

APPENDIX A

Model Results – Approved Mining Scenario

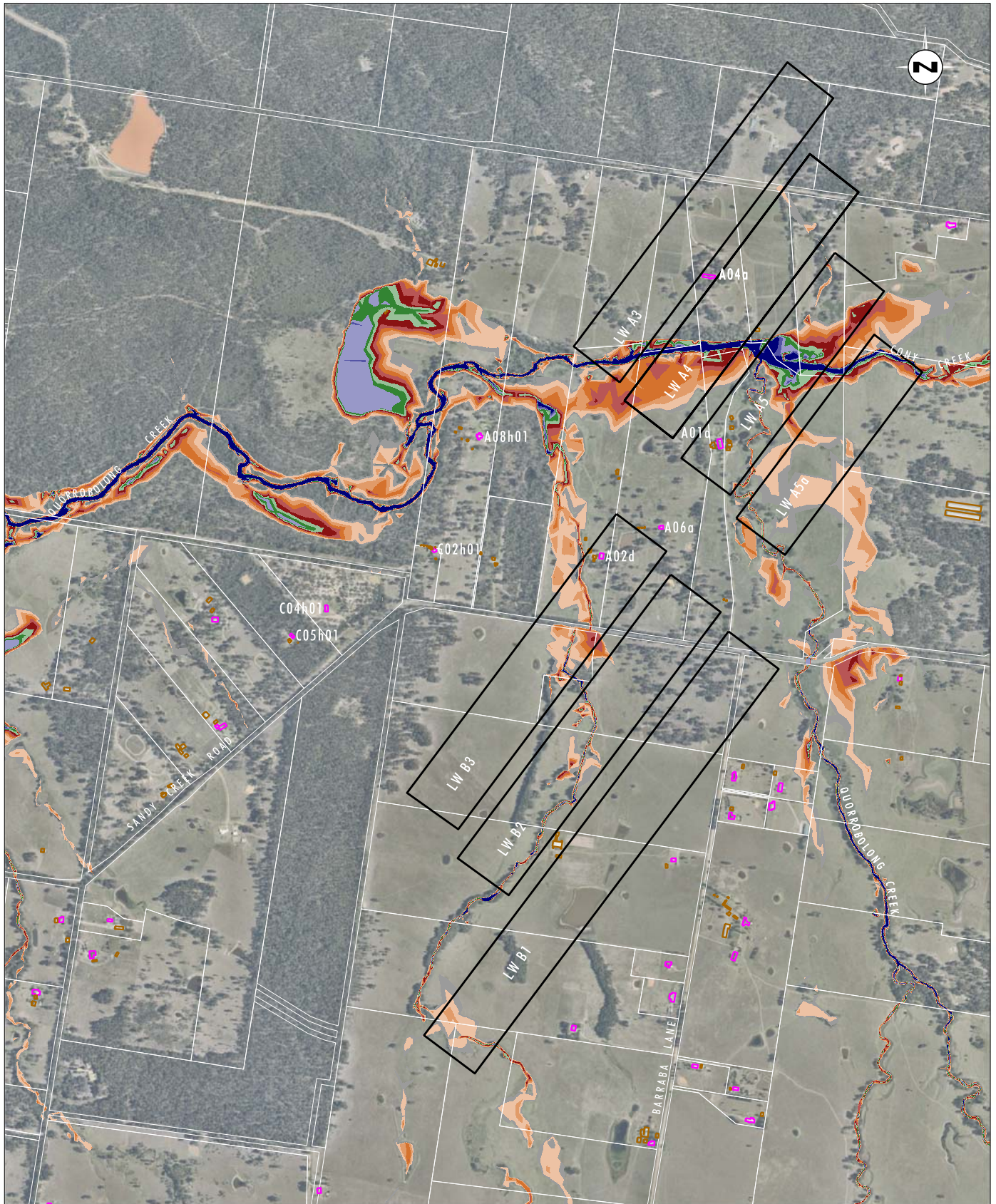


Image Source: Nearmap (2017)
 Data Source: Austar Coal Mine (2017), MSEC (2017)

0 0.25 0.5 1.0 km
 1:20 000

Legend

- Approved LWA3-A19 and LWB1-B3 Longwall Panels
- Dwelling
- Other Structure

Water Depth (m)

- | | |
|--|--|
| Range [0.001 : 0.100] | Range [0.900 : 1.100] |
| Range [0.100 : 0.300] | Range [1.100 : 1.300] |
| Range [0.300 : 0.500] | Range [1.300 : 1.500] |
| Range [0.500 : 0.700] | Range [1.500 : 1.700] |
| Range [0.700 : 0.900] | Range [1.700 : 1.900] |
| | Range [$>$ 1.900] |

