Appendix G Mitigated Flood Mapping (Option PC25)

508,000 509,000 510,000

6,647,000 6,646,000

AVON RISE
WALLACE CIRCUIT
COLAC TERRACE
LAKES DRIVE
MENINDEE CIRCUIT
MAWSON CLOSE
SAND STREET
BURRIDGE AVENUE
FLEMING CLOSE
EELEY CLOSE
CORNISH STREET
LOUDEN CLOSE
ROBERT GARRETT STREET
CARTEN CLOSE
FERAN CRESCENT
MORRISON CLOSE
MATHIE STREET
RAY MCCARTHY DRIVE
HURLEY DRIVE
REID DRIVE
NORTH BOAMBEE ROAD
INDUSTRIAL DRIVE
ENGINEERING DRIVE
FORGE DRIVE
ISLES DRIVE
ELSWICK PLACE
COLLISON PLACE
PACIFIC HIGHWAY
WINGARA DRIVE
O'KEEFE DRIVE
ENGLANDS ROAD
STADIUM DRIVE
PHIL HAWTHORNE DRIVE
HOGBIN DRIVE

Paper Size A3

0 37.5 75 150 225 300

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Flood Depth (m)

- 0.00 - 0.05
- 0.05 - 0.15
- 0.15 - 0.50
- 0.50 - 1.00
- 1.00 - 1.50
- 1.50 - 2.00
- 2.00 - 3.00
- 3.00 - 4.00
- 4.00 - 5.00
- > 5.00m
- Flood Level (mAHD)

1

Coffs Harbour City Council
Boambee newports Creek
Floodplain Risk Management Study

Job Number	22-16407
Revision	0
Date	14 Jul 2016

Flood Extent and Depth
PC25 - 1% AEP

Appendix G.F.1

G:\22\16407\GIS\Maps\Deliverables\22_16407_G_F_1_6_PC25_100yr_Flood_Extent_and_Depth_Rev0.mxd

© 2016. Whilst every care has been taken to prepare this map, GHD (and LPI) make no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and cannot accept liability and responsibility of any kind (whether in contract, tort or otherwise) for any expenses, losses, damages and/or costs (including indirect or consequential damage) which are or may be incurred by any party as a result of the map being inaccurate, incomplete or unsuitable in any way and for any reason.

Data source: LPI (2012), LPI Lot Boundaries, 2012. Created by:sldouglas

230 Harbour Drive Coffs Harbour NSW 2450 Australia **T** 61 2 6650 5600 **F** 61 2 6652 6021 **E** cfsmail@ghd.com **W** www.ghd.com

509,000 510,000 511,000

6,646,000

NORTH BOAMBEE ROAD
HURLEY DRIVE
REID DRIVE
PACIFIC HIGHWAY
ISLES DRIVE
O'KEEFE DRIVE
WINGARA DRIVE
DAKOTA DRIVE
AVIATION DRIVE
HOGBIN DRIVE
AIRPORT DRIVE
FELLOWSHIP DRIVE
PHIL HAWTHORNE DRIVE
STADIUM DRIVE
DOUG KNIGHT DRIVE
NEWPORTS CREEK

6,645,000

509,000 510,000 511,000

Paper Size A3

0 37.5 75 150 225 300

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Flood Depth (m)

0.00 - 0.05	0.50 - 1.00	1.50 - 2.00	3.00 - 4.00
0.05 - 0.15	1.00 - 1.50	2.00 - 3.00	4.00 - 5.00
0.15 - 0.50			> 5.00m

Flood Level (mAHD)

2

Coffs Harbour City Council
Boambee newports Creek
Floodplain Risk Management Study

Job Number	22-16407
Revision	0
Date	14 Jul 2016

Flood Extent and Depth
PC25 - 1% AEP

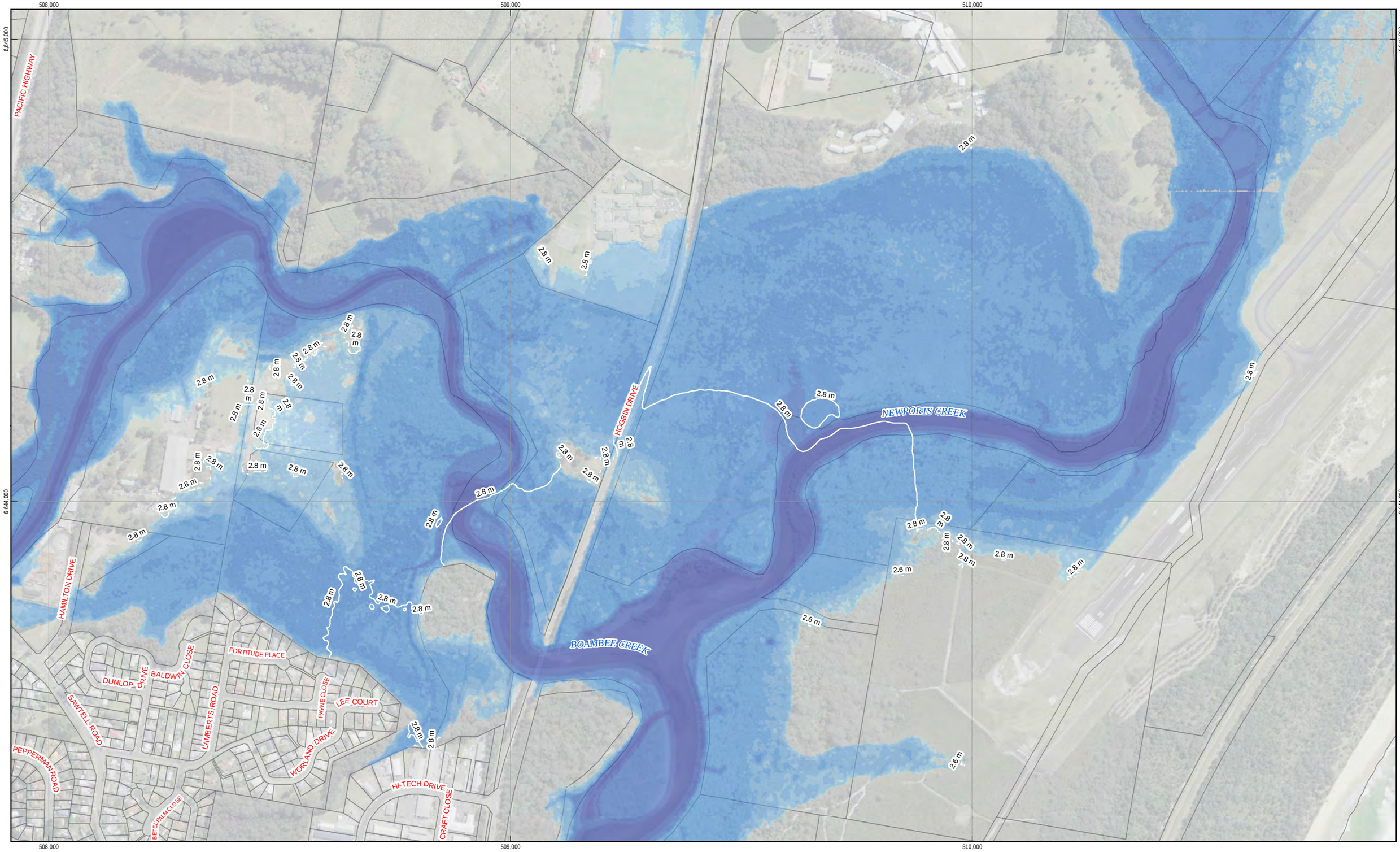
Appendix G.F.2

G:\22\16407\GIS\Maps\Deliverables\22_16407_G_F_1_6_PC25_100yr_Flood_Extent_and_Depth_Rev0.mxd

© 2016. Whilst every care has been taken to prepare this map, GHD (and LPI) make no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and cannot accept liability and responsibility of any kind (whether in contract, tort or otherwise) for any expenses, losses, damages and/or costs (including indirect or consequential damage) which are or may be incurred by any party as a result of the map being inaccurate, incomplete or unsuitable in any way and for any reason.

