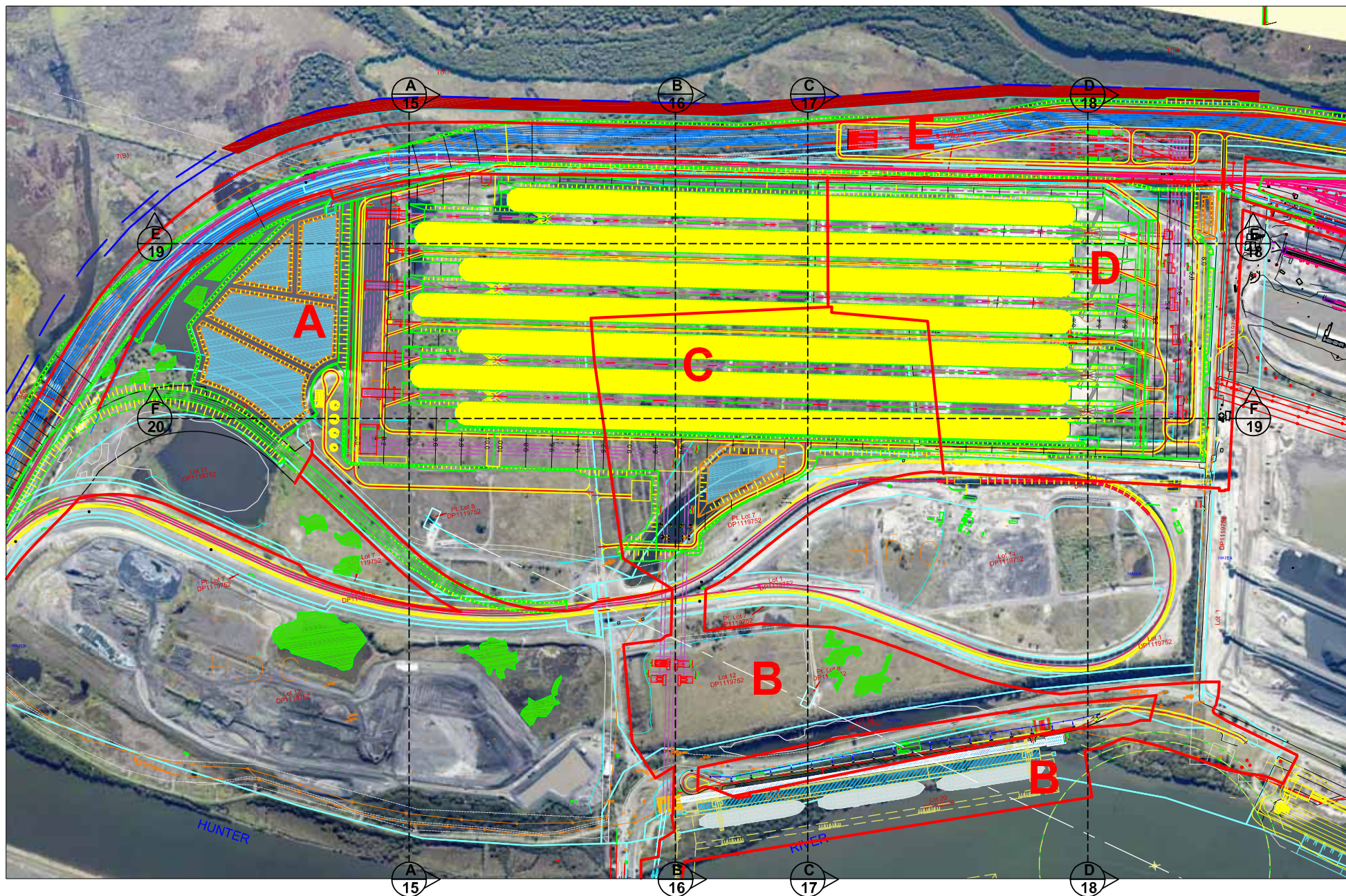


DRAWING ADAPTED FROM PLAN BY AURECON HATCH, DRAWING No KL323270_a_site overview.dwg