FIGURE A1

**100% AEP Storm Event:
 Maximum Modelled Flood Depths,
 Predicted Subsidence Approved LWA3-A19 and LWB1-B3**

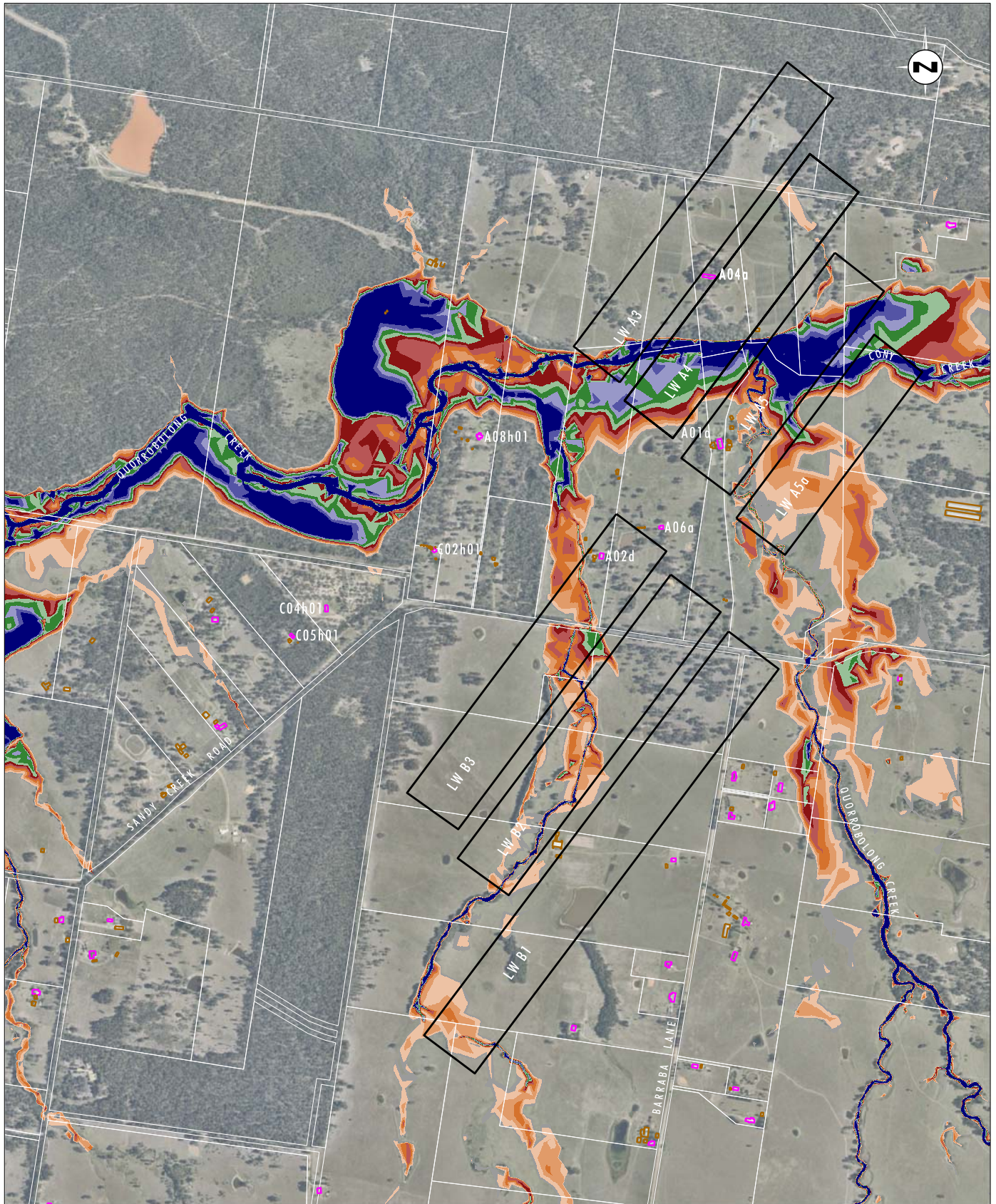


Image Source: Nearmap (2017)
 Data Source: Austar Coal Mine (2017)

0 0.25 0.5 1.0km
 1:20 000

Legend

- Approved LWA3-A19 and LWB1-B3 Longwall Panels
- Dwelling
- Other Structure

Water Depth (m)

- | | |
|--|--|
| Range [0.001 : 0.100] | Range [0.900 : 1.100] |
| Range [0.100 : 0.300] | Range [1.100 : 1.300] |
| Range [0.300 : 0.500] | Range [1.300 : 1.500] |
| Range [0.500 : 0.700] | Range [1.500 : 1.700] |
| Range [0.700 : 0.900] | Range [1.700 : 1.900] |
| | Range [$>$ 1.900] |

