



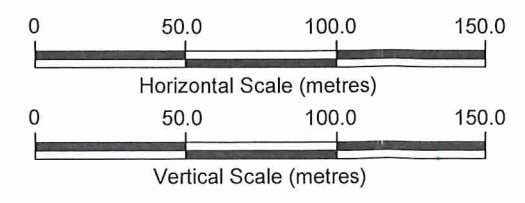


**LEGEND**

-  CONE PENETRATION TEST (COFFEY 2013)
-  TEST PIT LOCATION (COFFEY 2012)
-  APPROXIMATE EXTENT OF STAGE 3A & 3B
-  LOTS EXCLUDED FROM GCR

- NOTES:**
1. As-built contour data from Harrison Grierson Consultants Limited, surveyed 2012.
  2. Contours are shown at 1.0-metre intervals to Moturiki Datum.
  3. Lot layout from Harrison Grierson Consultants Limited, dated 19 March 2014 .

revision	rev	description	drawn	approved	date

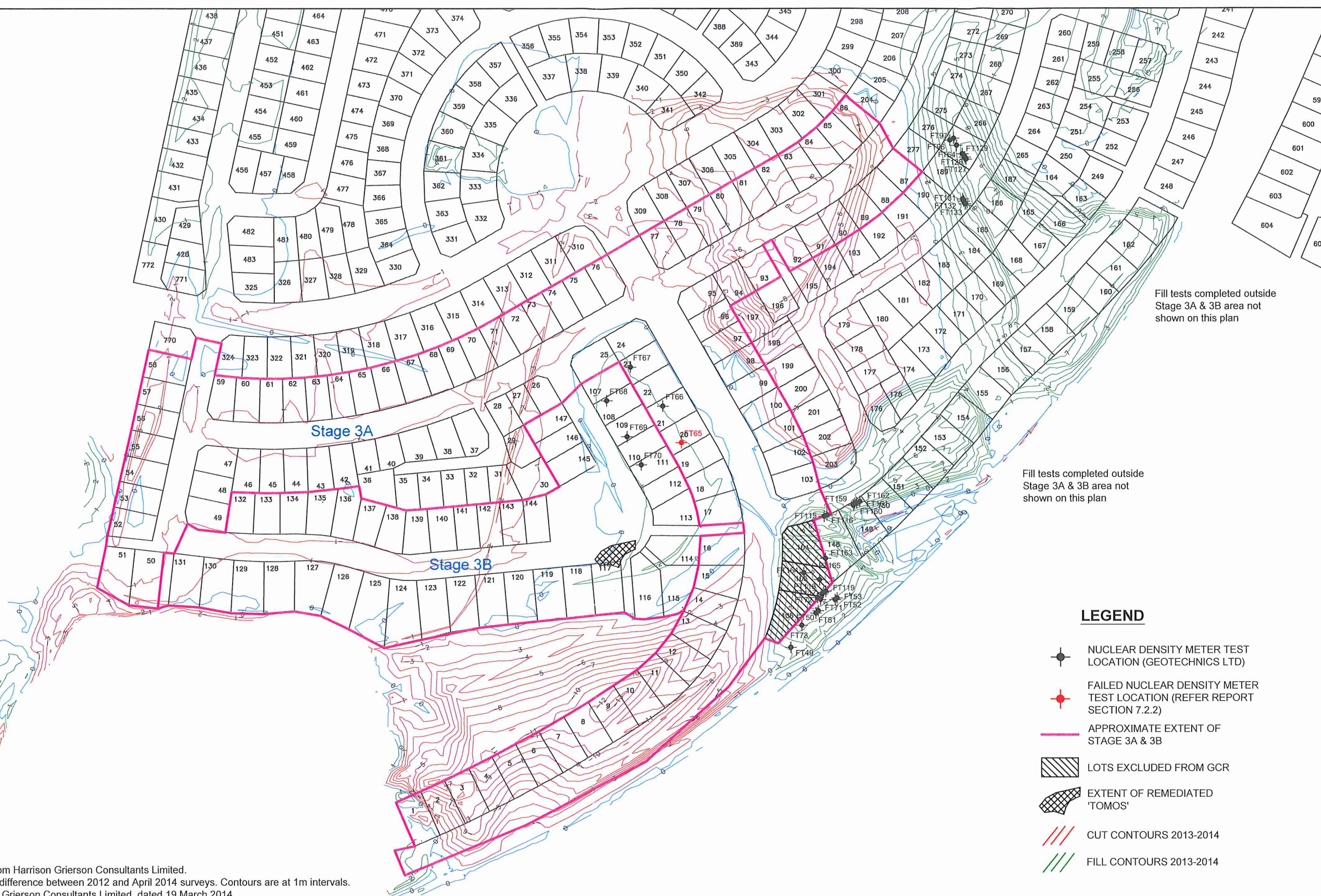


drawn	AIP
approved	RBT
date	24/4/2015
scale	1:2500
original size	A3



client:	THE LAKES (2012) LIMITED		
project:	THE LAKES SUBDIVISION STAGE 3A & 3B GEOTECHNICAL COMPLETION REPORT		
title:	2007-2008 AS-BUILT CONTOUR PLAN		
project no:	13086AP-AB	figure no:	03
rev:	-		





Fill tests completed outside Stage 3A & 3B area not shown on this plan

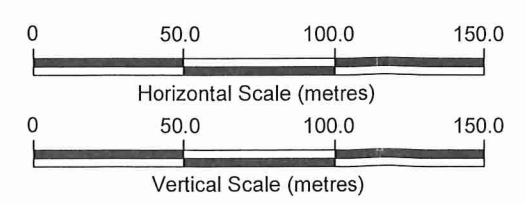
Fill tests completed outside Stage 3A & 3B area not shown on this plan