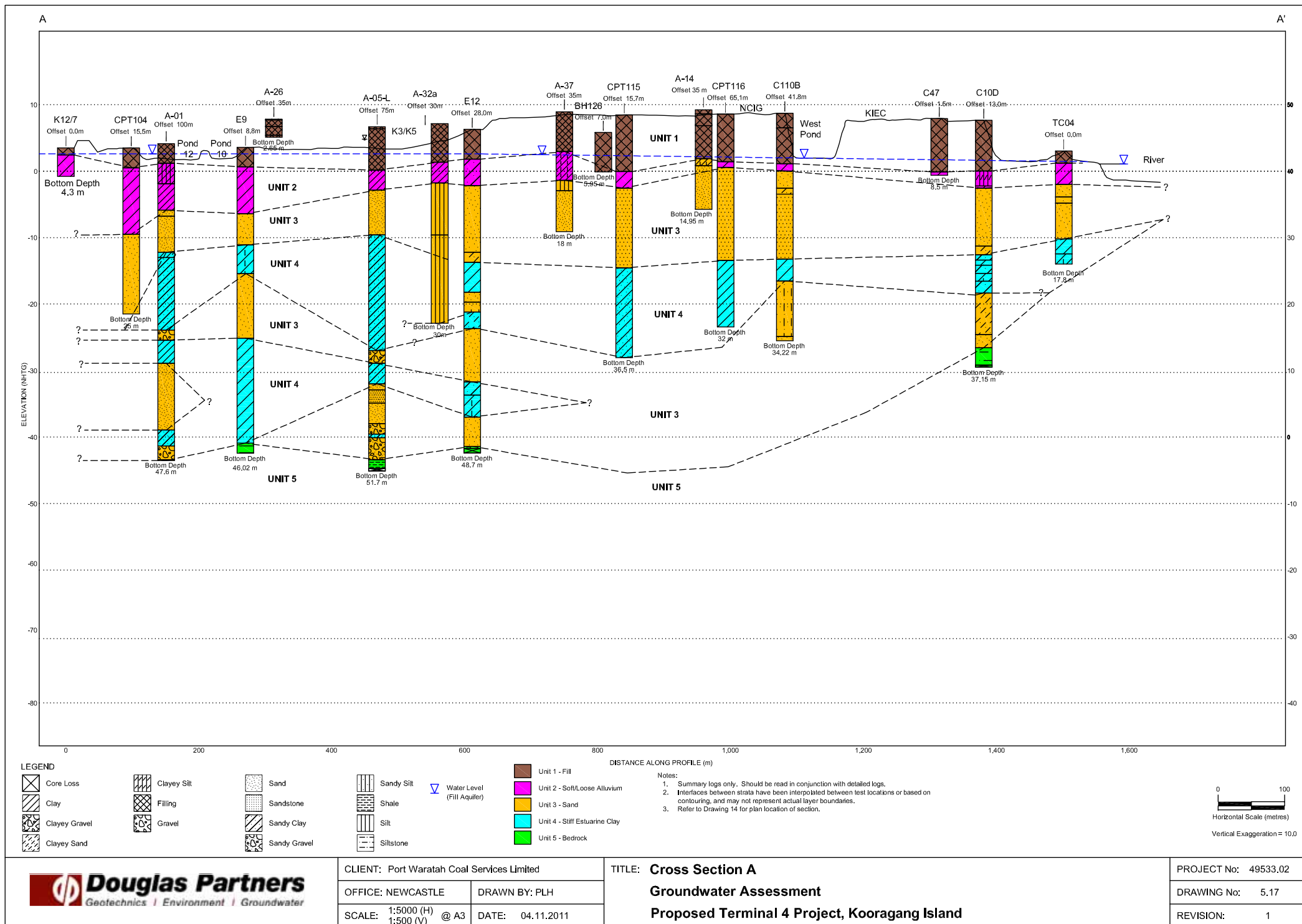


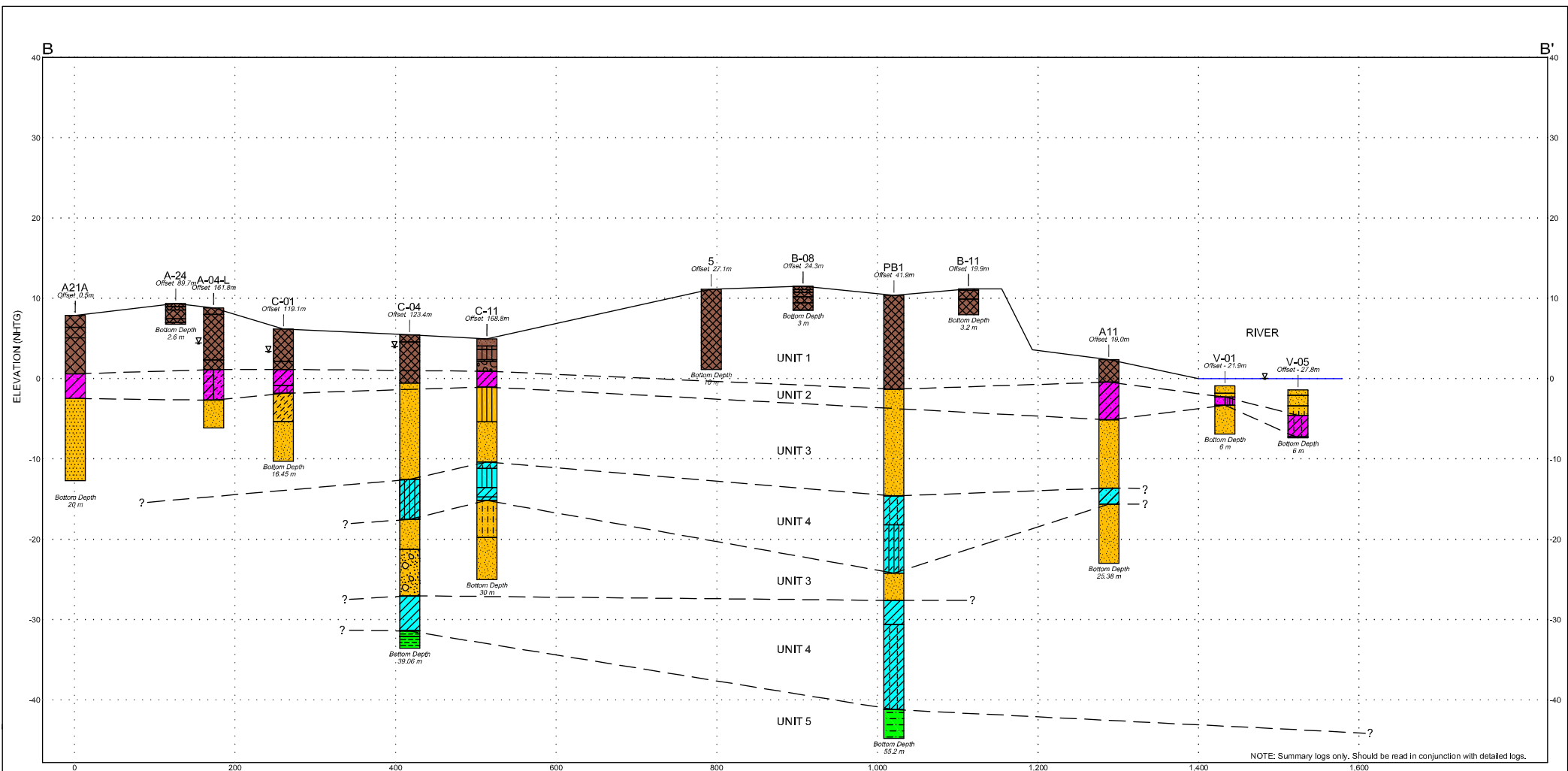
CLIENT: Port Waratah Coal Services Limited	
OFFICE: Newcastle	DRAWN BY: PLH
SCALE: 1:8000@A3	DATE: 04.11.2011