FIGURE A2

**5% AEP Storm Event:
 Maximum Modelled Flood Depths,
 Predicted Subsidence Approved LWA3-A19 and LWB1-B3**

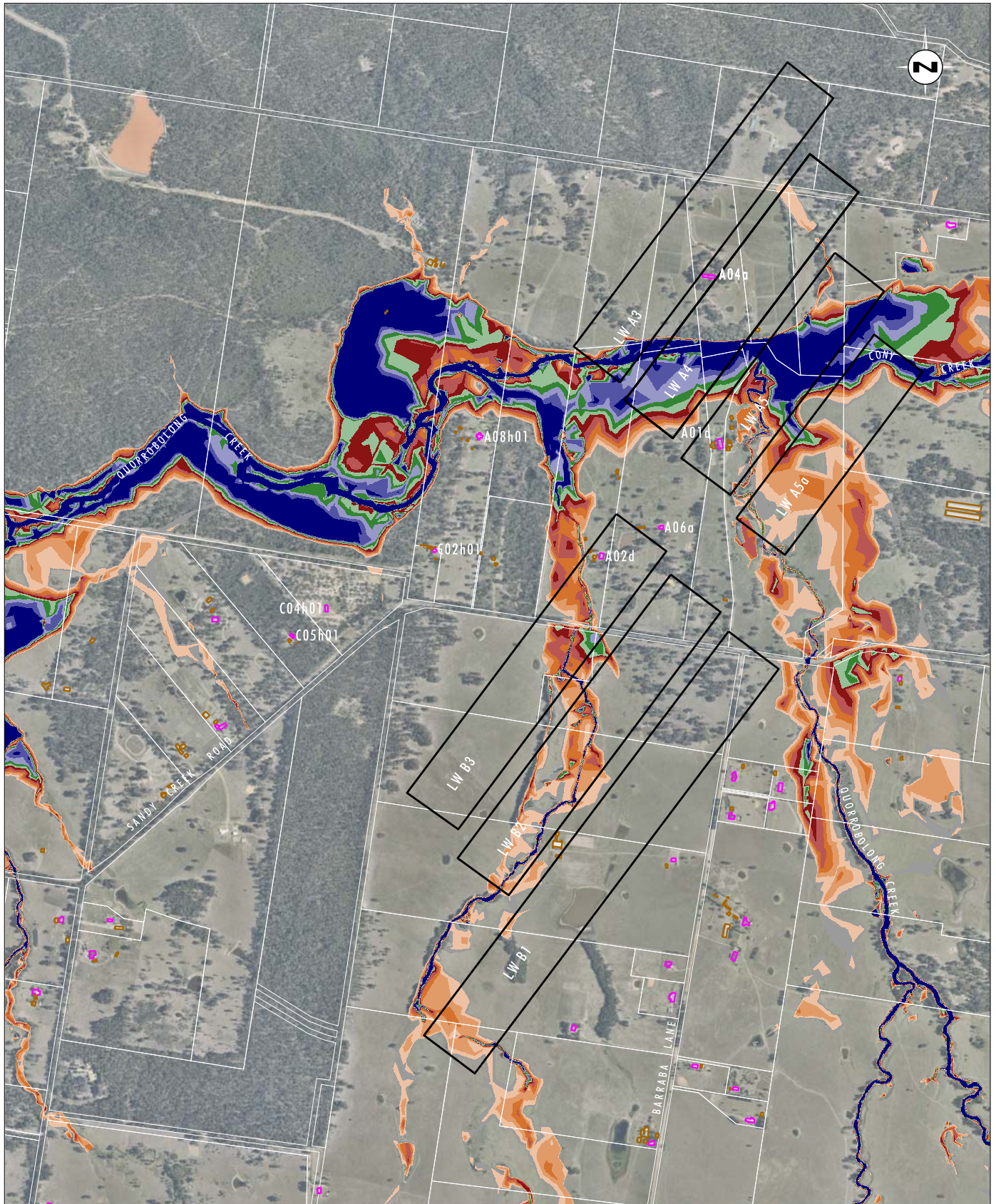


Image Source: Nearmap (2017)
 Data Source: Austar Coal Mine (2017)

0 0.25 0.5 1.0 km
 1:20 000

Legend Approved LWA3-A19 and LWB1-B3 Longwall Panels Dwelling Other Structure	Water Depth (m) Range [0.001 : 0.100] Range [0.100 : 0.300] Range [0.300 : 0.500] Range [0.500 : 0.700] Range [0.700 : 0.900]	Range [0.900 : 1.100]
		Range [1.100 : 1.300] Range [1.300 : 1.500] Range [1.500 : 1.700] Range [1.700 : 1.900] Range [$>$ 1.900]

FIGURE A3

1% AEP Storm Event:
 Maximum Modelled Flood Depths,
 Predicted Subsidence Approved LWA3-A19 and LWB1-B3

