMPLE

CURRENT TESTS

- 'DEEP' BORE
- 'SHALLOW' BORE
- CPT (Standard)
- CPTu (Piezocone)

- VIBROCORE
- TEST PIT
- PUSH CORE

1 — CONTOUR OF TOP OF SOFT CLAY LEVEL (NHTG)



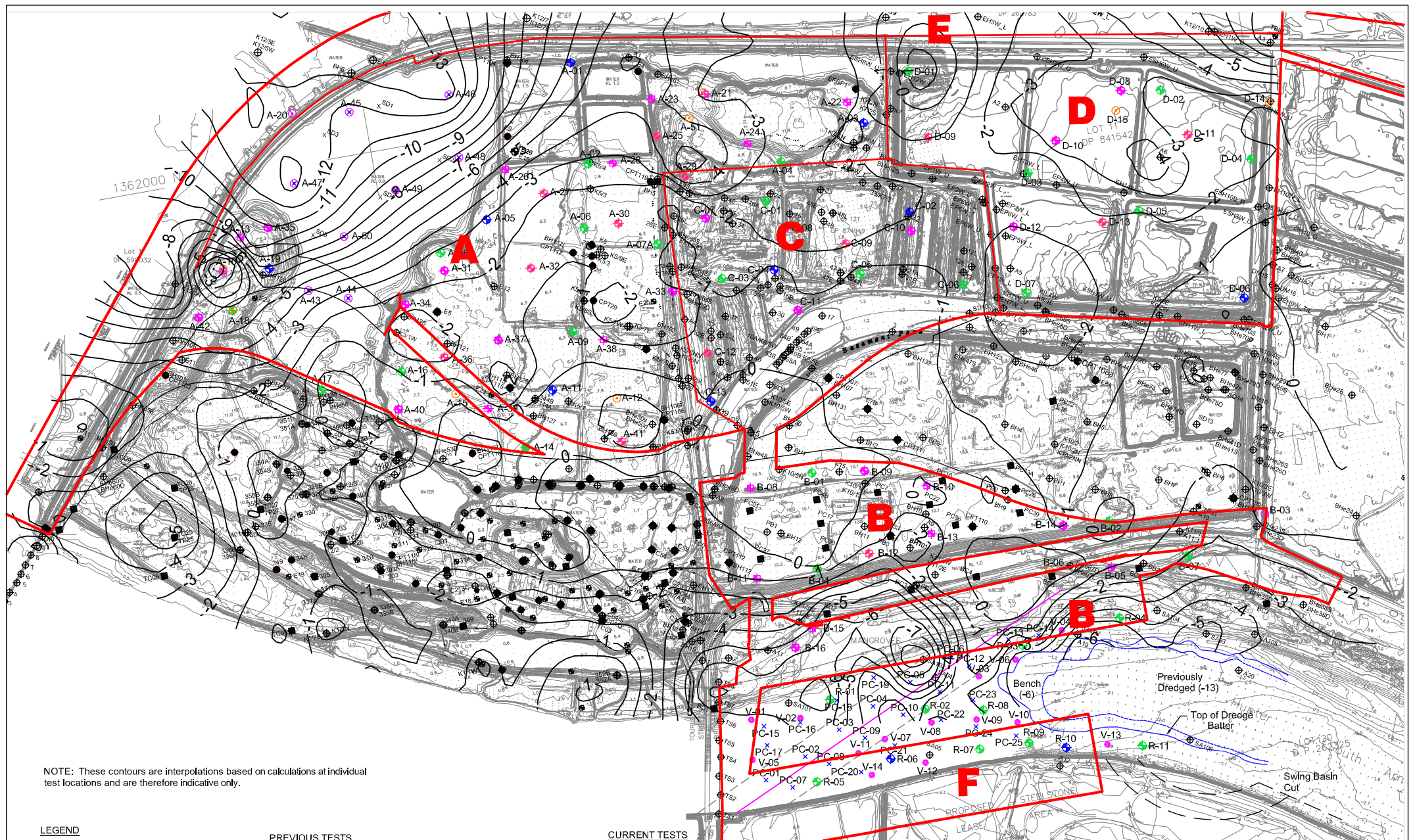
Douglas Partners
Geotechnics | Environment | Groundwater

CLIENT: Port Waratah Coal Services Limited	
OFFICE: Newcastle	DRAWN BY: PLH
SCALE: 1:8000@A3	DATE: 04.11.2011

TITLE: **Contours of Top of Soft Clay Level**
Groundwater Assessment
Proposed Terminal 4 Project, Kooragang Island



PROJECT No: 49533.02
DRAWING No: 5.11
REVISION: 1



NOTE: These contours are interpolations based on calculations at individual test locations and are therefore indicative only.

