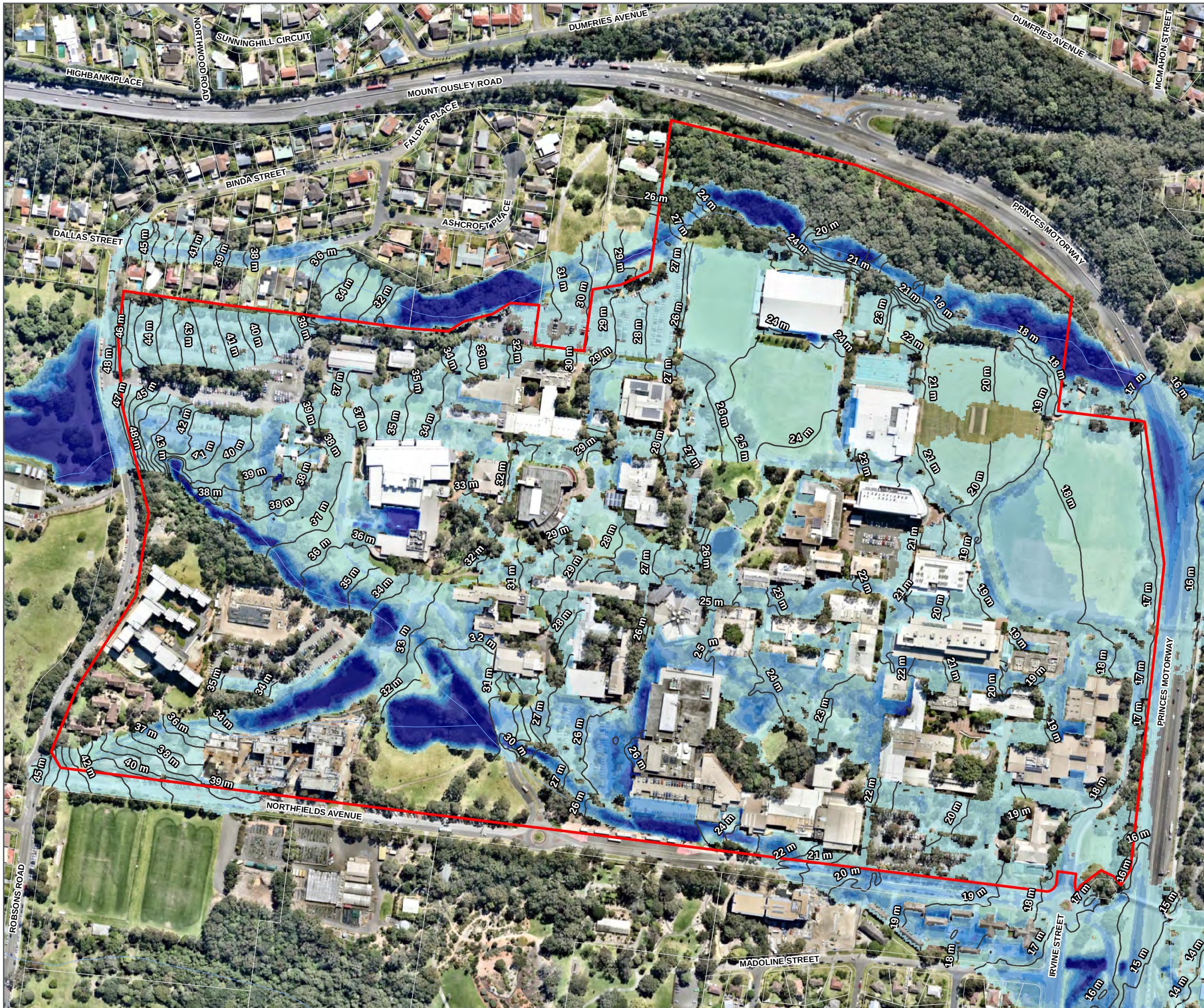




Flood Extent Existing PMF

UOW MLS FLOOD STUDY

Legend

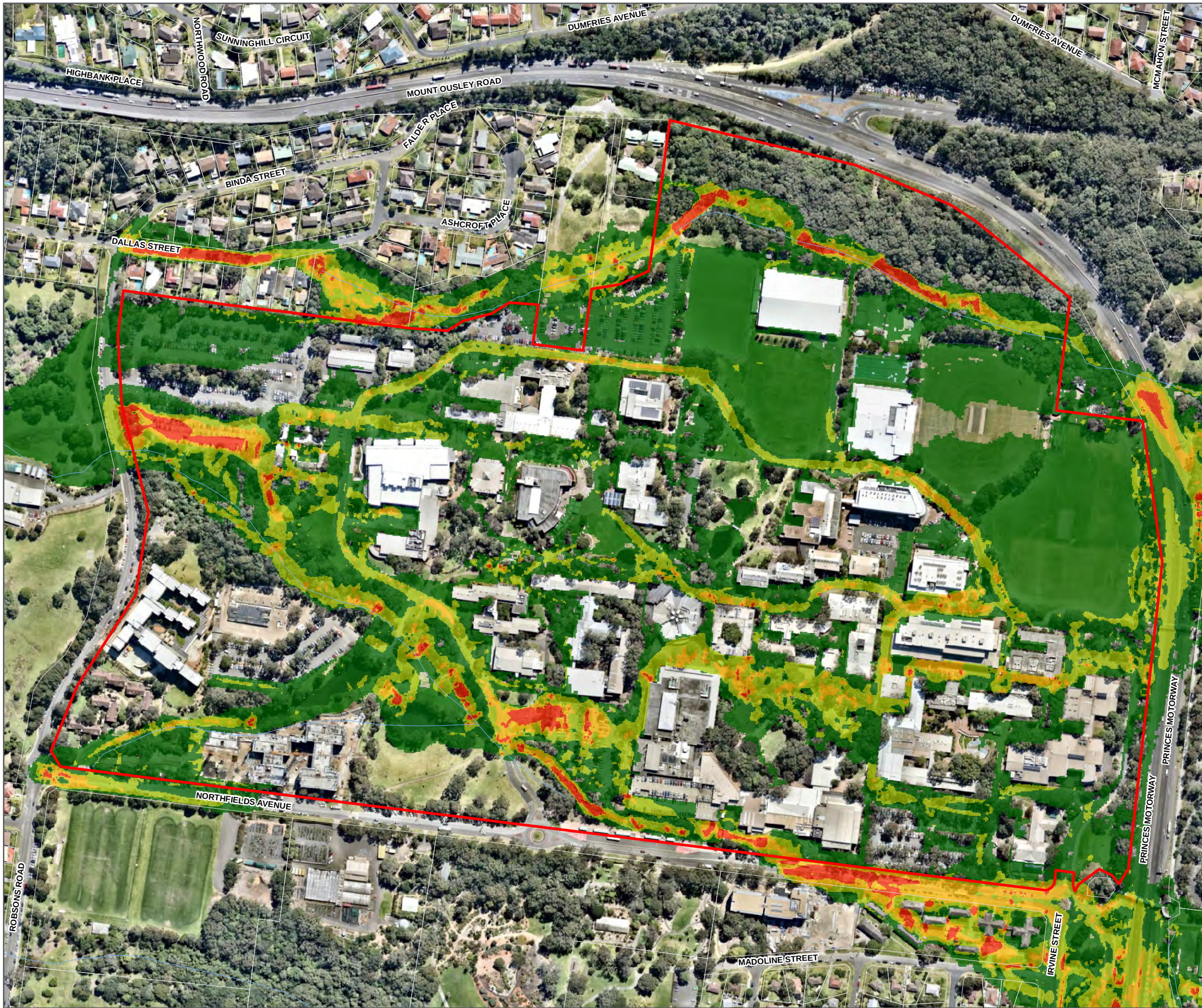
-  Site Boundary
-  Watercourses (LPI)
-  1m Flood Height Contour (mAHD)
-  Cadastre (LPI, 2015)

Flood Depth (m)

-  0 - 0.25
-  0.25 - 0.50
-  0.50 - 0.75
-  0.75 - 1.00
-  1.00 - 1.25
-  1.25 - 1.50
-  > 1.50

1:3,500 Scale at A3

Metres
0 50 100 150 200



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Flood Velocity Existing PMF

UOW MLS FLOOD STUDY

Legend

- Site Boundary
- Watercourses (LPI)
- Cadastre (LPI, 2015)

Flood Velocity (m/s)

- 0 - 1
- 1 - 2
- 2 - 3
- > 4

1:3,500 Scale at A3

Metres
0 50 100 150 200



Map Produced by Cardno NSW/ACT Pty Ltd (WOL)
Date: 2017-02-07 | Project: 82017137-01
Coordinate System: GDA 1994 MGA Zone 56
Map: 82017137-GS-005-ExVelocityPMF.mxd 01
Aerial imagery supplied by nearmap (October 2016)



TUFLOW Model Configuration (Developed)

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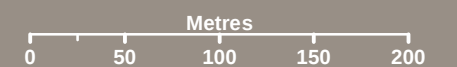
Legend

-  Site Boundary
-  Culvert
-  Tailwater
-  Flow Path (Cardno)
-  10m Contours (LPI)
-  Cadastre (LPI, 2015)

Materials Used for Modelling (Manning's n)