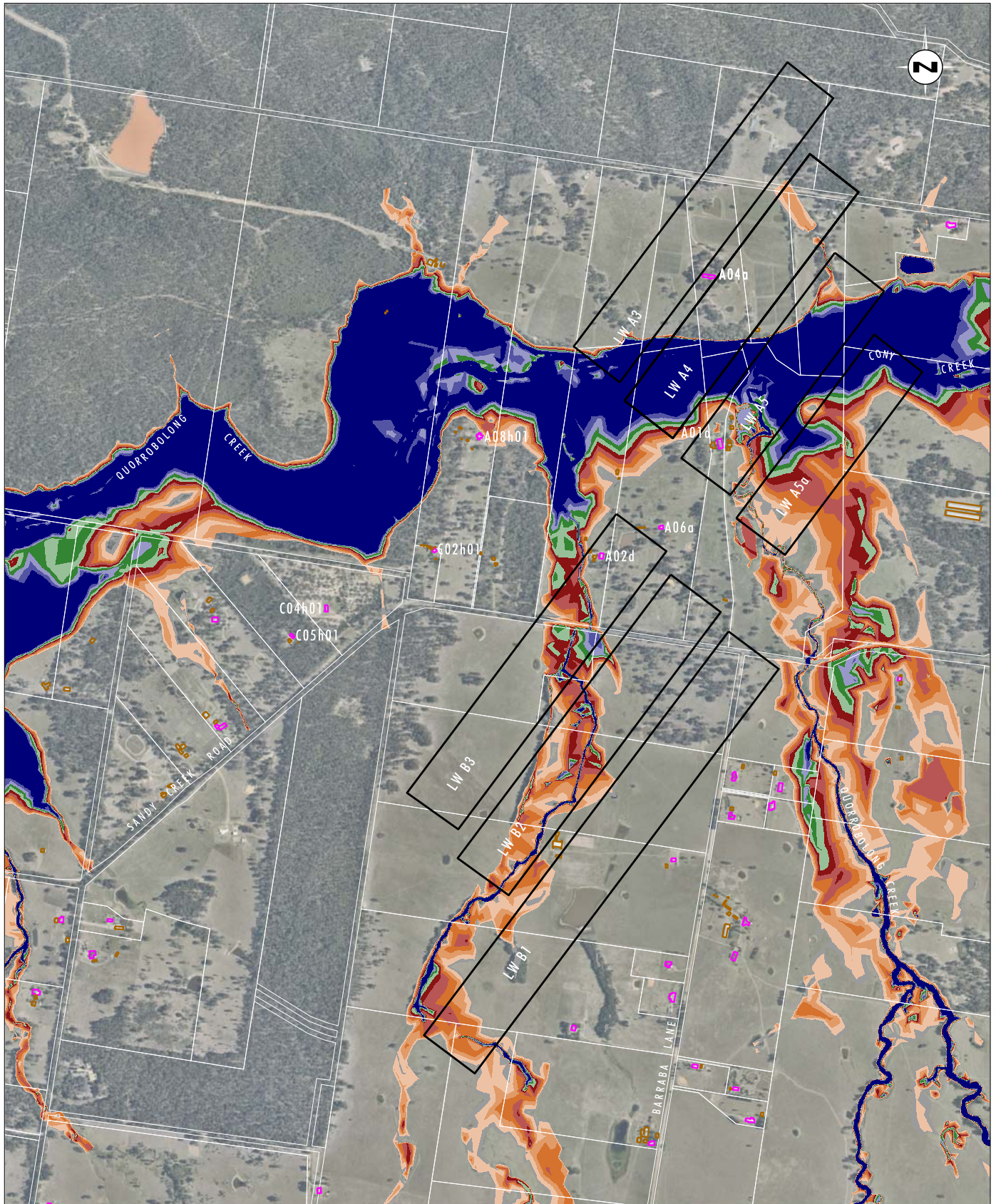


Image Source: Nearmap (2017)
 Data Source: Austar Coal Mine (2017)

0 0.25 0.5 1.0 km
 1:20 000

Legend

- Approved LWA3-A19 and LWB1-B3 Longwall Panels
- Dwelling
- Other Structure

Water Depth (m)

- | | |
|--|--|
| Range [0.001 : 0.100] | Range [0.900 : 1.100] |
| Range [0.100 : 0.300] | Range [1.100 : 1.300] |
| Range [0.300 : 0.500] | Range [1.300 : 1.500] |
| Range [0.500 : 0.700] | Range [1.500 : 1.700] |
| Range [0.700 : 0.900] | Range [1.700 : 1.900] |
| | Range [$>$ 1.900] |