TITLE: **Proposed Development and Section Locations**
Groundwater Assessment
Proposed Terminal 4 Project, Kooragang Island

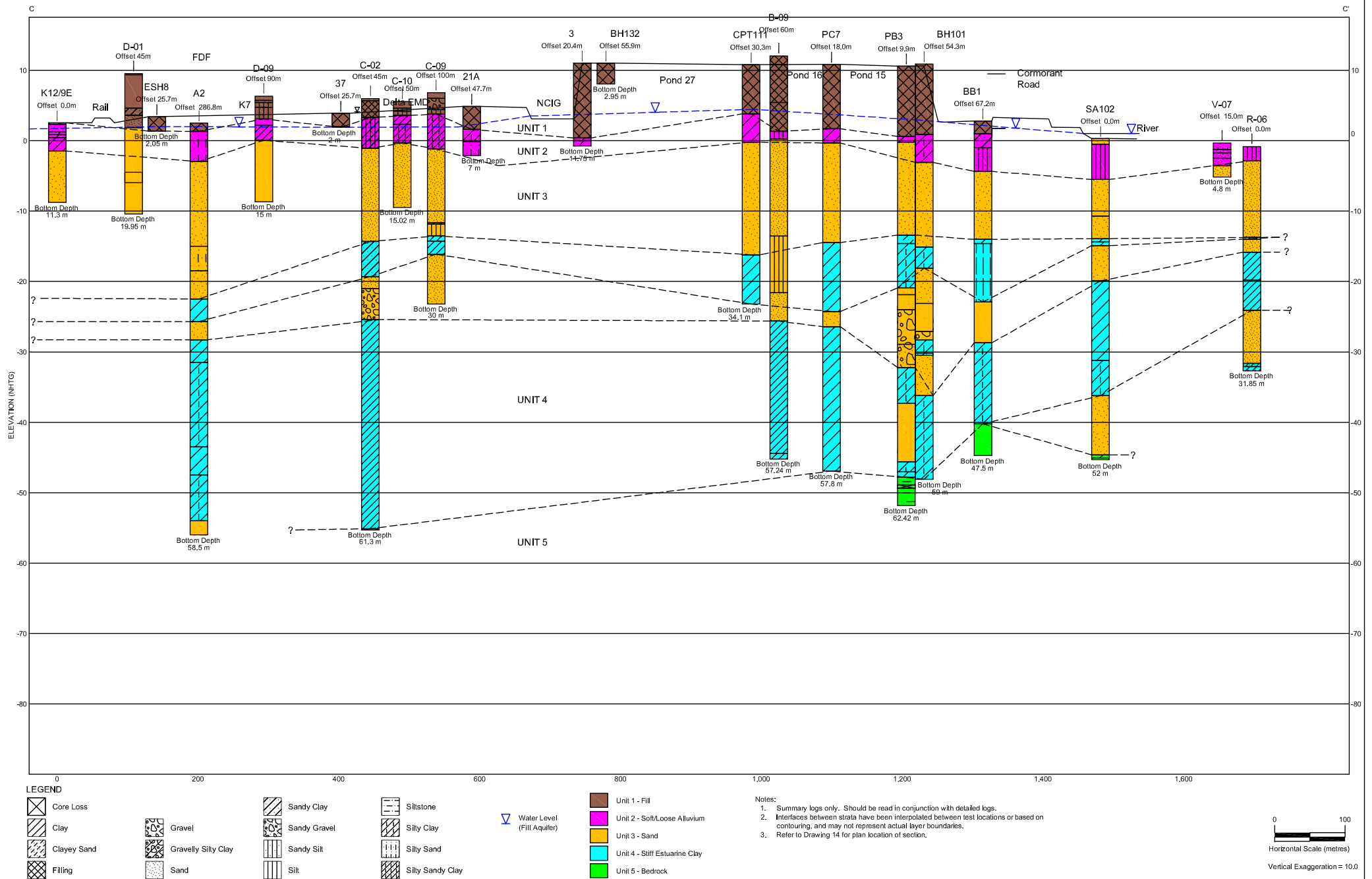


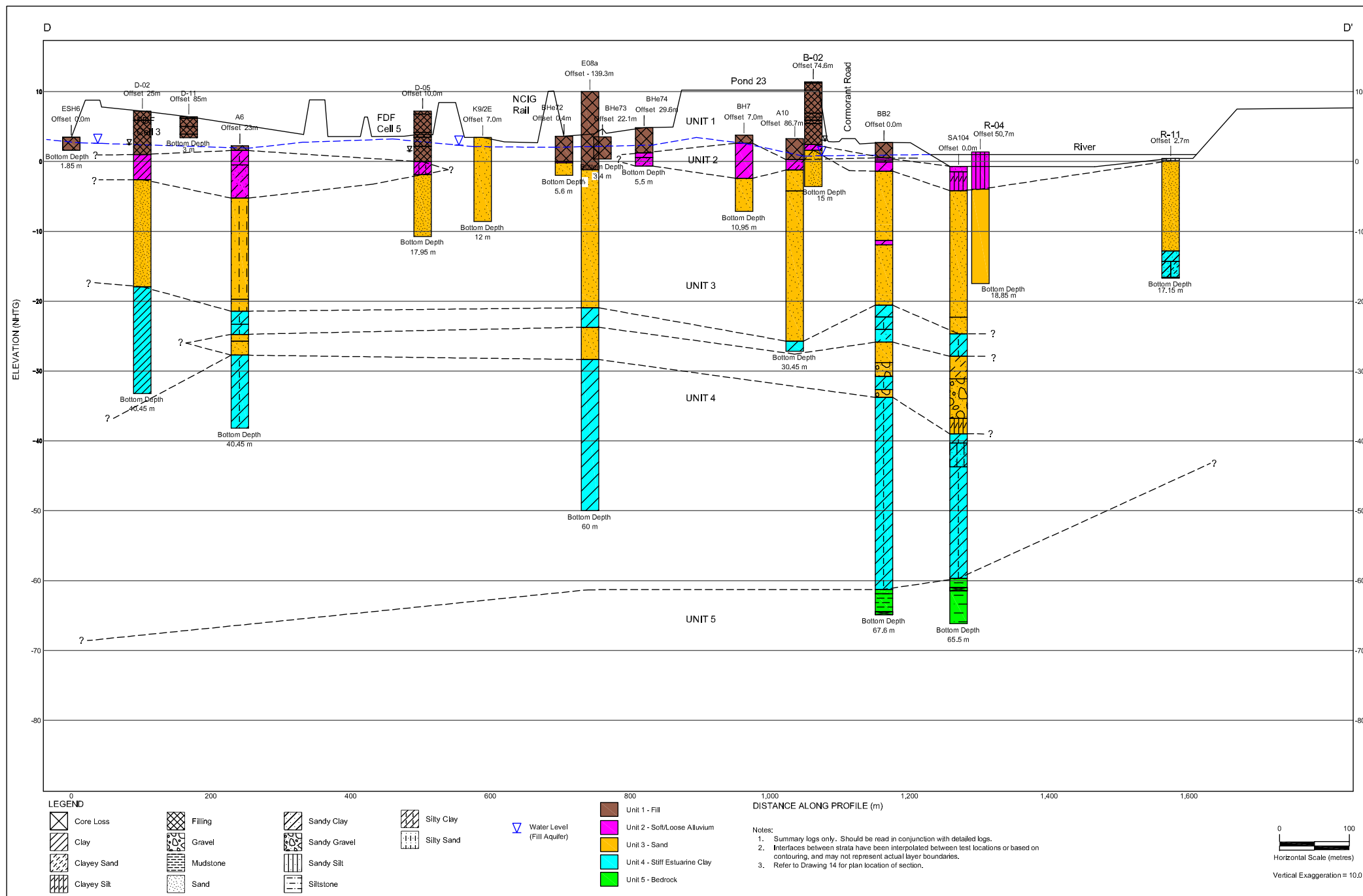
PROJECT No:	49533.02
DRAWING No:	5.16
REVISION:	1