Data source: LPI (2012), LPI Lot Boundaries, 2012. Created by:sldouglas

230 Harbour Drive Coffs Harbour NSW 2450 Australia **T** 61 2 6650 5600 **F** 61 2 6652 6021 **E** cfsmail@ghd.com **W** www.ghd.com



Paper Size A3

0 37.5 75 150 225 300

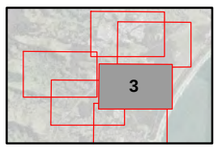
Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Flood Depth (m)

- 0.00 - 0.05
- 0.05 - 0.15
- 0.15 - 0.50
- 0.50 - 1.00
- 1.00 - 1.50
- 1.50 - 2.00
- 2.00 - 3.00
- 3.00 - 4.00
- 4.00 - 5.00
- > 5.00m
- Flood Level (mAHD)



Coffs Harbour City Council
Boambee newports Creek
Floodplain Risk Management Study

Job Number	22-16407
Revision	0
Date	14 Jul 2016

Flood Extent and Depth
PC25 - 1% AEP

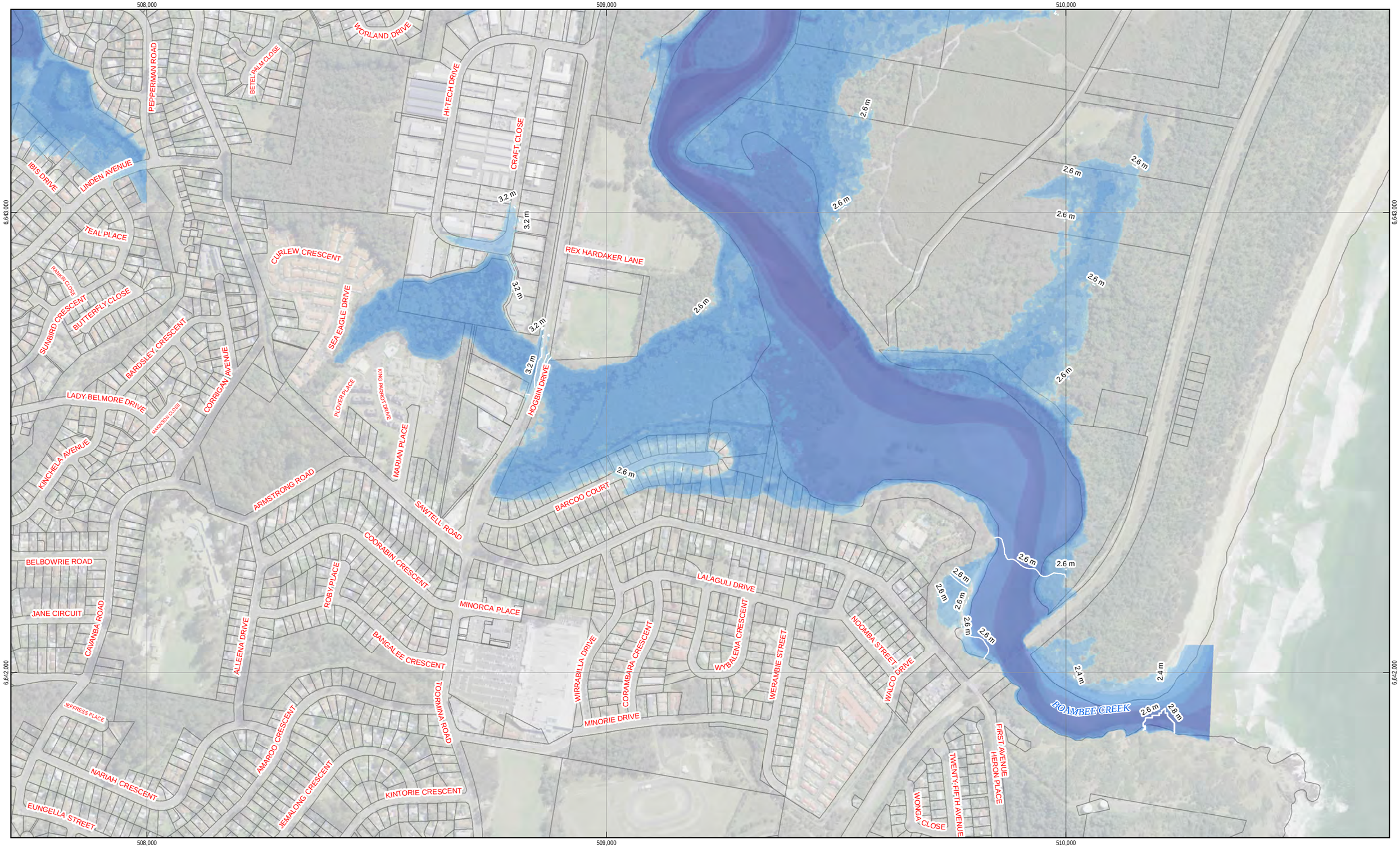
Appendix G.F.3

G:\22\16407\GIS\Maps\Deliverables\22_16407_G_F_1_6_PC25_100yr_Flood_Extent_and_Depth_Rev0.mxd

© 2016. Whilst every care has been taken to prepare this map, GHD (and LPI) make no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and cannot accept liability and responsibility of any kind (whether in contract, tort or otherwise) for any expenses, losses, damages and/or costs (including indirect or consequential damage) which are or may be incurred by any party as a result of the map being inaccurate, incomplete or unsuitable in any way and for any reason.

Data source: LPI (2012), LPI Lot Boundaries, 2012. Created by:sldouglas

230 Harbour Drive Coffs Harbour NSW 2450 Australia **T** 61 2 6650 5600 **F** 61 2 6652 6021 **E** cfsmail@ghd.com **W** www.ghd.com



Paper Size A3

0 37.5 75 150 225 300

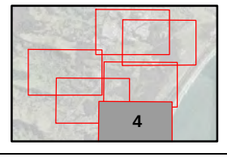
Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Flood Depth (m)

- 0.00 - 0.05
- 0.05 - 0.15
- 0.15 - 0.50
- 0.50 - 1.00
- 1.00 - 1.50
- 1.50 - 2.00
- 2.00 - 3.00
- 3.00 - 4.00
- 4.00 - 5.00
- > 5.00m
- Flood Level (mAHD)



Coffs Harbour City Council
Boambee newports Creek
Floodplain Risk Management Study