FIGURE A4

**PMF Event:
 Maximum Modelled Flood Depths,
 Predicted Subsidence Approved LWA3-A19 and LWB1-B3**

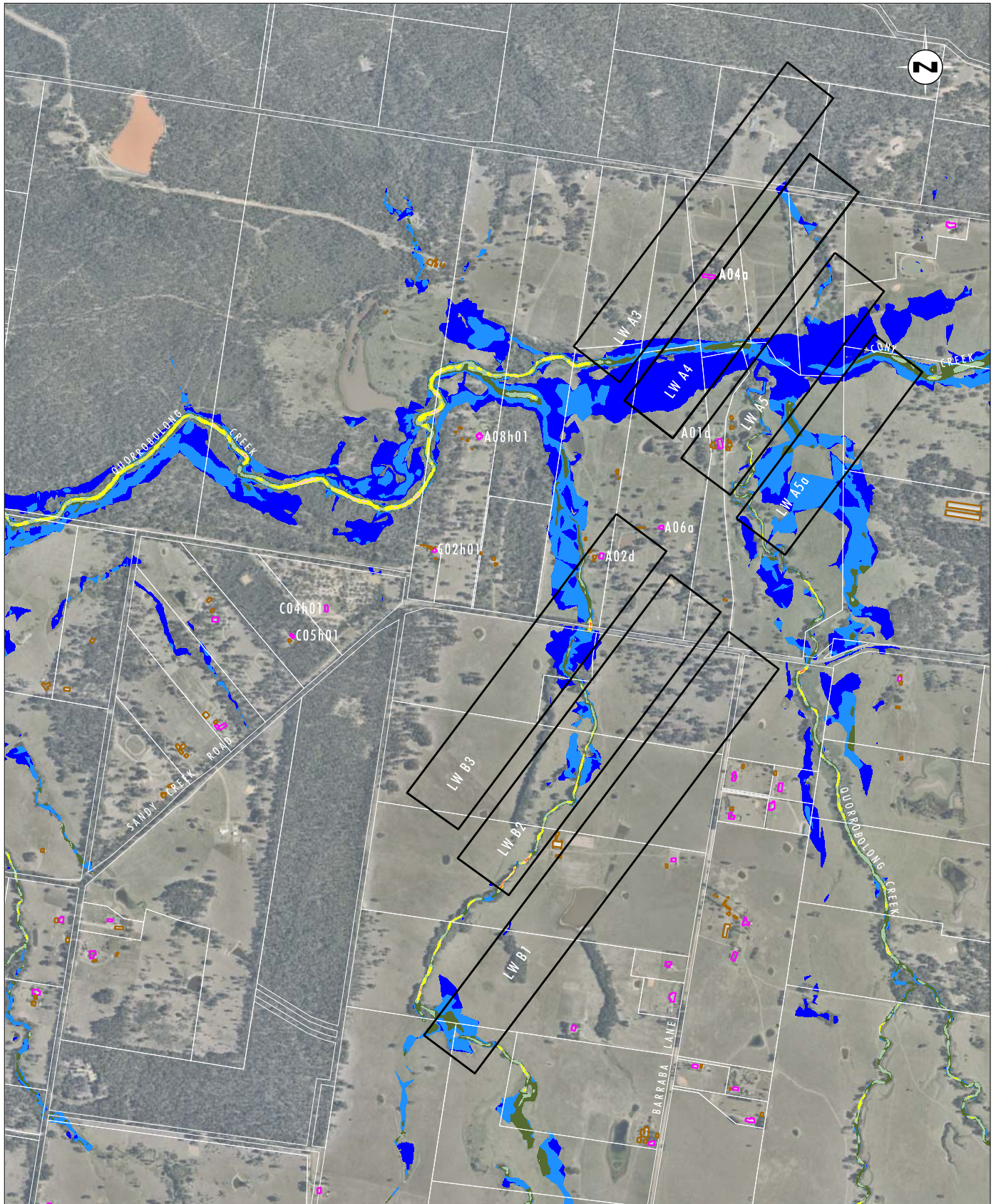


Image Source: Nearmap (2017)
 Data Source: Austar Coal Mine (2017)

0 0.25 0.5 1.0 km
 1:20 000

Legend

- Approved LWA3-A19 and LWB1-B3 Longwall Panels
- Dwelling
- Other Structure

Water Velocity (m/s)

- Range [0.100 : 0.250]
- Range [0.250 : 0.500]
- Range [0.500 : 0.750]
- Range [0.750 : 1.000]
- Range [1.000 : 1.250]
- Range [1.250 : 1.500]
- Range [1.500 : 1.750]
- Range [1.750 : 2.000]
- Range [2.000 : 2.250]
- Range [2.250 : 3.000]