**LEGEND**

- NUCLEAR DENSITY METER TEST LOCATION (GEOTECHNICS LTD)
- FAILED NUCLEAR DENSITY METER TEST LOCATION (REFER REPORT SECTION 7.2.2)
- APPROXIMATE EXTENT OF STAGE 3A & 3B
- LOTS EXCLUDED FROM GCR
- EXTENT OF REMEDIATED 'TOMOS'
- CUT CONTOURS 2013-2014
- FILL CONTOURS 2013-2014

- NOTES:**
- Cut / Fill contour data from Harrison Grierson Consultants Limited.
  - Cut / Fill contours show difference between 2012 and April 2014 surveys. Contours are at 1m intervals.
  - Lot layout from Harrison Grierson Consultants Limited, dated 19 March 2014.

revision	rev	description	drawn	approved	date

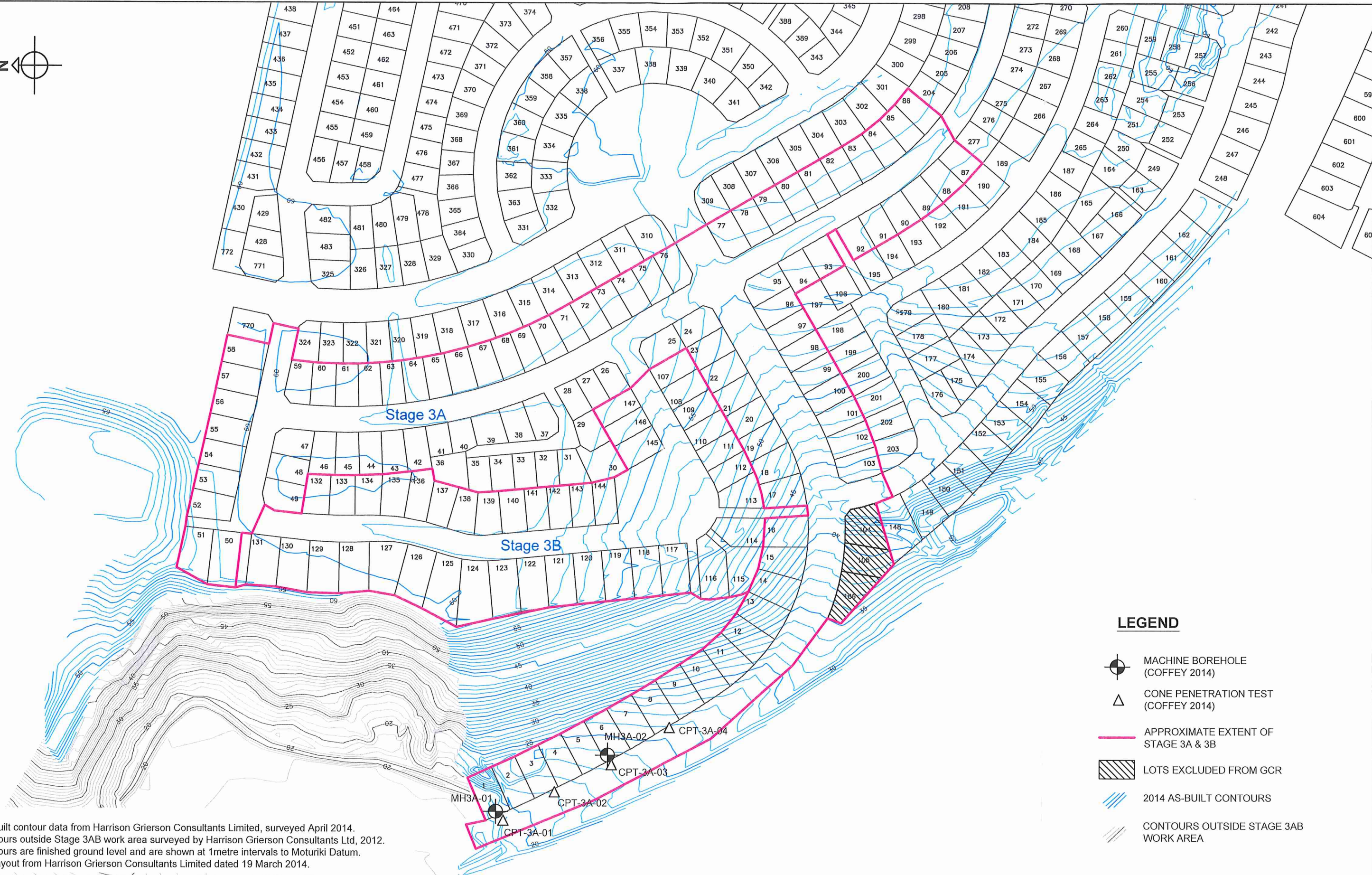


drawn	AIP
approved	RBT
date	24/4/2015
scale	1:2500
original size	A3



client:	THE LAKES (2012) LIMITED		
project:	THE LAKES SUBDIVISION STAGE 3A & 3B GEOTECHNICAL COMPLETION REPORT		
title:	2013-2014 CUT/FILL CONTOUR PLAN		
project no:	13086AP-AB	figure no:	04
		rev:	-











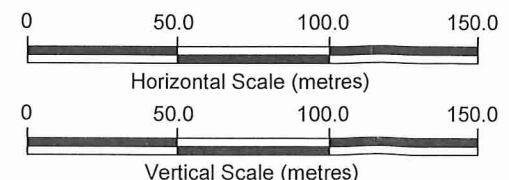
**NOTES:**

1. As-built contour data from Harrison Grierson Consultants Limited, surveyed April 2014.
2. Contours outside Stage 3AB work area surveyed by Harrison Grierson Consultants Ltd, 2012.
3. Contours are finished ground level and are shown at 1metre intervals to Moturiki Datum.
4. Lot layout from Harrison Grierson Consultants Limited dated 19 March 2014.