Job Number	22-16407
Revision	0
Date	14 Jul 2016

Flood Extent and Depth
PC25 - 1% AEP

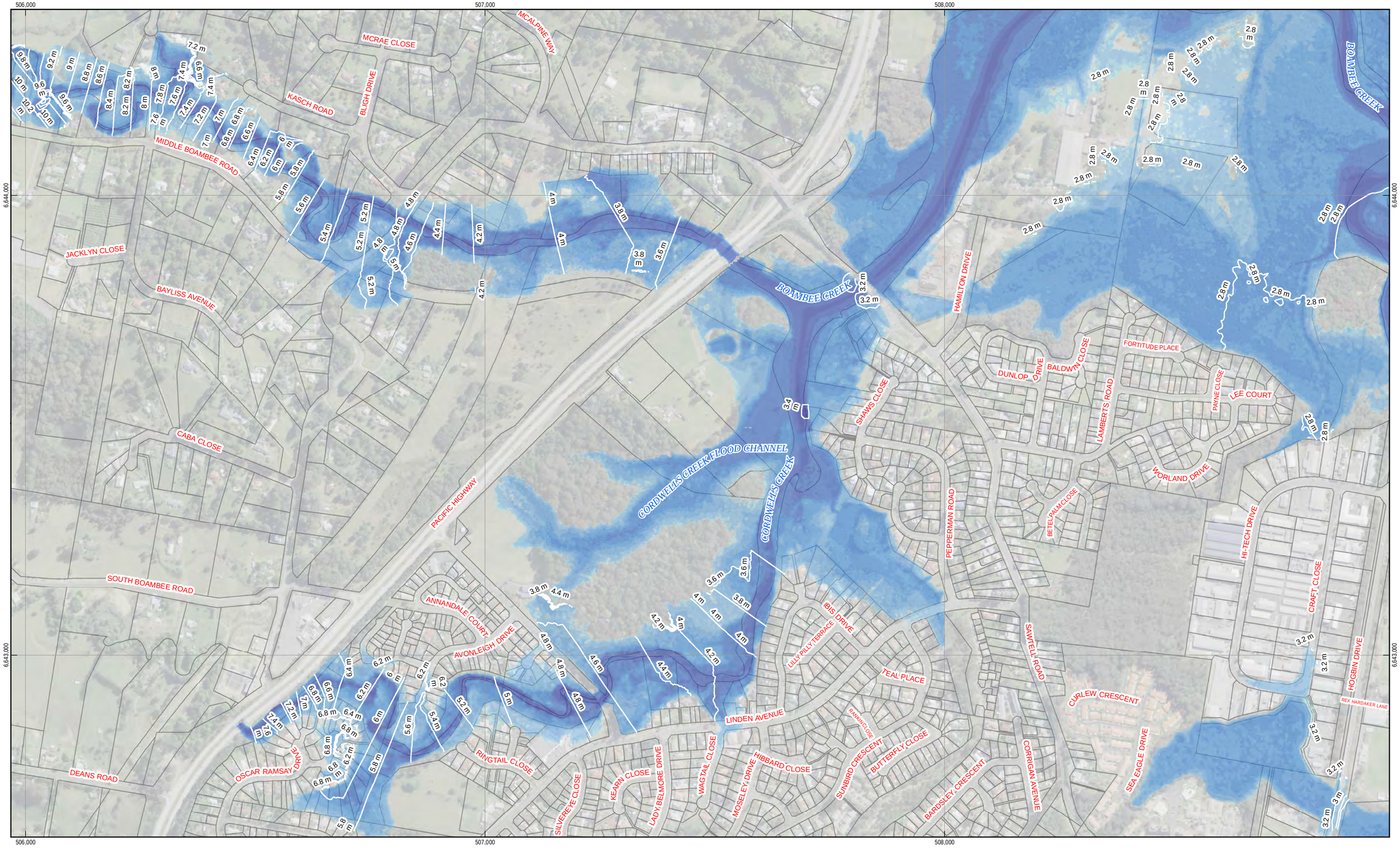
Appendix G.F.4

G:\22\16407\GIS\Maps\Deliverables\22_16407_G_F_1_6_PC25_100yr_Flood_Extent_and_Depth_Rev0.mxd

© 2016. Whilst every care has been taken to prepare this map, GHD (and LPI) make no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and cannot accept liability and responsibility of any kind (whether in contract, tort or otherwise) for any expenses, losses, damages and/or costs (including indirect or consequential damage) which are or may be incurred by any party as a result of the map being inaccurate, incomplete or unsuitable in any way and for any reason.

Data source: LPI (2012), LPI Lot Boundaries, 2012. Created by:sldouglas

230 Harbour Drive Coffs Harbour NSW 2450 Australia **T** 61 2 6650 5600 **F** 61 2 6652 6021 **E** cfsmail@ghd.com **W** www.ghd.com



Paper Size A3

0 37.5 75 150 225 300

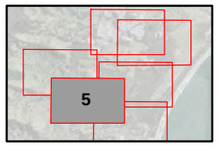
Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Flood Depth (m)

- 0.00 - 0.05
- 0.05 - 0.15
- 0.15 - 0.50
- 0.50 - 1.00
- 1.00 - 1.50
- 1.50 - 2.00
- 2.00 - 3.00
- 3.00 - 4.00
- 4.00 - 5.00
- > 5.00m
- Flood Level (mAHD)



Coffs Harbour City Council
Boambee newports Creek
Floodplain Risk Management Study

Job Number	22-16407
Revision	0
Date	14 Jul 2016

Flood Extent and Depth
PC25 - 1% AEP

Appendix G.F.5

G:\22\16407\GIS\Maps\Deliverables\22_16407_G_F_1_6_PC25_100yr_Flood_Extent_and_Depth_Rev0.mxd

230 Harbour Drive Coffs Harbour NSW 2450 Australia **T** 61 2 6650 5600 **F** 61 2 6652 6021 **E** cfsmail@ghd.com **W** www.ghd.com

© 2016. Whilst every care has been taken to prepare this map, GHD (and LPI) make no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and cannot accept liability and responsibility of any kind (whether in contract, tort or otherwise) for any expenses, losses, damages and/or costs (including indirect or consequential damage) which are or may be incurred by any party as a result of the map being inaccurate, incomplete or unsuitable in any way and for any reason.

Data source: LPI (2012), LPI Lot Boundaries, 2012. Created by:sldouglas

505,000 506,000 507,000

6,645,000 6,644,000

AYRSHIRE PARK DRIVE
SKYE CLOSE
BANFF CLOSE
FOREST CLOSE
MCALPINE WAY
PLUNKETT CRESCENT
CANALE DRIVE
BORSATO DRIVE
RAINTREE PLACE
AMANDA CLOSE
CURNUCK CLOSE
RAINFORD DRIVE
YARAD PLACE
SYMONS AVENUE
WEDDS ROAD
MCRAE CLOSE
KASCH ROAD
BLIGH DRIVE
LINDSAYS ROAD
PACIFIC HIGHWAY
PERKINS ROAD
BAYLISS AVENUE
JACKLYN CLOSE
BOAMBEE CREEK
SAWTELL ROAD

Paper Size A3

0 37.5 75 150 225 300

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Flood Depth (m)

- 0.00 - 0.05
- 0.05 - 0.15
- 0.15 - 0.50
- 0.50 - 1.00
- 1.00 - 1.50
- 1.50 - 2.00
- 2.00 - 3.00
- 3.00 - 4.00
- 4.00 - 5.00
- > 5.00m
- Flood Level (mAHD)

6

Coffs Harbour City Council
Boambee newports Creek
Floodplain Risk Management Study

Job Number	22-16407
Revision	0
Date	14 Jul 2016

Flood Extent and Depth
PC25 - 1% AEP

Appendix G.F.6

G:\22\16407\GIS\Maps\Deliverables\22_16407_G_F_1_6_PC25_100yr_Flood_Extent_and_Depth_Rev0.mxd

© 2016. Whilst every care has been taken to prepare this map, GHD (and LPI) make no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and cannot accept liability and responsibility of any kind (whether in contract, tort or otherwise) for any expenses, losses, damages and/or costs (including indirect or consequential damage) which are or may be incurred by any party as a result of the map being inaccurate, incomplete or unsuitable in any way and for any reason.

