1. All dimensions are in metres unless otherwise noted.
2. Projection is Blank Mine Grid.
3. Design information is based on Challenger survey operations 1997. Bathymetry data shown are from DDMI composite surfaces dated October 14, 2015 and November 17, 2015, and includes the dike fill contours below water level, and洽谈 bathymetry outside of the dike footprint. Contour interval is 1.0 m.
4. Dike embankment fill above water level is based on DDMI surface dated October 8, 2017. 0+300 marine fill layout is based on JJM surface dated September 5, 2015. The 0+300 and 0+800 marine fill layouts are based on JJM surfaces dated August 04, 2016 and August 31, 2016, respectively. All Marine Fill Buffers layout is based on JJM surface dated September 14, 2015. Filter blanket as per 2016 Construction Performance Report.
5. Dike core lines and the safety berms shown are approximate, and have been estimated from contours issued to DDMI dated October 05, 2017 and the drone photo provided by DDMI, dated November 10, 2017. Safety berms may be smaller than shown at instrument pad locations which are not shown for clarity. Dike downstream crest lines between Stations 1+190 m and 1+500 m represent the state of the dike prior to slope adjustment which was completed between October 8 and 14, 2017. Survey data after slope adjustment are not available from DDMI.
6. DDMI provided the pit design below top of bedrock geological surface on August 15, 2017. Open pit outline shown correspond to the pit outline on labeled, which was generated by BGC by assuming a 5 m wide bench at the top of bedrock and 2H:1V slope in the overburden. South Island and DPS-08 are based on water levels measured on the downstream lakebed, which was generated by BGC by assuming a 5 m wide bench and 2H:1V slope adjustment which was completed between October 8 and 14, 2017.
7. Diami provided the pit design below top of bedrock geological surface on August 15, 2017. Open pit outline shown correspond to the pit outline on JJM surfaces dated August 04, 2016 and August 31, 2016, respectively. The pit was generated by BGC after slope adjustment which was completed between October 8 and 14, 2017.
8. Contours were generated by BGC by assuming a 5 m wide bench at the top of bedrock and 2H:1V slope in the overburden. South Island and DPS-08 are based on water levels measured on the downstream lakebed, which was generated by BGC by assuming a 5 m wide bench and 2H:1V slope adjustment which was completed between October 8 and 14, 2017.
9. Diami provided the pit design below top of bedrock geological surface on August 15, 2017. Open pit outline shown correspond to the pit outline on JJM surfaces dated August 04, 2016 and August 31, 2016, respectively. The pit was generated by BGC after slope adjustment which was completed between October 8 and 14, 2017.
10. All used data after slope adjustment are not available from DDMI.
11. Survey data after slope adjustment are not available from DDMI. Diami provided the pit design below top of bedrock geological surface on August 15, 2017. Open pit outline shown correspond to the pit outline on JJM surfaces dated August 04, 2016 and August 31, 2016, respectively. The pit was generated by BGC after slope adjustment which was completed between October 8 and 14, 2017.
1. Values and data shown originate from DDMI's spreadsheet 'A21PiezometerCalculation_rev 27 FINAL.xlsx' submitted to BGC on September 1, 2018, which was modified and resent to DDMI on September 11, 2018.

2. 'Shipped Zero B', 'Shipped Zero T', 'Shipped Zero Baro', 'CF' and 'TF' values are from RST calibration records for the respective piezometers.

3. Initial barometric pressure values were calculated by interpolating from field zero readings and RST calibration sheet values.

4. Instrument offset is relative to dike reference line. Positive offset is downstream of reference line. Negative offset is upstream of reference line.

5. Pond piezometer data was reviewed during dewatering of the A21 main pond up to November 18, 2017 when readings became unreliable.

6. Piezometer tip elevation and target material units were revised from the details shown on the IFC Drawing 14300-41D2-1027.1 Rev. 1 based on the drill response.

7. Unless BGC agrees otherwise in writing, this Drawing shall not be modified or used for any purpose other than the purpose for which BGC generated it. BGC shall have no liability for any damages or loss arising in any way from any use or modification of this document not authorized by BGC. Any use of or reliance upon this document or its contents by third parties shall be at each third party's sole risk.