LEGEND

- NCIG RAILWAY EASEMENT
- 2009 SURFACE CONTOUR (m AHD)
- BOUNDARY OF T4 SITE

PREVIOUS TESTS

- APPROXIMATE LOCATION OF TEST PIT
- APPROXIMATE LOCATION OF CONE PENETRATION TEST
- APPROXIMATE LOCATION OF PIEZOCONE PENETRATION TEST
- APPROXIMATE LOCATION OF BORE
- X APPROXIMATE LOCATION OF SEDIMENT SAMPLE

CURRENT TESTS

- 'DEEP' BORE
- 'SHALLOW' BORE
- CPT (Standard)
- CPTu (Piezocone)

- VIBROCORE
- TEST PIT
- PUSH CORE

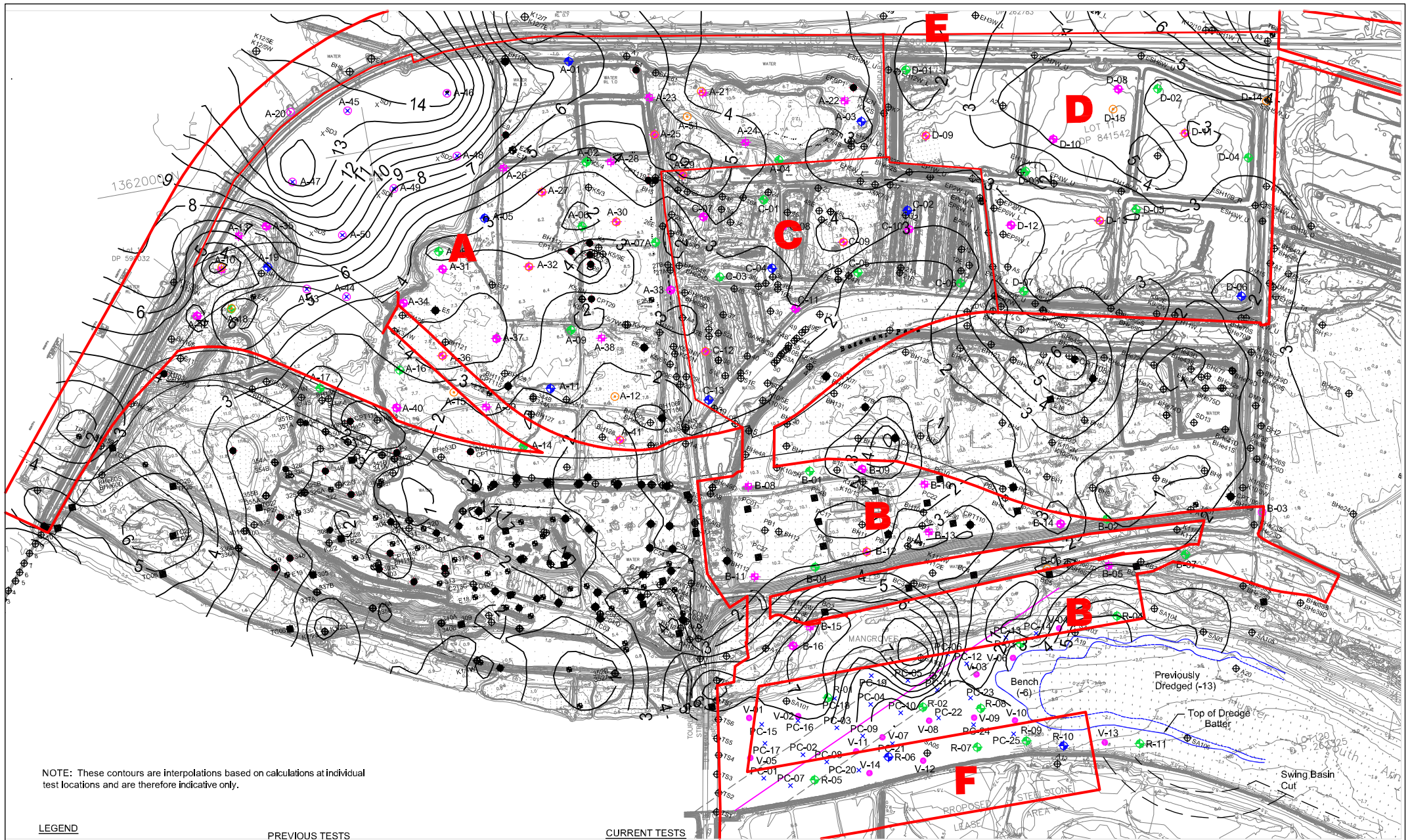
— 1 — CONTOUR OF BASE OF SOFT CLAY LEVEL (NHTG)