Data source: LPI (2012), LPI Lot Boundaries, 2012. Created by:sldouglas

230 Harbour Drive Coffs Harbour NSW 2450 Australia **T** 61 2 6650 5600 **F** 61 2 6652 6021 **E** cfsmail@ghd.com **W** www.ghd.com

508,000 509,000 510,000

6,647,000 6,646,000

AVON RISE
WALLACE CIRCUIT
COLAC TERRACE
LAKES DRIVE
MENINDEE CIRCUIT
MAWSON CLOSE
SAND STREET
BURRIDGE AVENUE
FLEMING CLOSE
EELEY CLOSE
CORNISH STREET
LOUDEN CLOSE
ROBERT GARRETT STREET
CARTEN CLOSE
FERAN CRESCENT
MORRISON CLOSE
MATHIE STREET
RAY MCCARTHY DRIVE
HURLEY DRIVE
REID DRIVE
NORTH BOAMBEE ROAD
KEONA CIRCUIT
MANSBRIDGE DRIVE
INDUSTRIAL DRIVE
FRASER DRIVE
PACIFIC HIGHWAY
ENGINEERING DRIVE
FORGE DRIVE
ELSWICK PLACE
COLLISON PLACE
ISLES DRIVE
COOK DRIVE
WINGARA DRIVE
O'KEEFE DRIVE
ENGLANDS ROAD
NEWPORTS CREEK
HOGBIN DRIVE
STADIUM DRIVE
PHIL HAWTHORNE DRIVE

NOTE: Flood Hazard has been calculated in accordance with Figure L2 of the Floodplain Development Manual 2005.

Paper Size A3

0 37.5 75 150 225 300

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

LEGEND

- Low hazard
- Intermediate Hazard
- High hazard

1

Coffs Harbour City Council
Boambee newports Creek
Floodplain Risk Management Study

Job Number	22-16407
Revision	0
Date	14 Jul 2016

Final Hydraulic Hazard
1% AEP

Appendix G.H.1

G:\22\16407\GIS\Maps\Deliverables\22_16407_G_H_1_6_PC25_100yr_Provisional_Hazard_Rev0.mxd

© 2016. Whilst every care has been taken to prepare this map, GHD (and LPI) make no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and cannot accept liability and responsibility of any kind (whether in contract, tort or otherwise) for any expenses, losses, damages and/or costs (including indirect or consequential damage) which are or may be incurred by any party as a result of the map being inaccurate, incomplete or unsuitable in any way and for any reason.

Data source: LPI (2012), LPI Lot Boundaries, 2012. Created by:sldouglas

230 Harbour Drive Coffs Harbour NSW 2450 Australia **T** 61 2 6650 5600 **F** 61 2 6652 6021 **E** cfsmail@ghd.com **W** www.ghd.com

509,000 510,000 511,000

6,646,000 6,645,000

NORTH BOAMBEE ROAD
HURLEY DRIVE
REID DRIVE
KEONA CIRCUIT
MANGSBRIDGE DRIVE
FRASER DRIVE
PACIFIC HIGHWAY
COOK DRIVE
WINGARA DRIVE
DAKOTA DRIVE
AVIATION DRIVE
ISLES DRIVE
O'KEEFE DRIVE
NEWPORTS CREEK
HOGBIN DRIVE
AIRPORT DRIVE
FELLOWSHIP DRIVE
PHIL HAWTHORNE DRIVE
STADIUM DRIVE
DOUG KNIGHT DRIVE

NOTE: Flood Hazard has been calculated in accordance with Figure L2 of the Floodplain Development Manual 2005.

Paper Size A3

0 37.5 75 150 225 300

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

LEGEND

- Low hazard
- Intermediate Hazard
- High hazard

2

Coffs Harbour City Council
Boambee newports Creek
Floodplain Risk Management Study

Job Number	22-16407
Revision	0
Date	14 Jul 2016

Final Hydraulic Hazard
1% AEP

Appendix G.H.2

G:\22\16407\GIS\Maps\Deliverables\22_16407_G_H_1_6_PC25_100yr_Provisional_Hazard_Rev0.mxd

© 2016. Whilst every care has been taken to prepare this map, GHD (and LPI) make no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and cannot accept liability and responsibility of any kind (whether in contract, tort or otherwise) for any expenses, losses, damages and/or costs (including indirect or consequential damage) which are or may be incurred by any party as a result of the map being inaccurate, incomplete or unsuitable in any way and for any reason.

Data source: LPI (2012), LPI Lot Boundaries, 2012. Created by:sldouglas

230 Harbour Drive Coffs Harbour NSW 2450 Australia **T** 61 2 6650 5600 **F** 61 2 6652 6021 **E** cfsmail@ghd.com **W** www.ghd.com

508,000 509,000 510,000

6,645,000

6,644,000

PACIFIC HIGHWAY
HOGBIN DRIVE
NEWPORTS CREEK
BOAMBEE CREEK
HAMILTON DRIVE
DUNLOP DRIVE
BALDWIN CLOSE
FORTITUDE PLACE
SAWTELL ROAD
LAMBERTS ROAD
PAYNE CLOSE
LEE COURT
WORLAND DRIVE
PEPPERMAN ROAD
BETEL PALM CLOSE
HI-TECH DRIVE
CRAFT CLOSE

NOTE: Flood Hazard has been calculated in accordance with Figure L2 of the Floodplain Development Manual 2005.

Paper Size A3

0 37.5 75 150 225 300

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

LEGEND

- Low hazard
- Intermediate Hazard
- High hazard

3

Coffs Harbour City Council
Boambee newports Creek
Floodplain Risk Management Study

Job Number	22-16407
Revision	0
Date	14 Jul 2016

Final Hydraulic Hazard
1% AEP

Appendix G.H.3

G:\22\16407\GIS\Maps\Deliverables\22_16407_G_H_1_6_PC25_100yr_Provisional_Hazard_Rev0.mxd

© 2016. Whilst every care has been taken to prepare this map, GHD (and LPI) make no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and cannot accept liability and responsibility of any kind (whether in contract, tort or otherwise) for any expenses, losses, damages and/or costs (including indirect or consequential damage) which are or may be incurred by any party as a result of the map being inaccurate, incomplete or unsuitable in any way and for any reason.

Data source: LPI (2012), LPI Lot Boundaries, 2012. Created by:sldouglas

230 Harbour Drive Coffs Harbour NSW 2450 Australia **T** 61 2 6650 5600 **F** 61 2 6652 6021 **E** cfsmail@ghd.com **W** www.ghd.com

508,000 509,000 510,000

6,643,000 6,642,000

WORLAND DRIVE
PEPPERMAN ROAD
BETEL PALM CLOSE
HI-TECH DRIVE
CRAFT CLOSE
IBIS DRIVE
LINDEN AVENUE
TEAL PLACE
CURLEW CRESCENT
REX HARDAKER LANE
HOGBIN DRIVE
SEA EAGLE DRIVE
RAMKIN CLOSE
SUNBIRD CRESCENT
BUTTERFLY CLOSE
BARDSLEY CRESCENT
CORRIGAN AVENUE
LADY BELMORE DRIVE
MAKINSON CLOSE
PLOVER PLACE
KING PARROT DRIVE
MARIAN PLACE
KINCHELA AVENUE
ARMSTRONG ROAD
SAWTELL ROAD
BARCOO COURT
COORABIN CRESCENT
BELBOWRIE ROAD
ROBY PLACE
JANE CIRCUIT
CAVANBA ROAD
ALLEENA DRIVE
MINORCA PLACE
LALAGULI DRIVE
BANGALEE CRESCENT
WIRRABILLA DRIVE
CORAMBARA CRESCENT
WYBALENA CRESCENT
WERAMBIE STREET
NOOMBA STREET
WALCO DRIVE
TOORMINA ROAD
MINORIE DRIVE
BOAMBEE CREEK
JEFFRESS PLACE
AMAROO CRESCENT
NARIAH CRESCENT
JEMALONG CRESCENT
KINTORIE CRESCENT
EUNGELLA STREET
TWENTY-FIFTH AVENUE
FIRST AVENUE
HERON PLACE

NOTE: Flood Hazard has been calculated in accordance with Figure L2 of the Floodplain Development Manual 2005.