**LEGEND**

-  MACHINE BOREHOLE (COFFEY 2014)
-  CONE PENETRATION TEST (COFFEY 2014)
-  APPROXIMATE EXTENT OF STAGE 3A & 3B
-  LOTS EXCLUDED FROM GCR
-  2014 AS-BUILT CONTOURS
-  CONTOURS OUTSIDE STAGE 3AB WORK AREA

revision	rev	description	drawn	approved	date

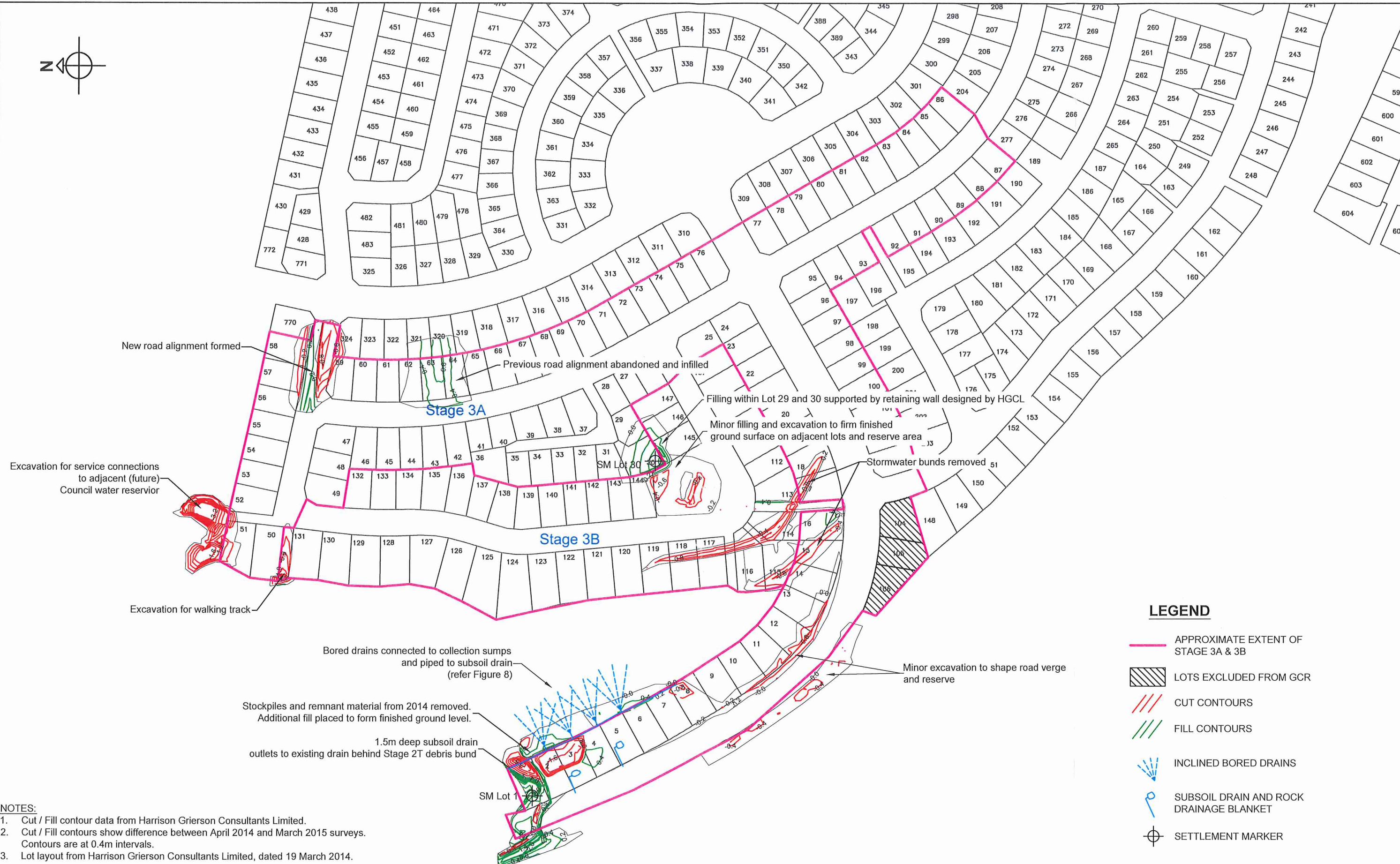


drawn	AIP
approved	RBT
date	1/5/2015
scale	1:2500
original size	A3



client:	THE LAKES (2012) LIMITED		
project:	THE LAKES SUBDIVISION STAGE 3A & 3B GEOTECHNICAL COMPLETION REPORT		
title:	2014 AS-BUILT CONTOUR PLAN		
project no:	13086AP-AB	figure no:	05
rev:	-		





New road alignment formed

Previous road alignment abandoned and infilled

Stage 3A

Filling within Lot 29 and 30 supported by retaining wall designed by HGCL  
 Minor filling and excavation to firm finished ground surface on adjacent lots and reserve area

Excavation for service connections to adjacent (future) Council water reservoir

Stormwater bunds removed

Excavation for walking track

Stage 3B

Bored drains connected to collection sumps and piped to subsoil drain (refer Figure 8)

Minor excavation to shape road verge and reserve

Stockpiles and remnant material from 2014 removed. Additional fill placed to form finished ground level.