-  Buildings (n = 0.5)
-  Ponds (n = 0.01)
-  Short Grass (n = 0.035)
-  Pasture (n = 0.045)
-  Trees (n = 0.08)
-  Roads (n = 0.025)
-  Default (n = 0.04)

1:4,000 Scale at A3





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Flood Extent Developed 100 Year ARI

UOW MLS FLOOD STUDY

Legend

- Site Boundary
- MLS Footprint
- Watercourses (LPI)
- 1m Flood Height Contour (mAHD)
- Cadastre (LPI, 2015)

Flood Depth (m)

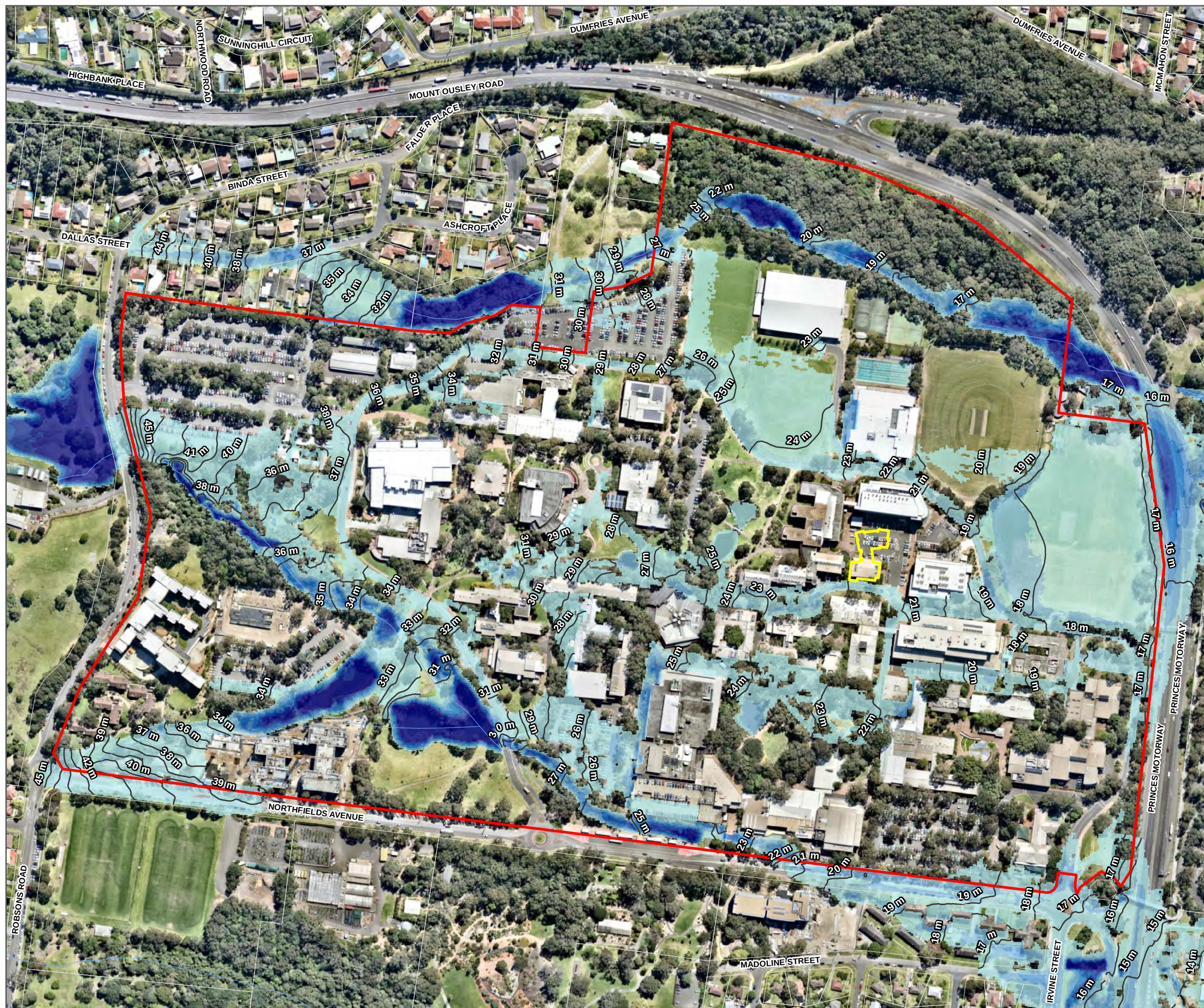
- 0 - 0.25
- 0.25 - 0.50
- 0.50 - 0.75
- 0.75 - 1.00
- 1.00 - 1.25
- 1.25 - 1.50
- > 1.50