Paper Size A3

0 37.5 75 150 225 300

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

LEGEND

- Low hazard
- Intermediate Hazard
- High hazard

4

Coffs Harbour City Council
Boambee newports Creek
Floodplain Risk Management Study

Job Number	22-16407
Revision	0
Date	14 Jul 2016

Final Hydraulic Hazard
1% AEP

Appendix G.H.4

G:\22\16407\GIS\Maps\Deliverables\22_16407_G_H_1_6_PC25_100yr_Provisional_Hazard_Rev0.mxd

© 2016. Whilst every care has been taken to prepare this map, GHD (and LPI) make no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and cannot accept liability and responsibility of any kind (whether in contract, tort or otherwise) for any expenses, losses, damages and/or costs (including indirect or consequential damage) which are or may be incurred by any party as a result of the map being inaccurate, incomplete or unsuitable in any way and for any reason.

Data source: LPI (2012), LPI Lot Boundaries, 2012. Created by:sldouglas

230 Harbour Drive Coffs Harbour NSW 2450 Australia **T** 61 2 6650 5600 **F** 61 2 6652 6021 **E** cfsmail@ghd.com **W** www.ghd.com

506,000 507,000 508,000

6,644,000 6,643,000

MCRAE CLOSE
MCALPINE WAY
KASCH ROAD
BLIGH DRIVE
MIDDLE BOAMBEE ROAD
BOAMBEE CREEK
LINDSAYS ROAD
JACKLYN CLOSE
BAYLISS AVENUE
CABA CLOSE
PACIFIC HIGHWAY
CORDWELLS CREEK FLOOD CHANNEL
SOUTH BOAMBEE ROAD
ANNANDALE COURT
BRUCE KING DRIVE
AVONLEIGH DRIVE
CAMARATTA CLOSE
MEADOW VIEW CLOSE
CORDWELLS CREEK
DEANS ROAD
OSCAR RAMSAY DRIVE
RINGTAIL CLOSE
SILVEREYE CLOSE
KEARN CLOSE
LADY BELMORE DRIVE
WAGTAIL CLOSE
MOSELEY DRIVE
HIBBARD CLOSE
LINDEN AVENUE
SUNBIRD CRESCENT
RANKIN CLOSE
BUTTERFLY CLOSE
TEAL PLACE
LILLY PILLY TERRACE
IBIS DRIVE
HAMILTON DRIVE
SHAWS CLOSE
DUNLOP DRIVE
BALDWIN CLOSE
FORTITUDE PLACE
LAMBERTS ROAD
PAYNE CLOSE
LEE COURT
WORLAND DRIVE
PEPPERMAN ROAD
BETEL PALM CLOSE
SAWTELL ROAD
CURLEW CRESCENT
CORRIGAN AVENUE
SEA EAGLE DRIVE
HI-TECH DRIVE
CRAFT CLOSE
HOGBIN DRIVE
REX HARDAKER LANE

NOTE: Flood Hazard has been calculated in accordance with Figure L2 of the Floodplain Development Manual 2005.

Paper Size A3

0 37.5 75 150 225 300

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

LEGEND

- Low hazard
- Intermediate Hazard
- High hazard

5

Coffs Harbour City Council
Boambee newports Creek
Floodplain Risk Management Study

Job Number 22-16407
Revision 0
Date 14 Jul 2016

Final Hydraulic Hazard
1% AEP

Appendix G.H.5

G:\22\16407\GIS\Maps\Deliverables\22_16407_G_H_1_6_PC25_100yr_Provisional_Hazard_Rev0.mxd

© 2016. Whilst every care has been taken to prepare this map, GHD (and LPI) make no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and cannot accept liability and responsibility of any kind (whether in contract, tort or otherwise) for any expenses, losses, damages and/or costs (including indirect or consequential damage) which are or may be incurred by any party as a result of the map being inaccurate, incomplete or unsuitable in any way and for any reason.

Data source: LPI (2012), LPI Lot Boundaries, 2012. Created by:sldouglas

230 Harbour Drive Coffs Harbour NSW 2450 Australia **T** 61 2 6650 5600 **F** 61 2 6652 6021 **E** cfsmail@ghd.com **W** www.ghd.com

505,000 506,000 507,000

6,645,000

AYRSHIRE PARK DRIVE
SKYE CLOSE
BANFF CLOSE
FOREST CLOSE
PLUNKETT CRESCENT
MCALPINE WAY
CANALE DRIVE
BORSATO DRIVE
RAINTREE PLACE
AMANDA CLOSE
CURNUCK CLOSE
RAINFORD DRIVE
YARAD PLACE
SYMONS AVENUE
WEDDS ROAD
MIDDLE BOAMBEE ROAD
MCRAE CLOSE
KASCH ROAD
BLIGH DRIVE
PACIFIC HIGHWAY
LINDSAYS ROAD
PERKINS ROAD
BAYLISS AVENUE
JACKLYN CLOSE
BOAMBEE CREEK
SAWTELL ROAD

6,644,000

NOTE: Flood Hazard has been calculated in accordance with Figure L2 of the Floodplain Development Manual 2005.

505,000 506,000 507,000

Paper Size A3

0 37.5 75 150 225 300

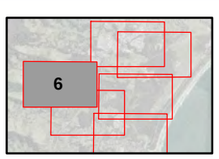
Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

LEGEND

- Low hazard
- Intermediate Hazard
- High hazard



Coffs Harbour City Council
Boambee newports Creek
Floodplain Risk Management Study

Job Number	22-16407
Revision	0
Date	14 Jul 2016

Final Hydraulic Hazard
1% AEP

Appendix G.H.6

G:\22\16407\GIS\Maps\Deliverables\22_16407_G_H_1_6_PC25_100yr_Provisional_Hazard_Rev0.mxd

© 2016. Whilst every care has been taken to prepare this map, GHD (and LPI) make no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and cannot accept liability and responsibility of any kind (whether in contract, tort or otherwise) for any expenses, losses, damages and/or costs (including indirect or consequential damage) which are or may be incurred by any party as a result of the map being inaccurate, incomplete or unsuitable in any way and for any reason.

Data source: LPI (2012), LPI Lot Boundaries, 2012. Created by:sldouglas

230 Harbour Drive Coffs Harbour NSW 2450 Australia **T** 61 2 6650 5600 **F** 61 2 6652 6021 **E** cfsmail@ghd.com **W** www.ghd.com

Paper Size A3

0 37.5 75 150 225 300

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Legend

Change In Flood Level (mm)

- . -500mm
- -500mm - -250mm
- -250mm - -100mm
- -100mm - -50mm
- -50mm - -30mm
- -30mm - -15mm
- -15mm - +15mm
- +15mm - +30mm
- +30mm - +50mm
- +50mm - +100mm
- +100mm - + 250mm
- +250mm - +500mm
- No Longer Flooded

Coffs Harbour City Council
Boambee newports Creek
Floodplain Risk Management Study

Existing vs PC25
1% AEP

Job Number	22-16407
Revision	0
Date	14 Jul 2016

Appendix G.D1

N:\AU\Coffs Harbour\Projects\22\16407\GIS\Maps\Deliverables\22_16407_G_D_1_6_PC25_100yr_Diff_Rev0.mxd

© 2016. Whilst every care has been taken to prepare this map, GHD (and LPI) make no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and cannot accept liability and responsibility of any kind (whether in contract, tort or otherwise) for any expenses, losses, damages and/or costs (including indirect or consequential damage) which are or may be incurred by any party as a result of the map being inaccurate, incomplete or unsuitable in any way and for any reason.