1.5m deep subsoil drain outlets to existing drain behind Stage 2T debris bund

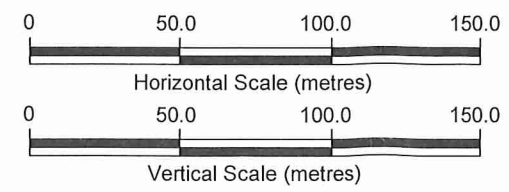
SM Lot 1

**LEGEND**

- APPROXIMATE EXTENT OF STAGE 3A & 3B
- LOTS EXCLUDED FROM GCR
- CUT CONTOURS
- FILL CONTOURS
- INCLINED BORED DRAINS
- SUBSOIL DRAIN AND ROCK DRAINAGE BLANKET
- SETTLEMENT MARKER

- NOTES:**
- Cut / Fill contour data from Harrison Grierson Consultants Limited.
  - Cut / Fill contours show difference between April 2014 and March 2015 surveys. Contours are at 0.4m intervals.
  - Lot layout from Harrison Grierson Consultants Limited, dated 19 March 2014.

revision	rev	description	drawn	approved	date

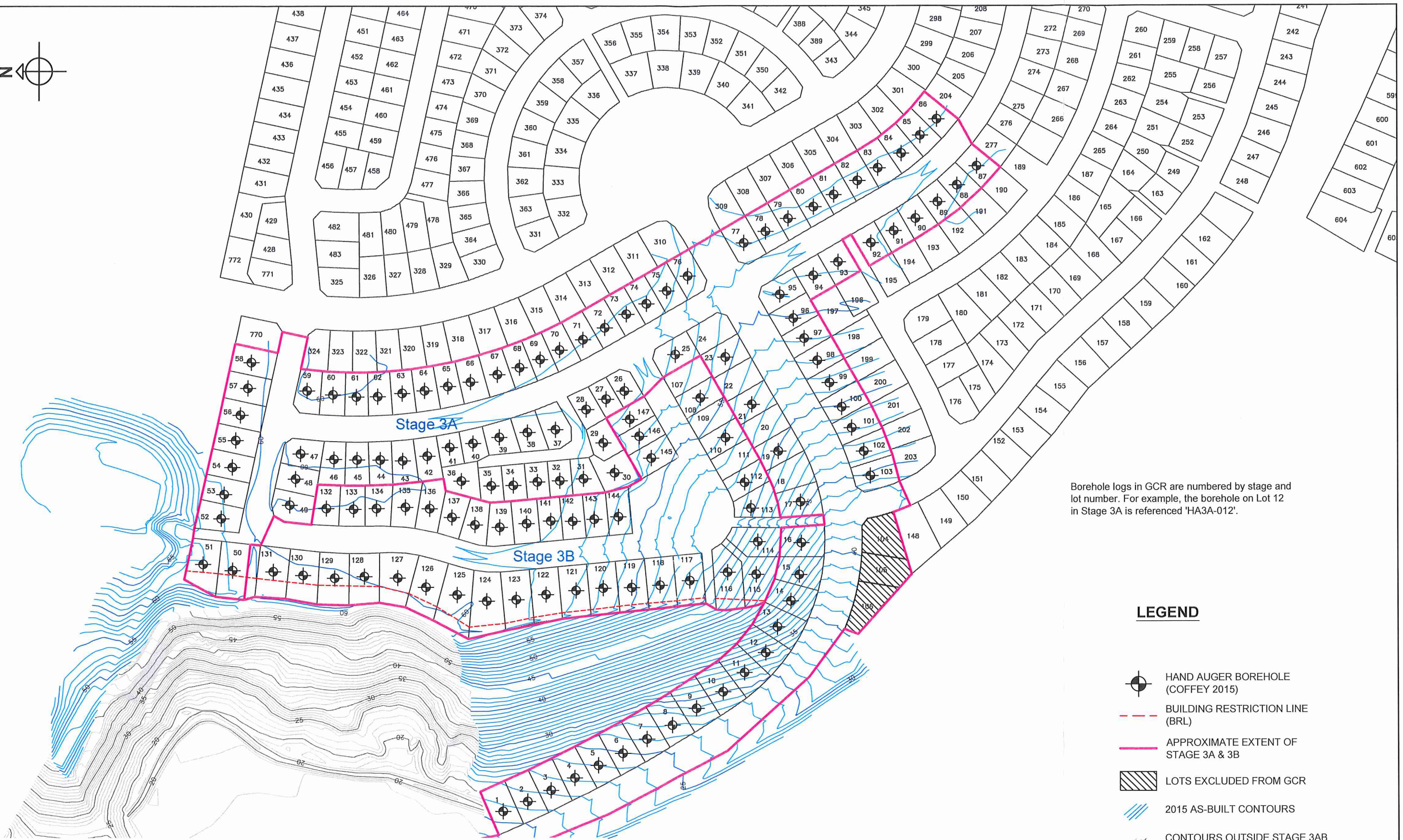


drawn	AIP
approved	RBT
date	24/4/2015
scale	1:2500
original size	A3



client:	THE LAKES (2012) LIMITED		
project:	THE LAKES SUBDIVISION STAGE 3A & 3B GEOTECHNICAL COMPLETION REPORT		
title:	2015 CUT/FILL CONTOUR PLAN		
project no:	13086AP-AB	figure no:	06
rev:			-





Borehole logs in GCR are numbered by stage and lot number. For example, the borehole on Lot 12 in Stage 3A is referenced 'HA3A-012'.