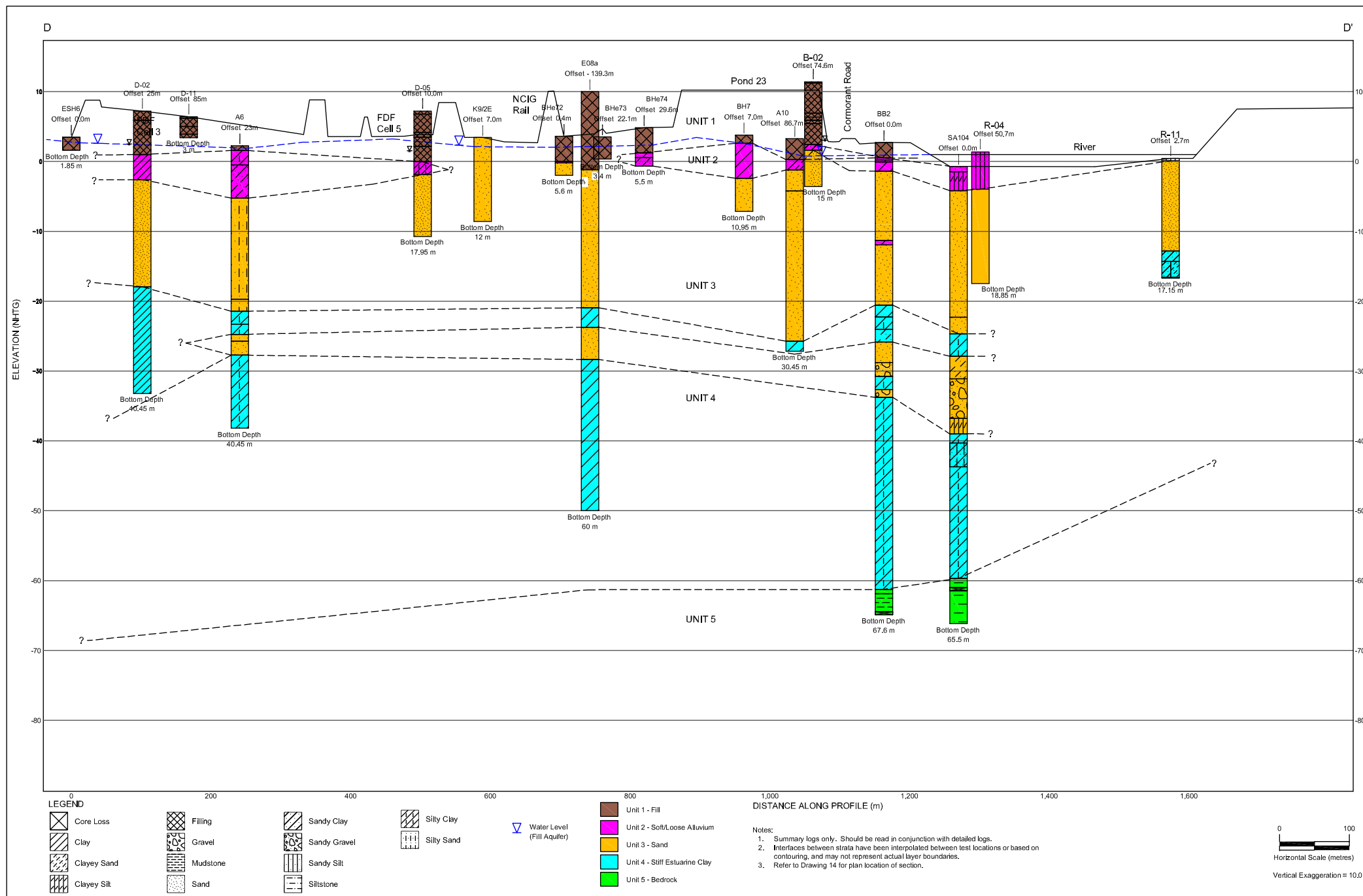


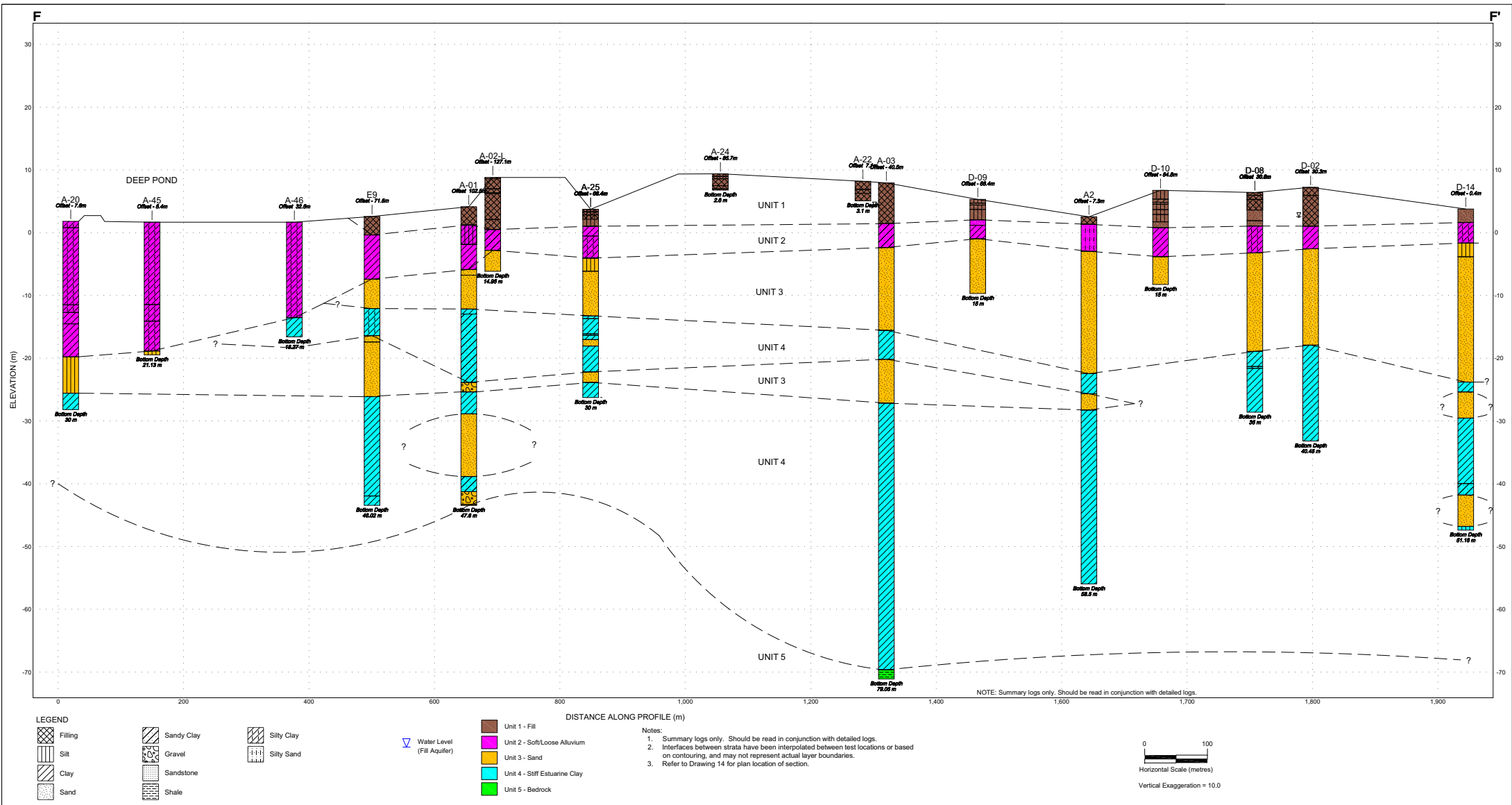


LEGEND Filling Sand Sandy Clay Silty Clay Clayey Sand Sandy Silt Clay Gravelly Sand Shale Silt Gravel Silty Sand Clayey Silt Siltstone				DISTANCE ALONG PROFILE (m) Unit 1 - Fill Unit 2 - Soft/Loose Alluvium Unit 3 - Sand Unit 4 - Stiff Estuarine Clay Unit 5 - Bedrock - Water level		Notes: 1. Summary logs only. Should