0 50 100 150 200 300 400 600 800m

1:8000 @ A3

DRAWING ADAPTED FROM SURVEY PLAN BY CONNELL HATCH REF NO: HW00-00-C-61-800 DATED 29/3/06 AND SURVEY FROM PWCS REF KOORAGANG RAIL 0.5m CONTOURS 2009/04





NOTE: These contours are interpolations based on calculations at individual test locations and are therefore indicative only.

LEGEND

- NCIG RAILWAY EASEMENT
- 2009 SURFACE CONTOUR (m AHD)
- BOUNDARY OF T4 SITE

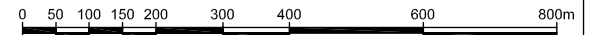
PREVIOUS TESTS

- APPROXIMATE LOCATION OF TEST PIT
- APPROXIMATE LOCATION OF CONE PENETRATION TEST
- APPROXIMATE LOCATION OF PIEZOCONE PENETRATION TEST
- APPROXIMATE LOCATION OF BORE
- X APPROXIMATE LOCATION OF SEDIMENT SAMPLE

CURRENT TESTS

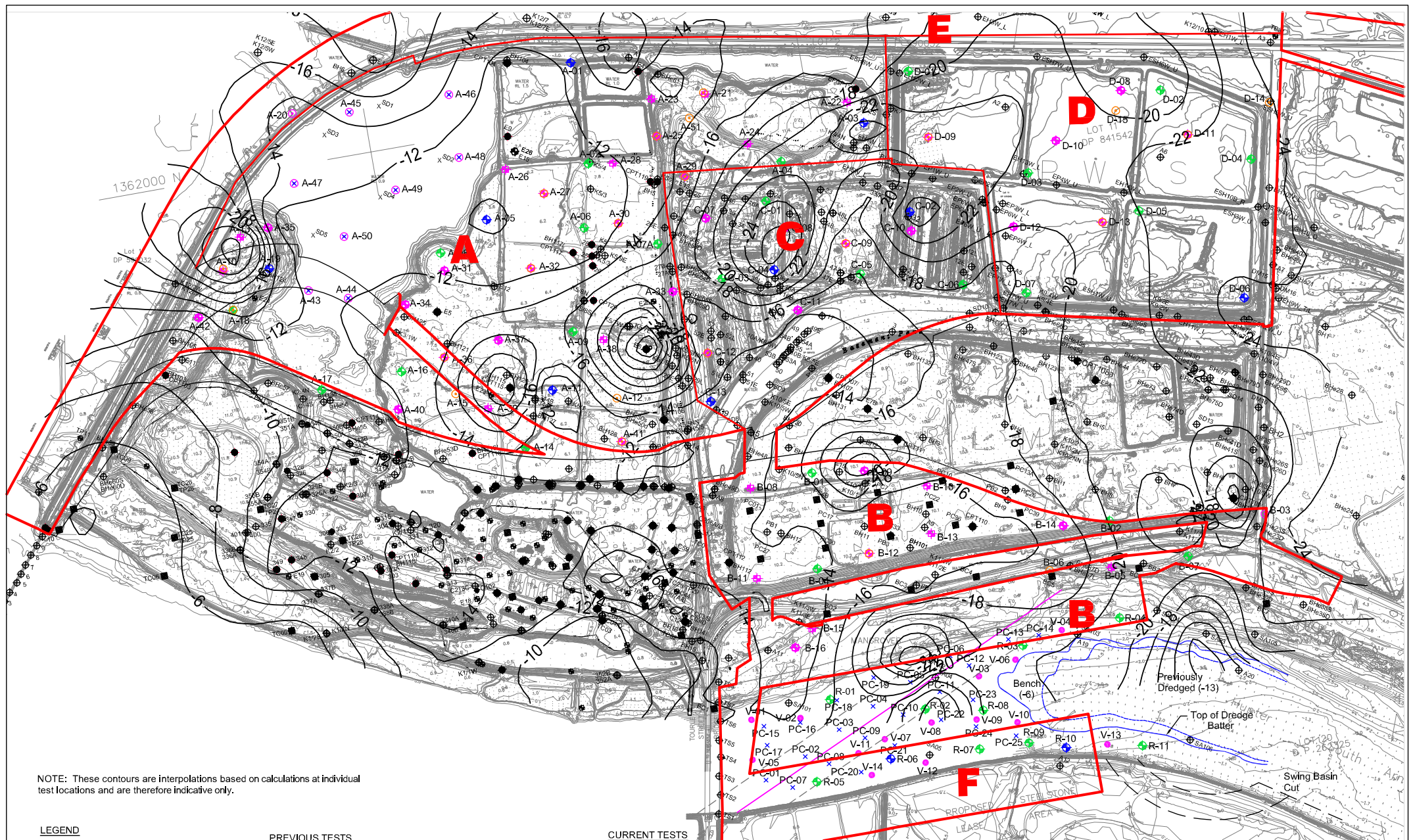
- 'DEEP' BORE
- 'SHALLOW' BORE
- CPT (Standard)
- CPTu (Piezocone)