Data source: LPI (2012), LPI Lot Boundaries, 2012. Created by:sldouglas

230 Harbour Drive Coffs Harbour NSW 2450 Australia **T** 61 2 6650 5600 **F** 61 2 6652 6021 **E** cfsmail@ghd.com **W** www.ghd.com

509,000 510,000 511,000

6,646,000

NORTH BOAMBEE ROAD
HURLEY DRIVE
REID DRIVE
KEONA CIRCUIT
MANSBRIDGE DRIVE
FRASER DRIVE
PACIFIC HIGHWAY
COOK DRIVE
WINGARA DRIVE
DAKOTA DRIVE
AVIATION DRIVE
ISLES DRIVE
O'KEEFE DRIVE
NEWPORTS CREEK
HOGBIN DRIVE
AIRPORT DRIVE
FELLOWSHIP DRIVE
PHIL HAWTHORNE DRIVE
STADIUM DRIVE
DOUG KNIGHT DRIVE

6,645,000

509,000 510,000 511,000

Paper Size A3

0 37.5 75 150 225 300

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Legend

Change In Flood Level (mm)

- . -500mm
- -500mm - -250mm
- -250mm - -100mm
- -100mm - -50mm
- -50mm - -30mm
- -30mm - -15mm
- -15mm - +15mm
- +15mm - +30mm
- +30mm - +50mm
- +50mm - +100mm
- +100mm - + 250mm
- +250mm - +500mm
- No Longer Flooded

GHD

COFFS HARBOUR CITY COUNCIL

Coffs Harbour City Council
Boambee newports Creek
Floodplain Risk Management Study

Job Number 22-16407
Revision 0
Date 14 Jul 2016

Existing vs PC25 1% AEP

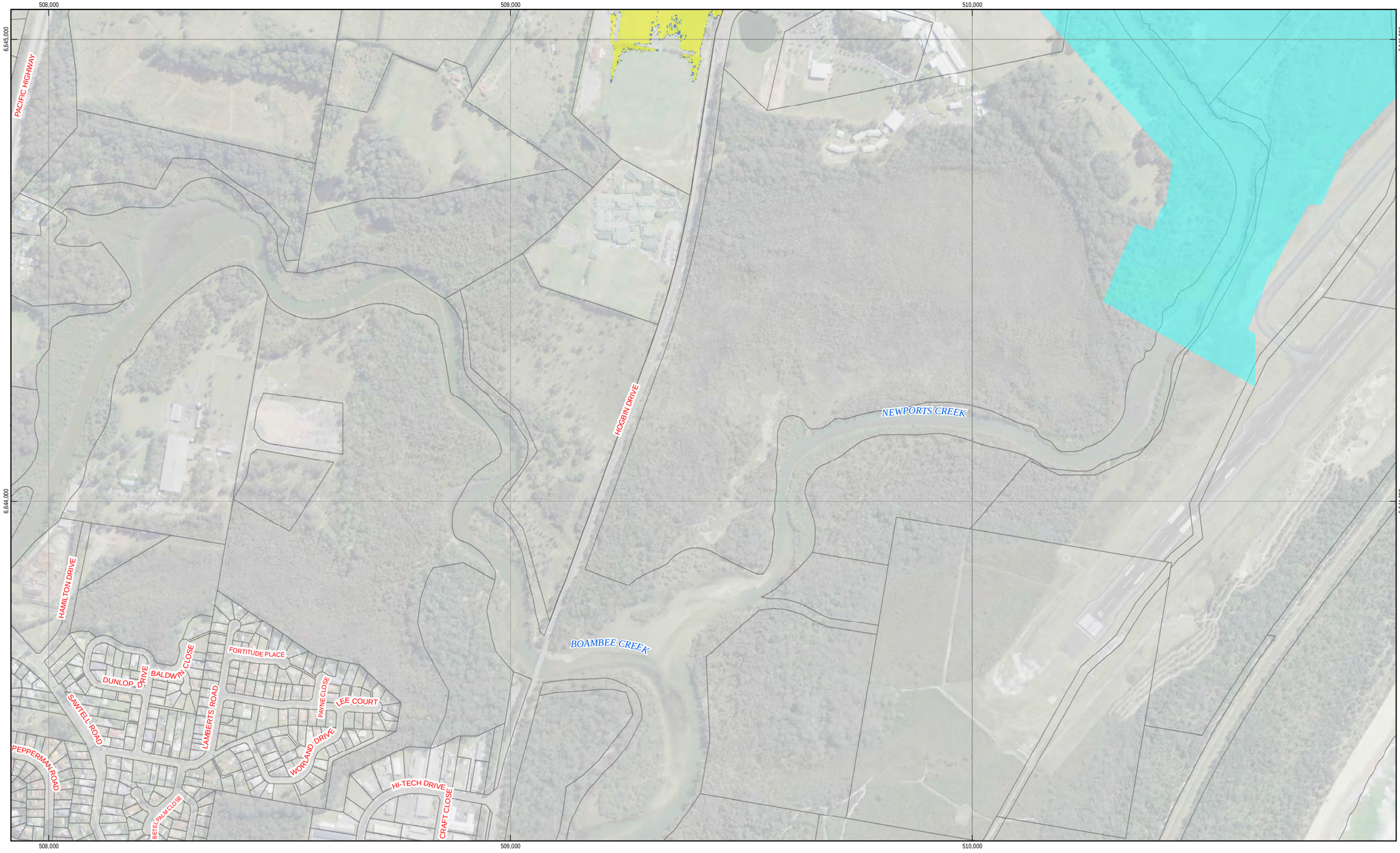
Appendix G.D2

N:\AU\Coffs Harbour\Projects\22\16407\GIS\Maps\Deliverables\22_16407_G_D_1_6_PC25_100yr_Diff_Rev0.mxd

© 2016. Whilst every care has been taken to prepare this map, GHD (and LPI) make no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and cannot accept liability and responsibility of any kind (whether in contract, tort or otherwise) for any expenses, losses, damages and/or costs (including indirect or consequential damage) which are or may be incurred by any party as a result of the map being inaccurate, incomplete or unsuitable in any way and for any reason.

Data source: LPI (2012), LPI Lot Boundaries, 2012. Created by:sldouglas

230 Harbour Drive Coffs Harbour NSW 2450 Australia **T** 61 2 6650 5600 **F** 61 2 6652 6021 **E** cfsmail@ghd.com **W** www.ghd.com



Paper Size A3

0 37.5 75 150 225 300

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Legend

Change In Flood Level (mm)

- . -500mm
- -500mm - -250mm
- -250mm - -100mm
- -100mm - -50mm
- -50mm - -30mm
- -30mm - -15mm
- -15mm - +15mm
- +15mm - +30mm
- +30mm - +50mm
- +50mm - +100mm
- +100mm - + 250mm
- +250mm - +500mm
- No Longer Flooded

Coffs Harbour City Council
Boambee newports Creek
Floodplain Risk Management Study

Job Number	22-16407
Revision	0
Date	14 Jul 2016

Existing vs PC25 1% AEP

Appendix G.D3

N:\AU\Coffs Harbour\Projects\22\16407\GIS\Maps\Deliverables\22_16407_G_D_1_6_PC25_100yr_Diff_Rev0.mxd

© 2016. Whilst every care has been taken to prepare this map, GHD (and LPI) make no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and cannot accept liability and responsibility of any kind (whether in contract, tort or otherwise) for any expenses, losses, damages and/or costs (including indirect or consequential damage) which are or may be incurred by any party as a result of the map being inaccurate, incomplete or unsuitable in any way and for any reason.