FIGURE A5

**100% AEP Storm Event:
 Maximum Modelled Flow Velocities,
 Predicted Subsidence Approved LWA3-A19 and LWB1-B3**

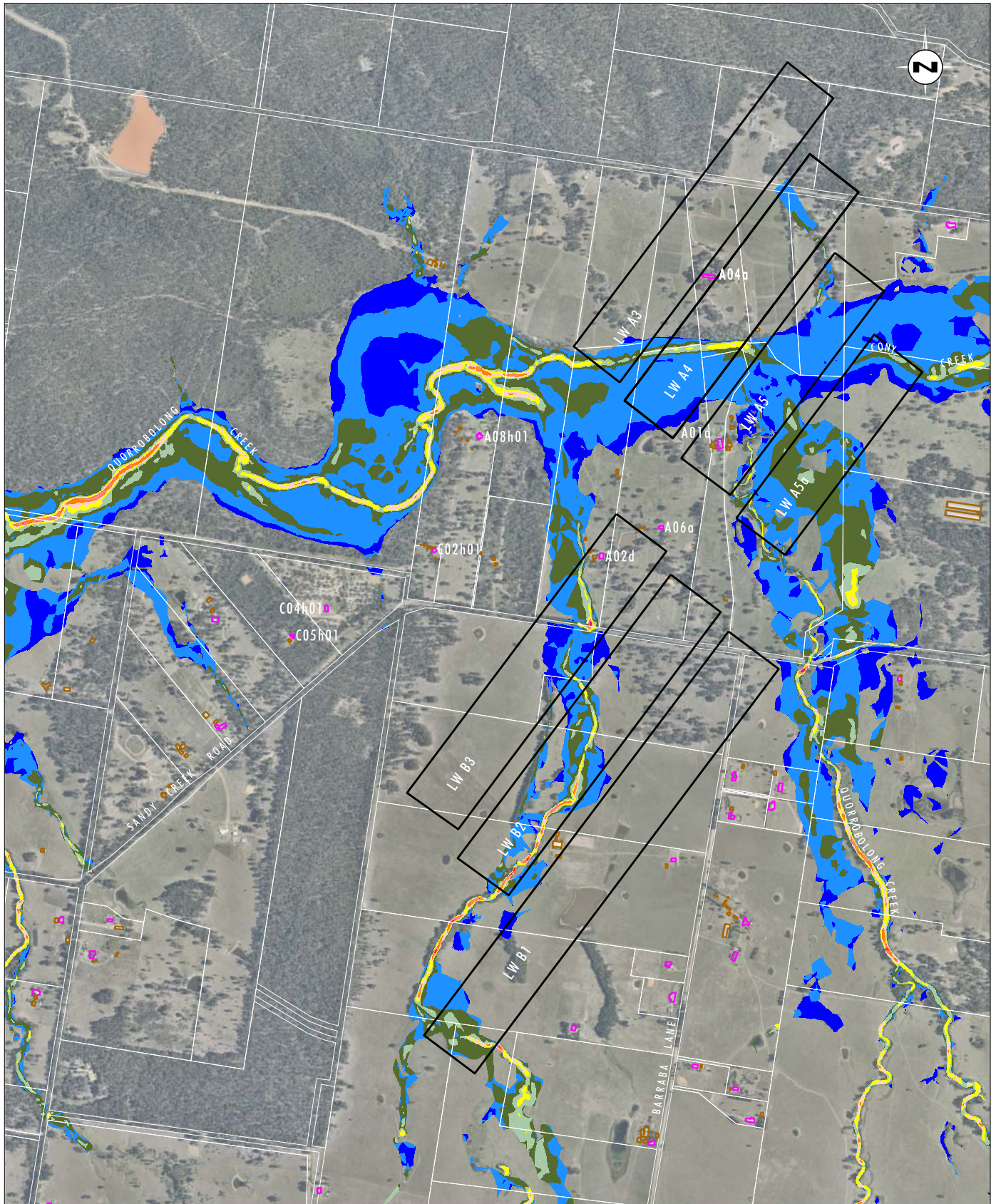


Image Source: Nearmap (2017)
 Data Source: Austar Coal Mine (2017)

0 0.25 0.5 1.0 km
 1:20 000

Legend	Approved LWA3-A19 and LWB1-B3 Longwall Panels	Water Velocity (m/s)	Range [1.250 : 1.500]
	Dwelling	Range [0.100 : 0.250]	Range [1.500 : 1.750]
Other Structure	Range [0.250 : 0.500]	Range [0.500 : 0.750]	Range [2.000 : 2.250]
	Range [0.750 : 1.000]	Range [1.000 : 1.250]	Range [2.250 : 3.000]

FIGURE A6

5% AEP Storm Event:
 Maximum Modelled Flow Velocities,
 Predicted Subsidence Approved LWA3-A19 and LWB1-B3