**LEGEND**

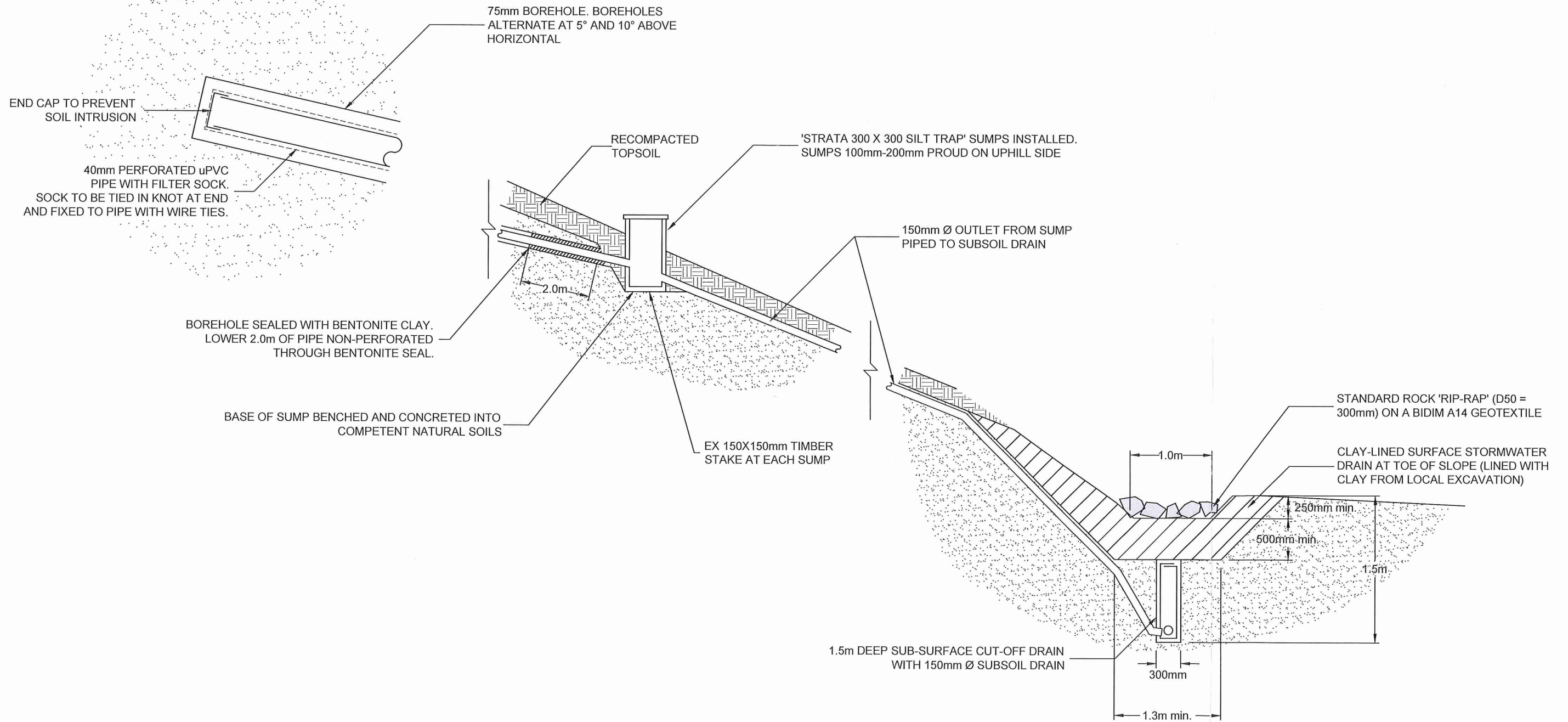
- HAND AUGER BOREHOLE (COFFEY 2015)
- BUILDING RESTRICTION LINE (BRL)
- APPROXIMATE EXTENT OF STAGE 3A & 3B
- LOTS EXCLUDED FROM GCR
- 2015 AS-BUILT CONTOURS
- CONTOURS OUTSIDE STAGE 3AB WORK AREA


- NOTES:**
1. As-built contour data from Harrison Grierson Consultants Limited, surveyed April 2015.
  2. Contours are finished ground level and are shown at 1metre intervals to Moturiki Datum.
  3. Lot layout from Harrison Grierson Consultants Limited dated 19 March 2014.

revision	rev	description	drawn	approved	date	<p>Horizontal Scale (metres)</p> <p>Vertical Scale (metres)</p>	drawn	AIP		client:	THE LAKES (2012) LIMITED				
							approved	RBT		project:	THE LAKES SUBDIVISION STAGE 3A & 3B GEOTECHNICAL COMPLETION REPORT				
							date	24/4/2015		title:	2015 AS-BUILT CONTOUR PLAN				
							scale	1:2500		project no:	13086AP-AB	figure no:	07	rev:	-
							original size	A3							