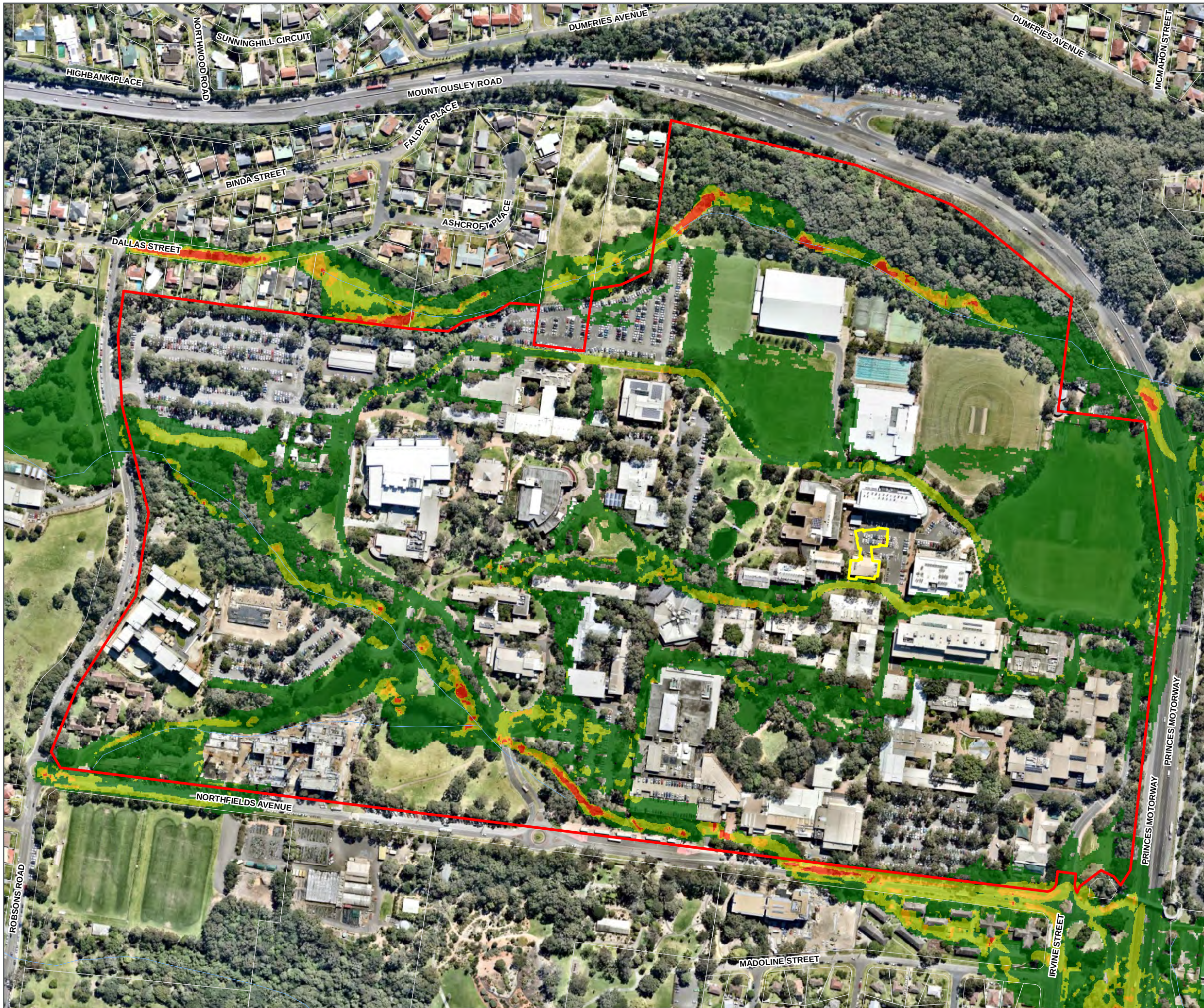
1:3,500 Scale at A3

Metres
0 50 100 150 200



Map Produced by Cardno NSW/ACT Pty Ltd (WOL)
Date: 2017-02-07 | Project: 82017137-01
Coordinate System: GDA 1994 MGA Zone 56
Map: 82017137-GS-007-DevDepth100y.mxd 01
Aerial imagery supplied by nearmap (October 2016)





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Flood Velocity Developed 100 Year ARI

UOW MLS FLOOD STUDY

Legend

- Site Boundary
- MLS Footprint
- Watercourses (LPI)
- Cadastre (LPI, 2015)

Flood Velocity (m/s)

- 0 - 1
- 1 - 2
- 2 - 3
- > 4

1:3,500 Scale at A3

Metres
0 50 100 150 200



Map Produced by Cardno NSW/ACT Pty Ltd (WOL)
Date: 2017-02-07 | Project: 82017137-01
Coordinate System: GDA 1994 MGA Zone 56
Map: 82017137-GS-009-DevVelocity100y.mxd 01
Aerial imagery supplied by nearmap (October 2016)