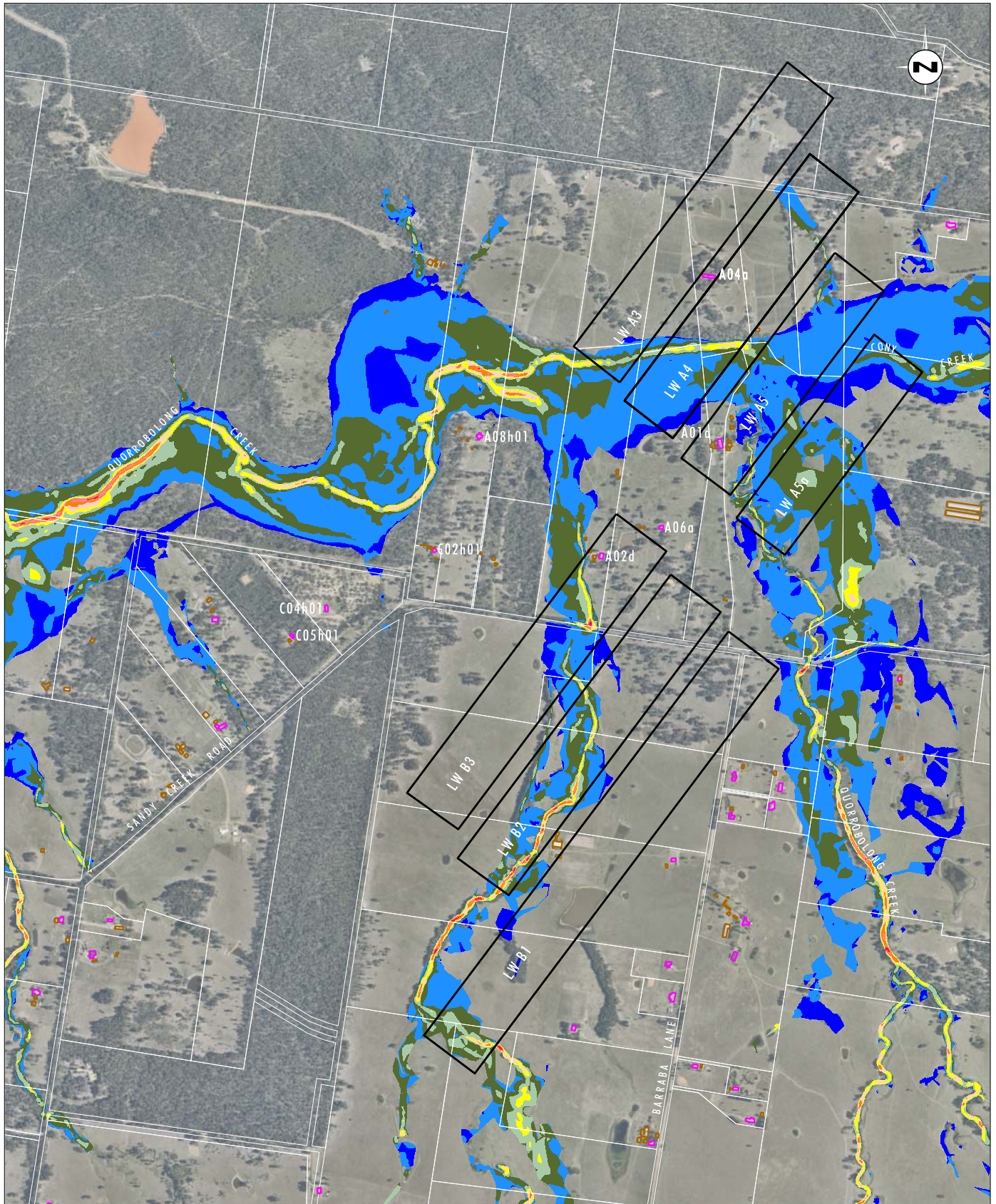


Image Source: Nearmap (2017)
 Data Source: Austar Coal Mine (2017)

0 0.25 0.5 1.0 km
 1:20 000

Legend

- Approved LWA3-A19 and LWB1-B3 Longwall Panels
- Dwelling
- Other Structure

Water Velocity (m/s)

- Range [0.100 : 0.250]
- Range [0.250 : 0.500]
- Range [0.500 : 0.750]
- Range [0.750 : 1.000]
- Range [1.000 : 1.250]
- Range [1.250 : 1.500]
- Range [1.500 : 1.750]
- Range [1.750 : 2.000]
- Range [2.000 : 2.250]
- Range [2.250 : 3.000]

FIGURE A7

**1% AEP Storm Event:
 Maximum Modelled Flow Velocities,
 Predicted Subsidence Approved LWA3-A19 and LWB1-B3**

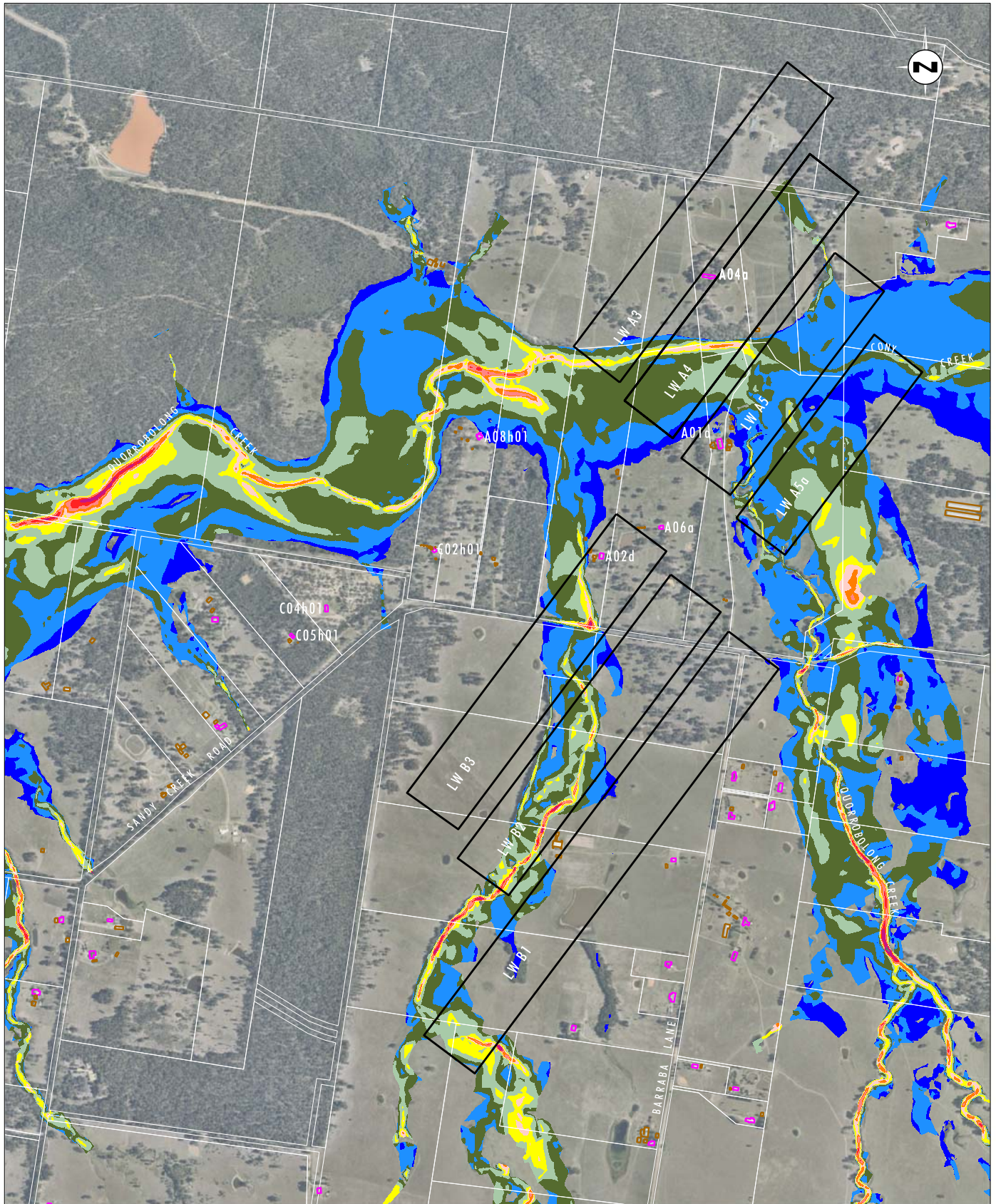


Image Source: Nearmap (2017)
 Data Source: Austar Coal Mine (2017)