be read in conjunction with detailed logs. 2. Interfaces between strata have been interpolated between test locations or based on contouring, and may not represent actual layer boundaries. 3. Refer to Drawing 14 for plan location of section.		 Horizontal Scale (metres) Vertical Exaggeration = 10:0
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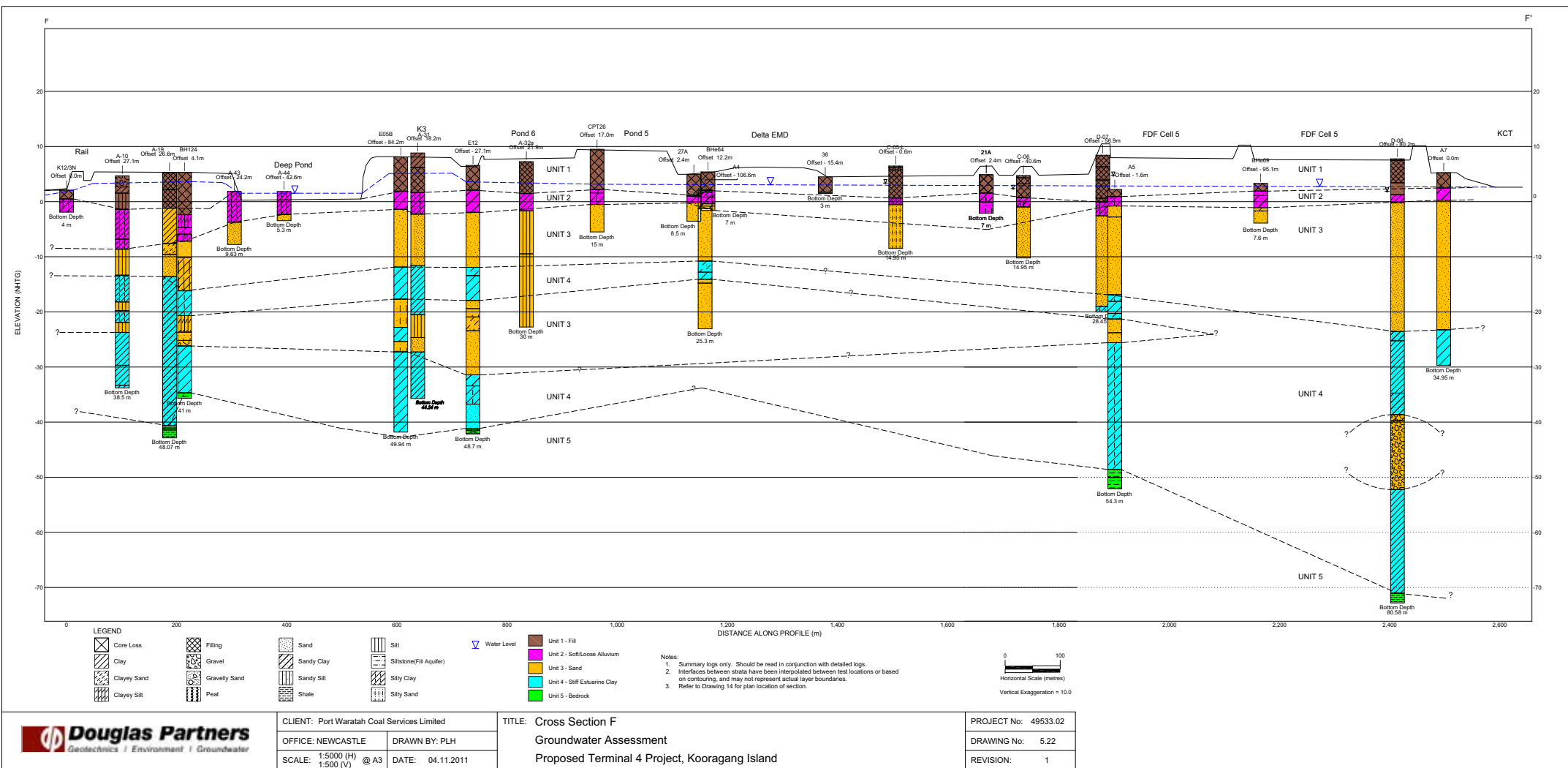