Data source: LPI (2012), LPI Lot Boundaries, 2012. Created by:sldouglas

230 Harbour Drive Coffs Harbour NSW 2450 Australia **T** 61 2 6650 5600 **F** 61 2 6652 6021 **E** cfsmail@ghd.com **W** www.ghd.com

508,000 509,000 510,000

6,643,000

WORLAND DRIVE
PEPPERMAN ROAD
BETEL PALM CLOSE
HI-TECH DRIVE
CRAFT CLOSE
IBIS DRIVE
LINDEN AVENUE
TEAL PLACE
CURLEW CRESCENT
REX HARDAKER LANE
RAMKIN CLOSE
SUNBIRD CRESCENT
BUTTERFLY CLOSE
SEA EAGLE DRIVE
HOGBIN DRIVE
BARDSLEY CRESCENT
HESKETT CLOSE
CORRIGAN AVENUE
LADY BELMORE DRIVE
MAWNSON CLOSE
PLOVER PLACE
KING PARROT DRIVE
MARIAN PLACE
KINCHELA AVENUE
ARMSTRONG ROAD
BARCOO COURT
SAWTELL ROAD
BELBOWRIE ROAD
COORABIN CRESCENT
ROBY PLACE
LALAGULI DRIVE
JANE CIRCUIT
MINORCA PLACE
CAVANBA ROAD
ALLEENA DRIVE
BANGALEE CRESCENT
WIRRABILLA DRIVE
CORAMBARA CRESCENT
WYBALENA CRESCENT
WERAMBIE STREET
NOOMBA STREET
WALCO DRIVE
TOORMINA ROAD
JEFFRESS PLACE
AMAROO CRESCENT
MINORIE DRIVE
BOAMBEE CREEK
FIRST AVENUE
HERON PLACE
TWENTY-FIFTH AVENUE
WONGA CLOSE
NARIAH CRESCENT
JEMALONG CRESCENT
KINTORIE CRESCENT
EUNGELLA STREET

6,642,000

508,000 509,000 510,000

Paper Size A3

0 37.5 75 150 225 300

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Legend

Change In Flood Level (mm)

- . -500mm
- -500mm - -250mm
- -250mm - -100mm
- -100mm - -50mm
- -50mm - -30mm
- -30mm - -15mm
- -15mm - +15mm
- +15mm - +30mm
- +30mm - +50mm
- +50mm - +100mm
- +100mm - + 250mm
- +250mm - +500mm
- No Longer Flooded

GHD

COFFS HARBOUR CITY COUNCIL

Coffs Harbour City Council
Boambee newports Creek
Floodplain Risk Management Study

Job Number	22-16407
Revision	0
Date	14 Jul 2016

Existing vs PC25 1% AEP

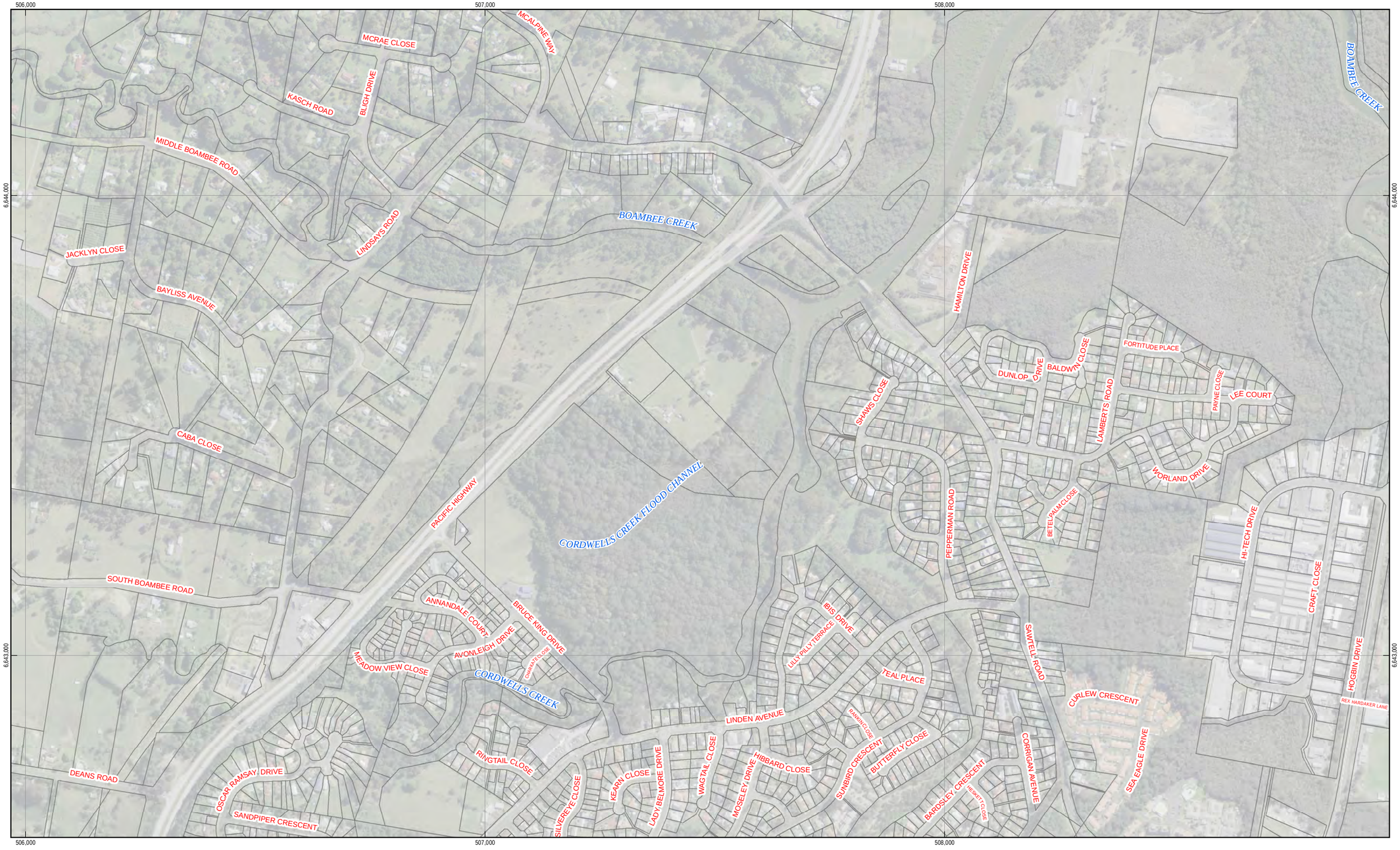
Appendix G.D4

N:\AU\Coffs Harbour\Projects\22\16407\GIS\Maps\Deliverables\22_16407_G_D_1_6_PC25_100yr_Diff_Rev0.mxd

© 2016. Whilst every care has been taken to prepare this map, GHD (and LPI) make no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and cannot accept liability and responsibility of any kind (whether in contract, tort or otherwise) for any expenses, losses, damages and/or costs (including indirect or consequential damage) which are or may be incurred by any party as a result of the map being inaccurate, incomplete or unsuitable in any way and for any reason.