- VIBROCORE
- TEST PIT
- PUSH CORE
- 1 — ISOPACHS OF SOFT CLAY (m)



1:8000 @ A3





NOTE: These contours are interpolations based on calculations at individual test locations and are therefore indicative only.

LEGEND

- NCIG RAILWAY EASEMENT
- 2009 SURFACE CONTOUR (m AHD)
- BOUNDARY OF T4 SITE

PREVIOUS TESTS

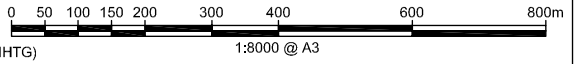
- ⊕ APPROXIMATE LOCATION OF TEST PIT
- ⬢ APPROXIMATE LOCATION OF CONE PENETRATION TEST
- ⊕ APPROXIMATE LOCATION OF PIEZOCONE PENETRATION TEST
- ⊕ APPROXIMATE LOCATION OF BORE
- X APPROXIMATE LOCATION OF SEDIMENT SAMPLE

CURRENT TESTS

- ⊕ 'DEEP' BORE
- ⊕ 'SHALLOW' BORE
- ⊕ CPT (Standard)
- ⊕ CPTu (Piezocone)

- ⊕ VIBROCORE
- ⊕ TEST PIT
- ⊕ PUSH CORE

— 1 — CONTOURS OF TOP OF STIFF CLAY LEVEL (NHTG)