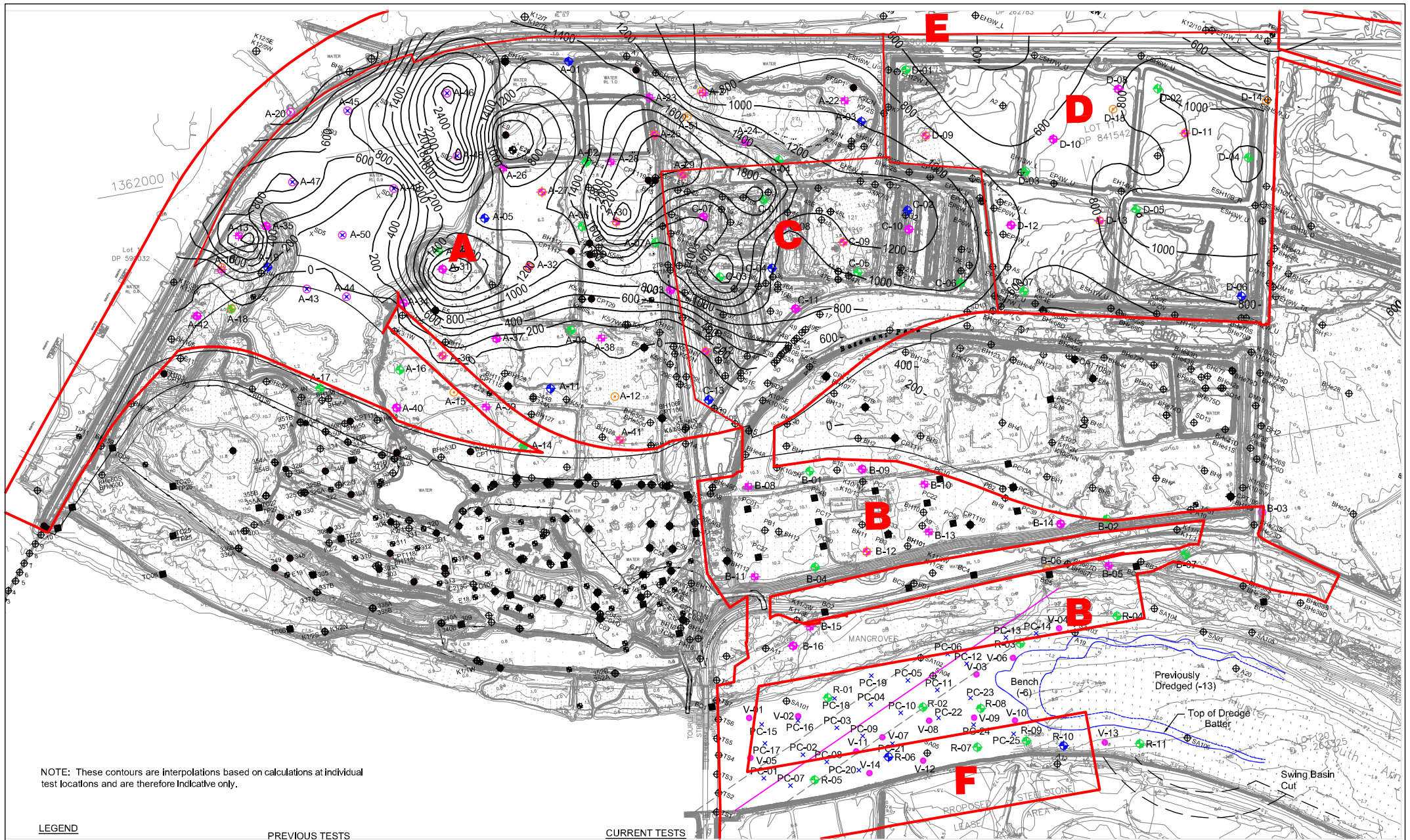






 Douglas Partners Geotechnics Environment Groundwater	CLIENT: Port Waratah Coal Services Limited		TITLE: Cross Section E Groundwater Assessment Proposed Terminal 4 Project, Kooragang Island	PROJECT No: 49533.02	
	OFFICE: NEWCASTLE	DRAWN BY: PLH		DRAWING No: 5.21	
	SCALE: 1:5000 (H) 1:500 (V) @ A3	DATE: 04.11.2011		REVISION: 1	