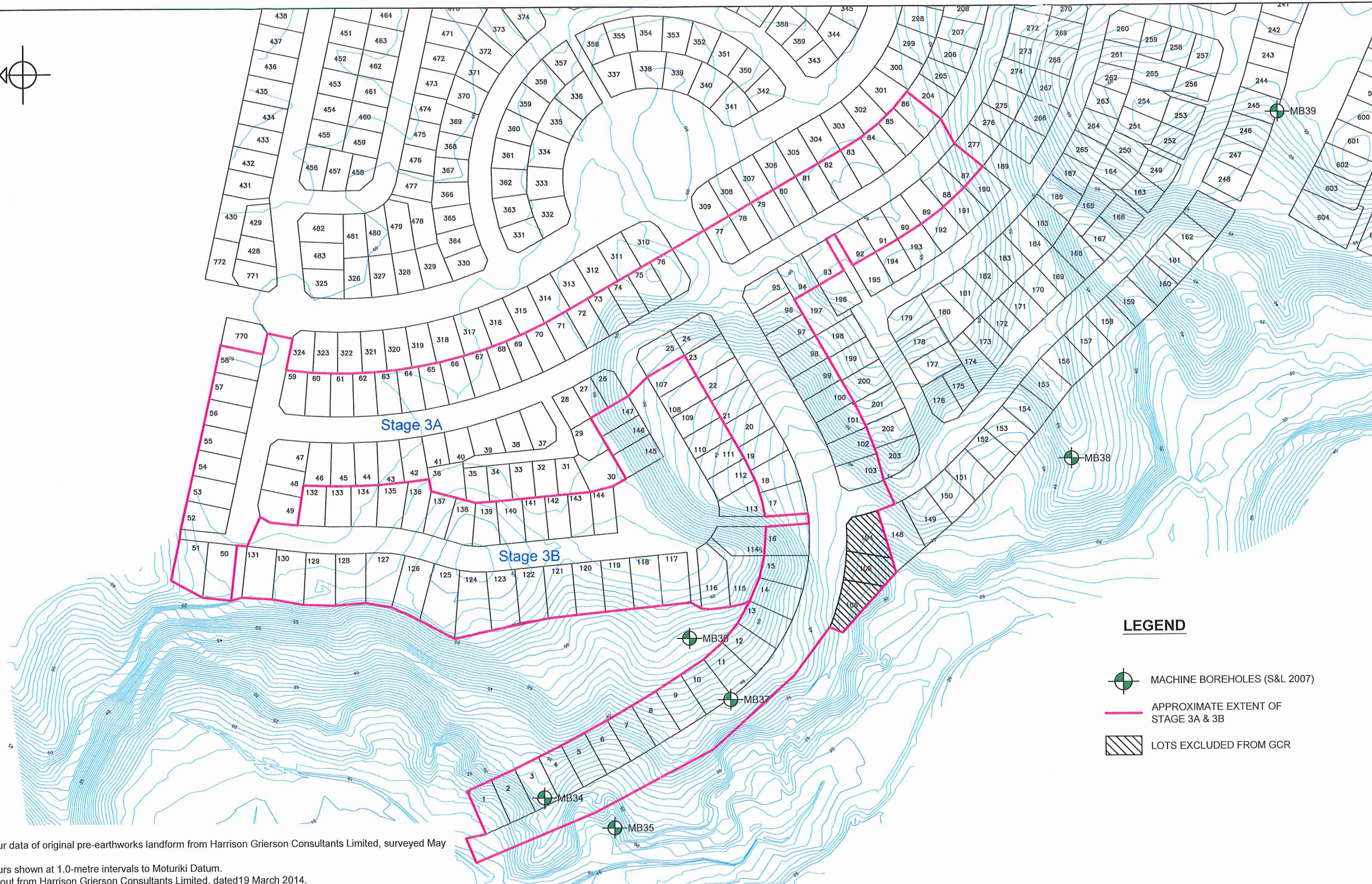


- NOTES:
1. SLOTS CUT ABOVE THE SPRINGLINE, ALTERNATING EITHER SIDE OF THE DRAIN PIPE IN 0.5m INTERVALS.
  2. REFER TO HARRISON GRIERSON DRAWING AB100 FOR LAYOUT DETAILS






revision	rev	description	drawn	approved	date	drawn	AIP		client:	THE LAKES (2012) LTD				
						approved	RBT		project:	THE LAKES SUBDIVISION STAGE 3a & 3B GEOTECHNICAL COMPLETION REPORT				
						date	24/4/2015		title:	DRAINAGE AS BUILT DRAWING				
						scale	NTS		project no:	13086AP-AB	figure no:	8	rev:	B
						original size	A3							



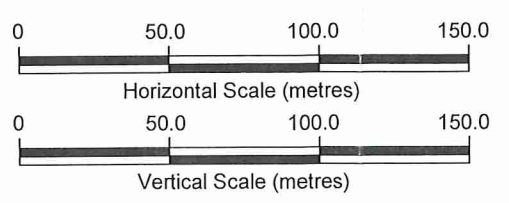


**LEGEND**

-  MACHINE BOREHOLES (S&L 2007)
-  APPROXIMATE EXTENT OF STAGE 3A & 3B
-  LOTS EXCLUDED FROM GCR

- NOTES:**
1. Contour data of original pre-earthworks landform from Harrison Grierson Consultants Limited, surveyed May 2007.
  2. Contours shown at 1.0-metre intervals to Moturiki Datum.
  3. Lot layout from Harrison Grierson Consultants Limited, dated 19 March 2014.