Data source: LPI (2012), LPI Lot Boundaries, 2012. Created by:sldouglas

230 Harbour Drive Coffs Harbour NSW 2450 Australia **T** 61 2 6650 5600 **F** 61 2 6652 6021 **E** cfsmail@ghd.com **W** www.ghd.com



Paper Size A3

0 37.5 75 150 225 300

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Legend

Change In Flood Level (mm)

- . -500mm
- -500mm - -250mm
- -250mm - -100mm
- -100mm - -50mm
- -50mm - -30mm
- -30mm - -15mm
- -15mm - +15mm
- +15mm - +30mm
- +30mm - +50mm
- +50mm - +100mm
- +100mm - + 250mm
- +250mm - +500mm
- No Longer Flooded

Coffs Harbour City Council
Boambee newports Creek
Floodplain Risk Management Study

Job Number	22-16407
Revision	0
Date	14 Jul 2016

Existing vs PC25 1% AEP

Appendix G.D5

N:\AU\Coffs Harbour\Projects\22\16407\GIS\Maps\Deliverables\22_16407_G_D_1_6_PC25_100yr_Diff_Rev0.mxd

© 2016. Whilst every care has been taken to prepare this map, GHD (and LPI) make no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and cannot accept liability and responsibility of any kind (whether in contract, tort or otherwise) for any expenses, losses, damages and/or costs (including indirect or consequential damage) which are or may be incurred by any party as a result of the map being inaccurate, incomplete or unsuitable in any way and for any reason.

Data source: LPI (2012), LPI Lot Boundaries, 2012. Created by:sldouglas

230 Harbour Drive Coffs Harbour NSW 2450 Australia **T** 61 2 6650 5600 **F** 61 2 6652 6021 **E** cfsmail@ghd.com **W** www.ghd.com

505,000 506,000 507,000

6,645,000

AYRSHIRE PARK DRIVE
SKYE CLOSE
BANFF CLOSE
FOREST CLOSE
PLUNKETT CRESCENT
MCALPINE WAY
CANALE DRIVE
BORSATO DRIVE
RAINTREE PLACE
AMANDA CLOSE
CURNUCK CLOSE
RAINFORD DRIVE
YARAD PLACE
SYMONS AVENUE
MCRAE CLOSE
WEDDS ROAD
MIDDLE BOAMBEE ROAD
KASCH ROAD
BLIGH DRIVE
PACIFIC HIGHWAY
LINDSAYS ROAD
BAYLISS AVENUE
PERKINS ROAD
JACKLYN CLOSE
BOAMBEE CREEK
SAWTELL ROAD

6,644,000

505,000 506,000 507,000

Paper Size A3

0 37.5 75 150 225 300

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Legend

Change In Flood Level (mm)

- . -500mm
- -500mm - -250mm
- -250mm - -100mm
- -100mm - -50mm
- -50mm - -30mm
- -30mm - -15mm
- -15mm - +15mm
- +15mm - +30mm
- +30mm - +50mm
- +50mm - +100mm
- +100mm - + 250mm
- +250mm - +500mm
- No Longer Flooded

Coffs Harbour City Council
Boambee newports Creek
Floodplain Risk Management Study

Job Number	22-16407
Revision	0
Date	14 Jul 2016

Existing vs PC25 1% AEP

Appendix G.D.6

N:\AU\Coffs Harbour\Projects\22\16407\GIS\Maps\Deliverables\22_16407_G_D_1_6_PC25_100yr_Diff_Rev0.mxd

© 2016. Whilst every care has been taken to prepare this map, GHD (and LPI) make no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and cannot accept liability and responsibility of any kind (whether in contract, tort or otherwise) for any expenses, losses, damages and/or costs (including indirect or consequential damage) which are or may be incurred by any party as a result of the map being inaccurate, incomplete or unsuitable in any way and for any reason.

Data source: LPI (2012), LPI Lot Boundaries, 2012. Created by:sldouglas

230 Harbour Drive Coffs Harbour NSW 2450 Australia **T** 61 2 6650 5600 **F** 61 2 6652 6021 **E** cfsmail@ghd.com **W** www.ghd.com

GHD
Client : Coffs Harbour City Council
Title : Boambee and Newports Creek FRMS
Job No : 22-16407

www.ghd.com.au
cfsmail@ghd.com
Tel. +61 2 6650 5601 Fax. +61 2 6650 5601
230 Harbour Drive, Coffs Harbour

Boambee Newport Floodplain Risk Management Plan

Mitigation Options

PC 25

Re-Grade Isles Drive Drainage Channel, clean out, steepen batters to 1 in 2 and grass.
Re-Grade Hospital Flooday, widen, steepen batters to 1 in 4 and grass. Relocation of Bollards
Removal of obstructions under Newports Creek Bridge
NBV Basin Works

purpose. They cannot be used for budget-setting purposes as common elements between options may have been omitted and/or the works not fully scoped. A functional design is recommended if a budget estimate is required.

SCHEDULE OF ESTIMATED QUANTITIES

PAY ITEM	DESCRIPTION OF WORK	QTY	UNIT	RATE	AMOUNT	NOTES
1	**Preliminaries**					
1.1	Establishment	1	item	11000.00	$ 11,000	Allowance only
1.2	Erosion and sediment control	1	item	11000.00	$ 11,000	Allowance only
1.3	Traffic control	1	item	11000.00	$ 11,000	Allowance only
	SUBTOTAL				**$ 33,000**	
2	**Earthworks & General - Isles Drive**					
2.1	Clear site of vegetation - light vegetation, over 500m2	4,180	m2	0.50	$ 2,090	-
2.3	Excavate over site to reduce levels in light soil	1,150	m3	21.00	$ 24,150	-
	Landscaping - hydro mulch sprayed grass seed	4,180	m2	0.30	$ 1,254	-
	Fence - supply and erect galvanised steel welded mesh 1.2m high	700	m	72.00	$ 50,400	
	Geotextile Mat - one layer of coir fibre between two layers of polymer mesh - 15-20 mm thick	4,180	m2	8.00	$ 33,440	product or similar
	Minor Works to culvert Crossing	1	item	100000.00	$ 100,000	
	Signage - warning signage around perimeter	1	unit	11000.00	$ 11,000	
	SUBTOTAL				**$ 222,334**	
3	**Earthworks & General - Hospital Floodway**					
3.1	Clear site of vegetation - light vegetation, over 500m2	13,010	m2	0.50	$ 6,505	-
3.2	Excavate over site to reduce levels in light soil	9,450	m3	21.00	$ 198,450	-
	Landscaping - hydro mulch sprayed grass seed	13,010	m2	0.30	$ 3,903	-
	Fence - supply and erect galvanised steel welded mesh 1.2m high	500	m	72.00	$ 36,000	
	Bollards - make good existing, relocate at completion of works	10,000	item	1.00	$ 10,000	
	Signage - warning signage around perimeter	1	unit	11000.00	$ 11,000	
	SUBTOTAL				**$ 265,858**	
4	**Remove Obstructions under Pacific Highway**					
4.1	Removal of gabions under Pacific Highway	1	item	100000.00	$ 100,000	Allowance only
	SUBTOTAL				**$ 100,000**	
	SUBTOTAL ITEMS 1-4				**$ 621,192**	
5	**Supervision, Project Management & Contractor On-Costs**					
5.1	Supervision, Project Management & Contractor On-Costs (20%)	20	%	-	$ 124,238	-
	SUBTOTAL				**$ 124,238**	
6	**Contingencies**					
6.1	Contingencies - General (30%)	30	%	-	$ 186,358	-
	SUBTOTAL				**$ 186,358**	
	SUBTOTAL ITEMS 1-6				**$ 931,788**	
3	**NBV Basin Works**					
	Proposed (OPTN 4) Detention Basin in Upper North Boambee Valley	1	item	2992500.00	$ 2,992,500	63% of NBV Basin works costed by DGB
	SUBTOTAL				**$ 2,992,500**	
	TOTAL (Ex-GST)				**$ 3,924,288**	