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

LEGEND

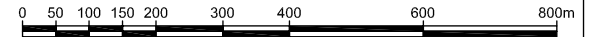
- NCIG RAILWAY EASEMENT
- 2009 SURFACE CONTOUR (m AHD)
- BOUNDARY OF T4 SITE

PREVIOUS TESTS

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

CURRENT TESTS

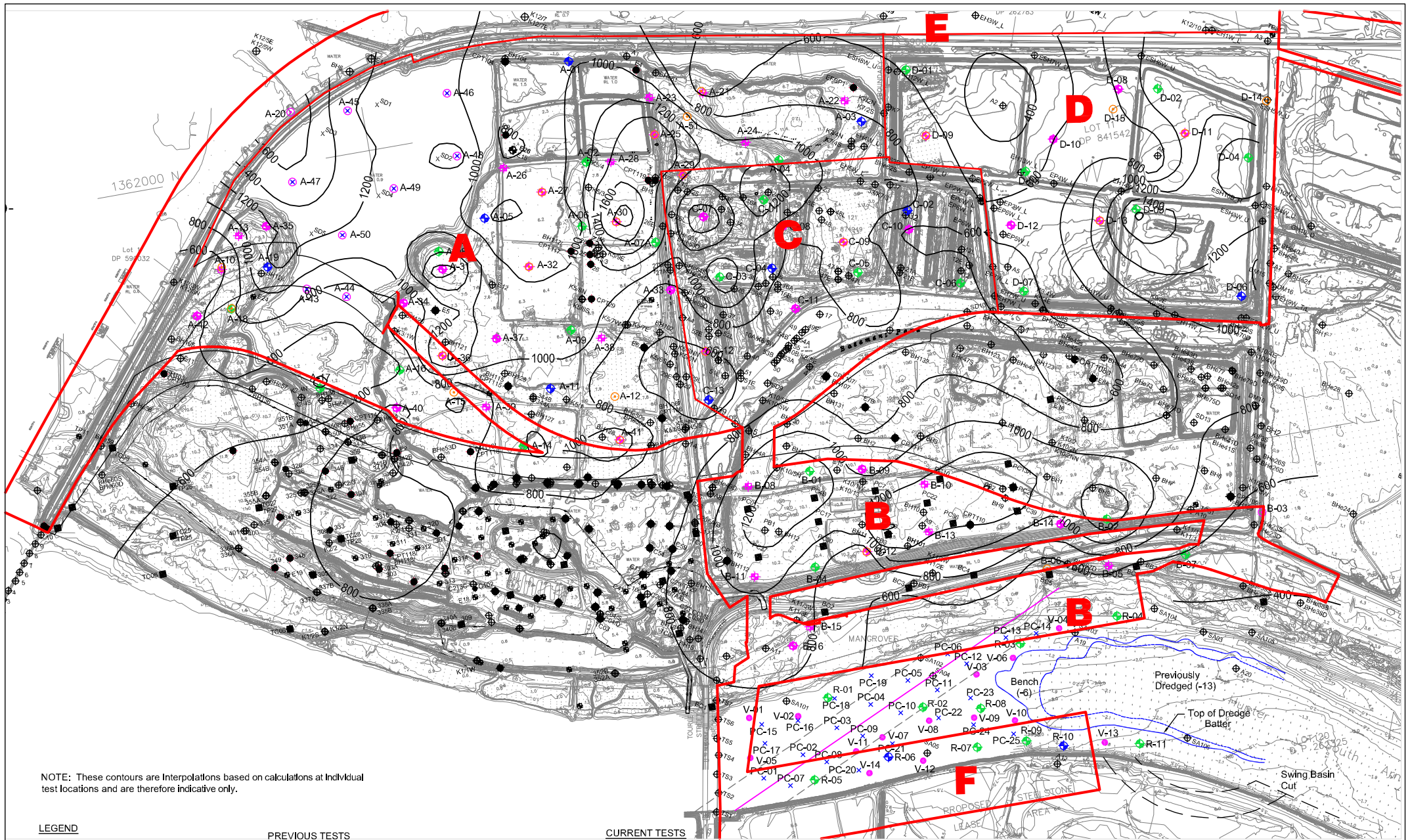
- 'DEEP' BORE
- 'SHALLOW' BORE
- CPT (Standard)
- CPTu (Piezocone)
- VIBROCORE
- TEST PIT
- PUSH CORE