revision	rev	description	drawn	approved	date

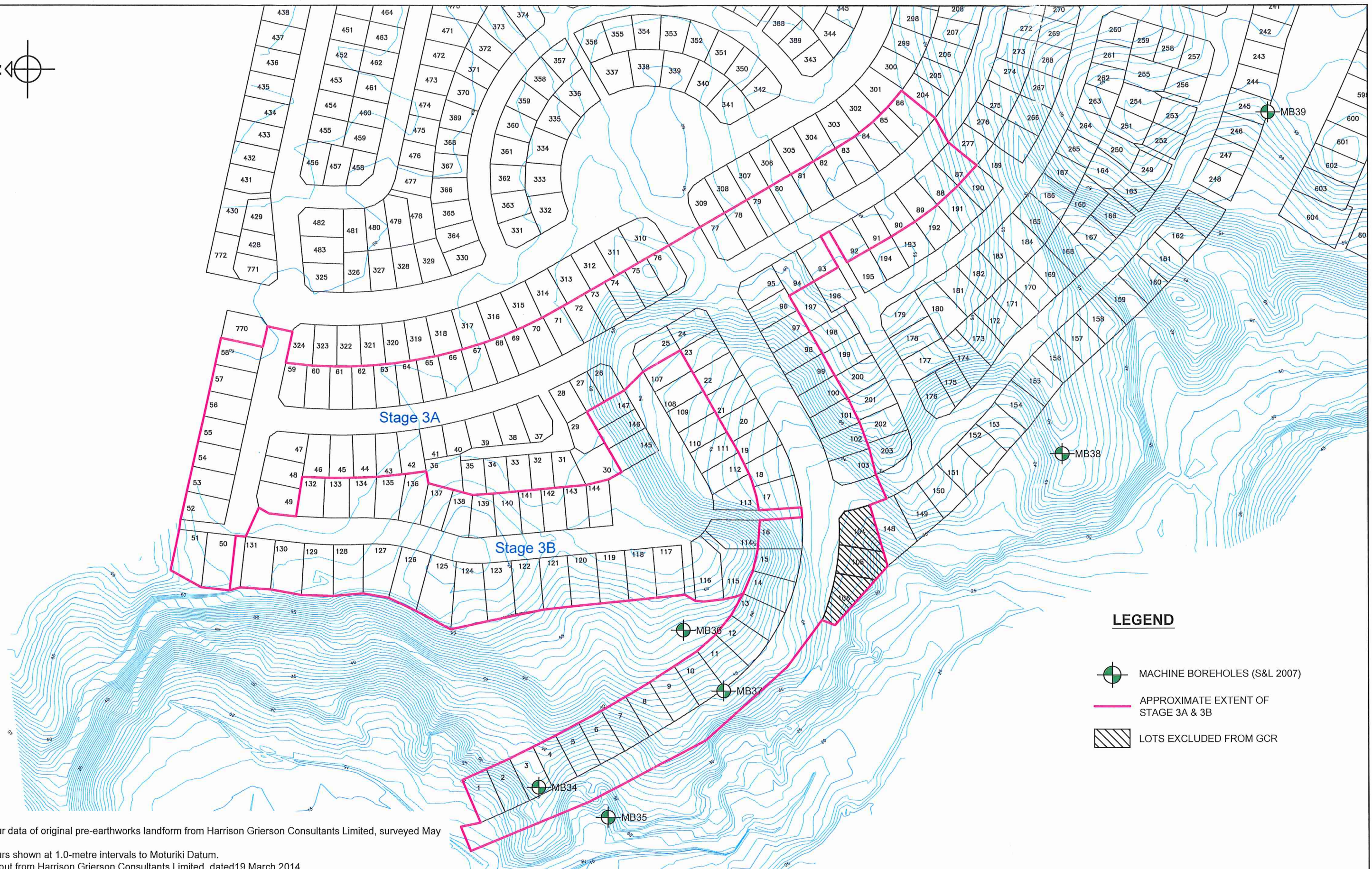


drawn	AIP
approved	RBT
date	24/4/2015
scale	1:2500
original size	A3



client:	THE LAKES (2012) LIMITED
	THE LAKES SUBDIVISION
	STAGE 3A & 3B
	COMPLETION REPORT
	PLACEMENT CONTOUR PLAN
figure no:	01
rev:	-








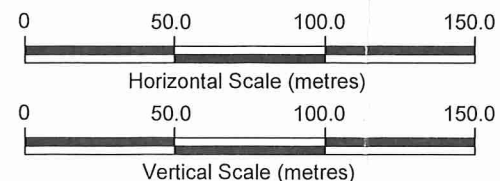
**NOTES:**

1. Contour data of original pre-earthworks landform from Harrison Grierson Consultants Limited, surveyed May 2007.
2. Contours shown at 1.0-metre intervals to Moturiki Datum.
3. Lot layout from Harrison Grierson Consultants Limited, dated 19 March 2014.