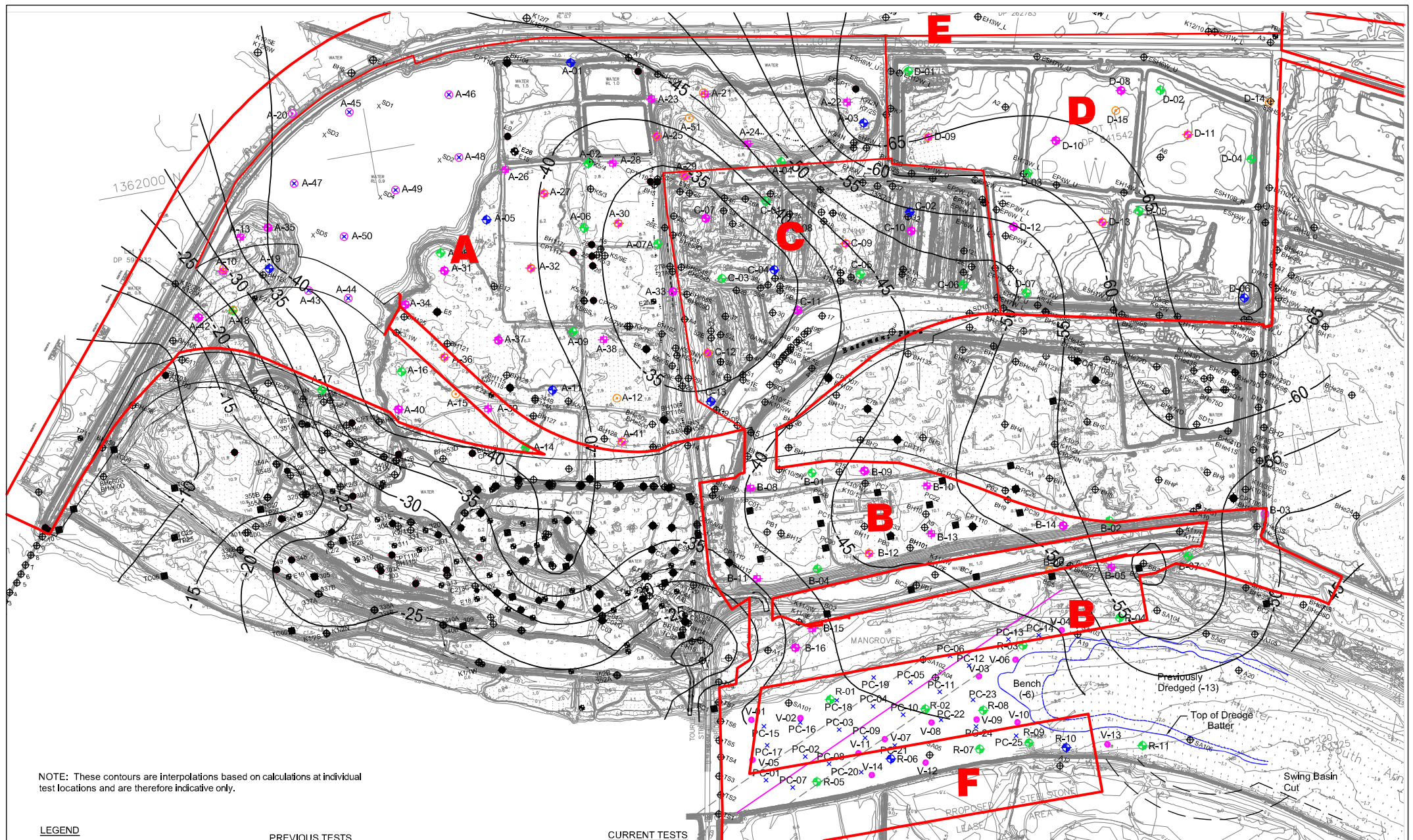


CLIENT: Port Waratah Coal Services Limited
 OFFICE: Newcastle
 SCALE: 1:8000@A3
 DRAWN BY: PLH
 DATE: 04.11.2011

TITLE: **Contours of Top of Stiff Clay Level**
Groundwater Assessment
Proposed Terminal 4 Project, Kooragang Island



PROJECT No: 49533.02
 DRAWING No: 5.14
 REVISION: 1



NOTE: These contours are interpolations based on calculations at individual test locations and are therefore indicative only.

LEGEND

- NCIG RAILWAY EASEMENT
- 2009 SURFACE CONTOUR (m AHD)
- BOUNDARY OF T4 SITE

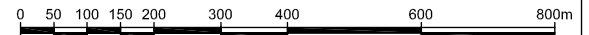
PREVIOUS TESTS

- APPROXIMATE LOCATION OF TEST PIT
- ◆ APPROXIMATE LOCATION OF CONE PENETRATION TEST
- APPROXIMATE LOCATION OF PIEZOCONE PENETRATION TEST
- ⊕ APPROXIMATE LOCATION OF BORE
- X APPROXIMATE LOCATION OF SEDIMENT SAMPLE

CURRENT TESTS

- ⊕ 'DEEP' BORE
- ⊕ 'SHALLOW' BORE
- CPT (Standard)
- CPTu (Piezocone)

- VIBROCORE
- ⊕ TEST PIT
- × PUSH CORE
- 1 — CONTOURS OF BEDROCK LEVEL (NHTG)



DRAWING ADAPTED FROM SURVEY PLAN BY CONNELL HATCH REF NO: HW00-00-C-61-800 DATED 29/3/06 AND SURVEY FROM PWCS REF KOORAGANG RAIL 0.5m CONTOURS 2009/4