1:8000 @ A3

~800~ CONTOURS OF SETTLEMENT AT 25 YEARS (mm)





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

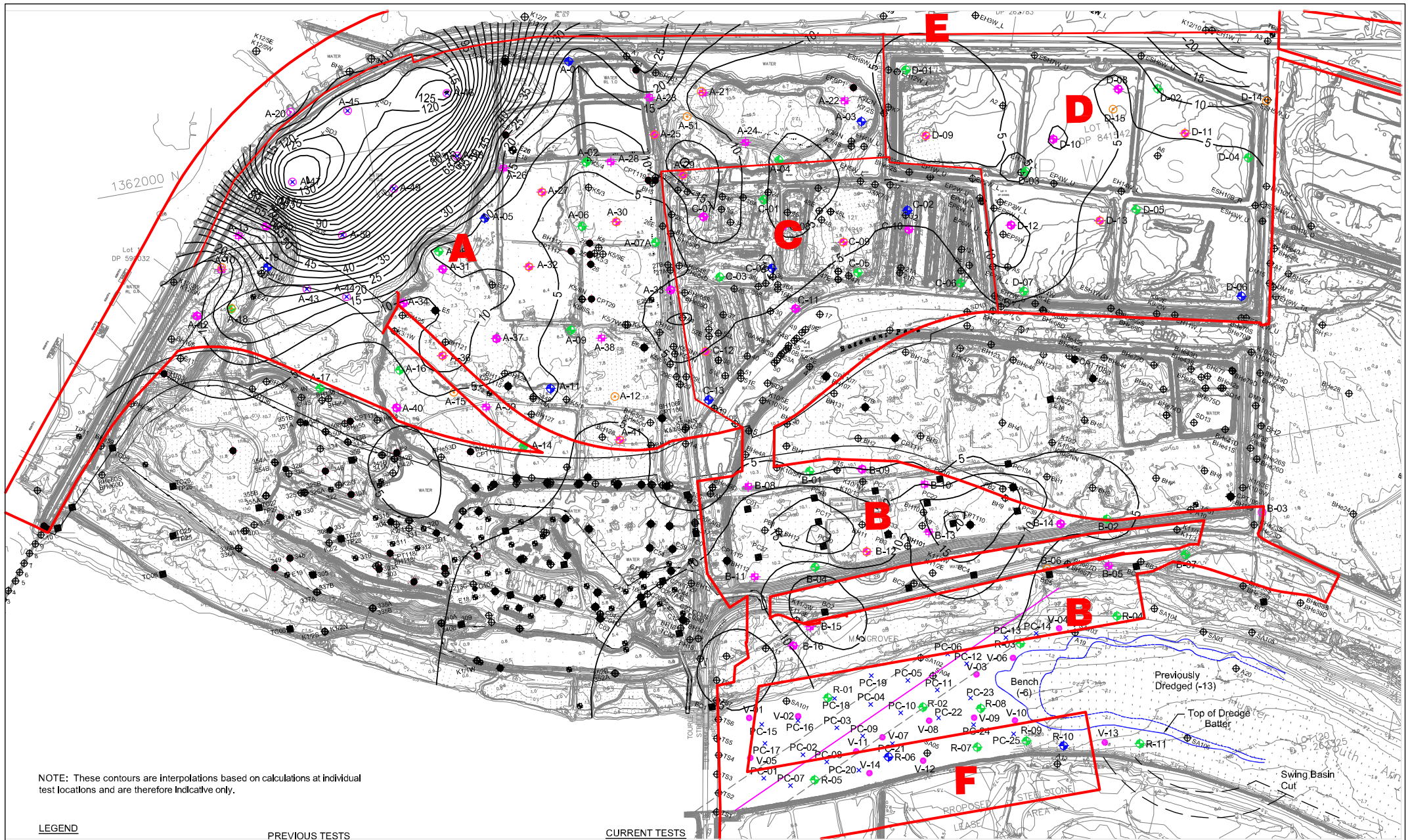
- 'DEEP' BORE
- 'SHALLOW' BORE
- CPT (Standard)
- CPTu (Piezocone)

- VIBROCORE
- TEST PIT
- PUSH CORE

800 - CONTOURS OF SETTLEMENT AT 25 YEARS (mm)

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

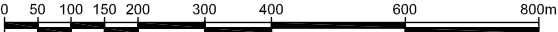
- ⊕ APPROXIMATE LOCATION OF TEST PIT
- ⬢ APPROXIMATE LOCATION OF CONE PENETRATION TEST
- ⊕ APPROXIMATE LOCATION OF PIEZOCONE PENETRATION TEST
- ⊕ APPROXIMATE LOCATION OF BORE
- X APPROXIMATE LOCATION OF SEDIMENT SAMPLE

CURRENT TESTS

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

- ⊕ VIBROCORE
- ⊕ TEST PIT
- ⊕ PUSH CORE

— 1 — TIME FOR 90% CONSOLIDATION (months)



PROJECT No: 49533.02
DRAWING No: 5.25
REVISION: 1