**LEGEND**

-  MACHINE BOREHOLES (S&L 2007)
-  APPROXIMATE EXTENT OF STAGE 3A & 3B
-  LOTS EXCLUDED FROM GCR

revision	rev	description	drawn	approved	date

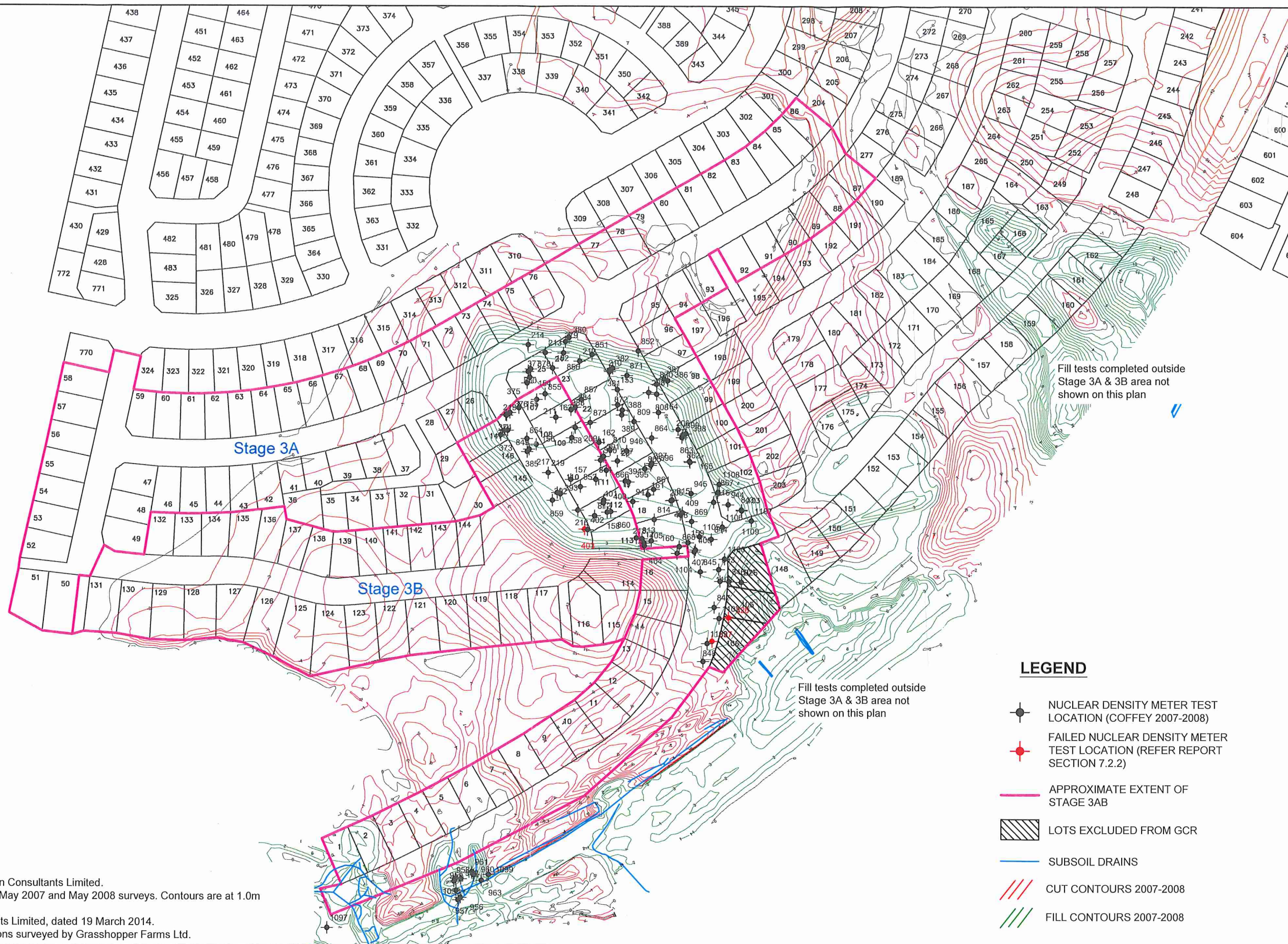


drawn	AIP
approved	RBT
date	24/4/2015
scale	1:2500
original size	A3



client:	THE LAKES (2012) LIMITED		
project:	THE LAKES SUBDIVISION STAGE 3A & 3B GEOTECHNICAL COMPLETION REPORT		
title:	PRE DEVELOPMENT CONTOUR PLAN		
project no:	13086AP-AB	figure no:	01
rev:	-		





Fill tests completed outside Stage 3A & 3B area not shown on this plan

Fill tests completed outside Stage 3A & 3B area not shown on this plan

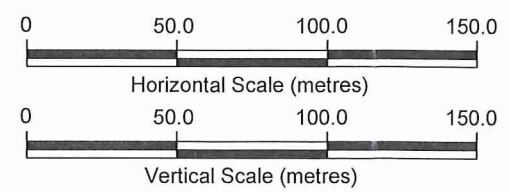
**LEGEND**

- NUCLEAR DENSITY METER TEST LOCATION (COFFEY 2007-2008)
- FAILED NUCLEAR DENSITY METER TEST LOCATION (REFER REPORT SECTION 7.2.2)
- APPROXIMATE EXTENT OF STAGE 3AB
- LOTS EXCLUDED FROM GCR
- SUBSOIL DRAINS
- CUT CONTOURS 2007-2008
- FILL CONTOURS 2007-2008

**NOTES:**

1. Cut / Fill contour data from Harrison Grierson Consultants Limited.
2. Cut / Fill contours show difference between May 2007 and May 2008 surveys. Contours are at 1.0m intervals.
3. Lot layout from Harrison Grierson Consultants Limited, dated 19 March 2014.
4. Testing conducted by Coffey and test locations surveyed by Grasshopper Farms Ltd.

revision	rev	description	drawn	approved	date



drawn	AIP
approved	RBT
date	24/4/2015
scale	1:2500
original size	A3



client:	THE LAKES (2012) LIMITED		
project:	THE LAKES SUBDIVISION STAGE 3A & 3B GEOTECHNICAL COMPLETION REPORT		
title:	2007-2008 CUT/FILL CONTOUR PLAN		
project no:	13086AP-AB	figure no:	02
rev:			