8. This Drawing is to be used in conjunction with accompanying Drawings and the Final Construction Records Report. Unless BGC agrees otherwise in writing, the Drawing shall not be modified or used for any purpose other than the purpose for which BGC generated it. BGC shall have no liability for any damages or loss arising in any way from any use or modification of this document not authorized by BGC. Any use of or reliance upon this document or its contents by third parties shall be at each third party's sole risk.
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<table>
<thead>
<tr>
<th>INDEX</th>
<th>CHANNEL</th>
<th>LABEL MARK</th>
<th>PIEZOMETER ID</th>
<th>ON SITE / OFF SITE</th>
<th>SERIAL NUMBER</th>
<th>SHIPPED ZERO BED</th>
<th>SHIPPED ZERO TIP</th>
<th>ZF 2000 BED</th>
<th>ZF 2000 TIP</th>
<th>CIP</th>
<th>TIP ELEVATION</th>
<th>CALCULATED FIELD BARO</th>
<th>MATERIAL AT TIP</th>
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</tbody>
</table>

**REV. NO.:**

**APPROVED:**

**DESIGN REVIEW REVISION / ISSUED DESCRIPTIONS:**

**REV. DD:**

**DESIGN REVIEW APPROVED REVISION / ISSUED DESCRIPTIONS:**

**DRAWN:**

**PROJECT:**

**INSTRUMENTATION - ADAS 4**

**A21 DIKE FINAL CONSTRUCTION RECORDS REPORT**

**RECORD OF CONSTRUCTION**

**SCALE:**

**TITLE:**

**NOTES:**

1. Values and data shown originate from DDMI’s spreadsheet ‘A21PiezometerCalculation_rev 27 FINAL.xlsx’ submitted to BGC on September 1, 2018, which was modified and resent to DDMI on September 11, 2018.

2. *Skipped Zero B*, *Skipped Zero T*, *ZT* and *TET* values are from RST calibration records for the respective parameters.

3. Initial barometric pressure values were calculated by interpolating from field zero readings and RST calibration sheet values.

4. Instrument offset is relative to dike reference line. Positive offset is downstream of reference line. Negative offset is upstream of reference line.

5. Pond piezometer data was reviewed during dewatering of the A21 main pond up to November 18, 2017 when readings became unreliable.

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NOTE 7

STATION (m) 0+380 TO 0+450 m

ELEVATION (m) 380.5-T

NOTE 19

RECORD OF CONSTRUCTION
LONGITUDINAL SECTION AT A21 DIKE REFERENCE LINE

ELEVATION (m)

370
380
390
400
410

0+520
0+540
0+560
0+580
0+600
0+620

SCALE 1:250

METRES

THIS DRAWING MAY HAVE BEEN REDUCED OR ENLARGED. ALL PRACTICAL SCALE NOTATIONS INDICATED ARE BASED ON ORIGINAL FORMAT DRAWING.

LEGEND

NO REFUSAL
EFFECTIVE HOLE BACKFILL VOLUME (LITRES) (NOTE 5)
LUGED IN VALUE FROM WATER PRESSURE TEST EFFECTIVE GROUT TAKE VOLUME (LITRES) (NOTE 6)
C-collar LOCATION (NOTES 2 AND 12)
TOP OF BEDROCK IN DRILL HOLE (NOTE 3)
TOP OF BEDROCK (DATA ACQUISITION SYSTEM)
BOTTOM OF TEMPORARY CASING
TOP OF CO TREATMENT (NOTE 4)
APPROVED FOUNDATION SYSTEM
CONSTRUCTION RECORD PRIMARY HOLE (Cased) (NOTE 12)
SECONDARY HOLE (BEDROCK) (NOTE 12)
SECONDARY HOLE (Cased) (NOTE 12)
TERTIARY HOLE (BEDROCK) (NOTE 12)
TERTIARY HOLE (Cased) (NOTE 12)
QUATERNARY HOLE (BEDROCK) (NOTE 12)
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QUINARY HOLE (Cased)
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EFFECTIVE GROUT TAKE VOLUME (LITRES)
GROUT HOLE (SAA SCAN)
COLLAR LOCATION (NOTES 2 AND 12)
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