0 0.25 0.5 1.0 km
 1:20 000

Legend

- Approved LWA3-A19 and LWB1-B3 Longwall Panels
- Dwelling
- Other Structure

Water Velocity (m/s)

- | | |
|--|---|
| <ul style="list-style-type: none"> ■ Range [0.100 : 0.250] ■ Range [0.250 : 0.500] ■ Range [0.500 : 0.750] ■ Range [0.750 : 1.000] ■ Range [1.000 : 1.250] | <ul style="list-style-type: none"> ■ Range [1.250 : 1.500] ■ Range [1.500 : 1.750] ■ Range [1.750 : 2.000] ■ Range [2.000 : 2.250] ■ Range [2.250 : 3.000] |
|--|---|

FIGURE A8

**PMF Event:
 Maximum Modelled Flow Velocities,
 Predicted Subsidence Approved LWA3-A19 and LWB1-B3**

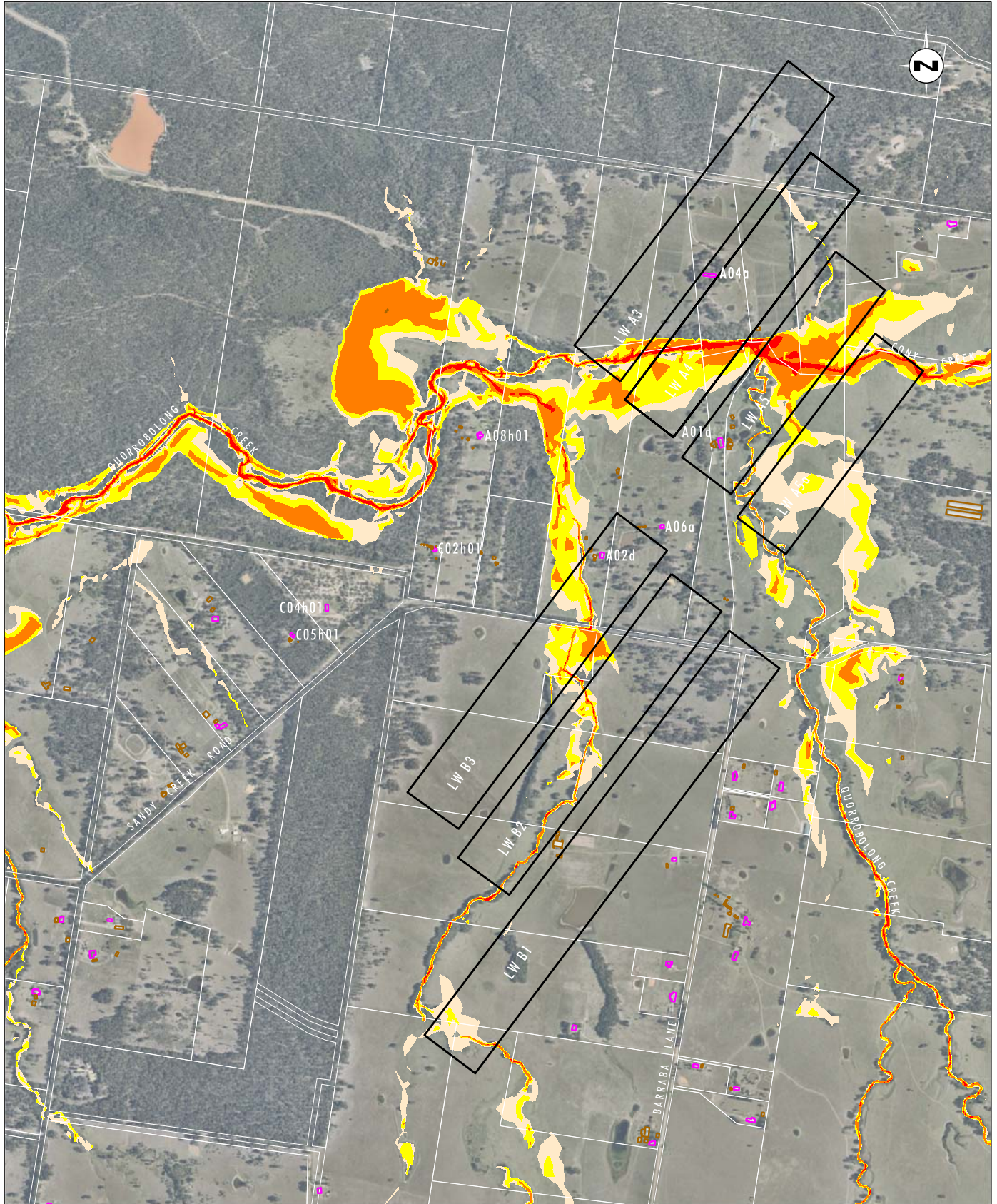


Image Source: Nearmap (2017)
 Data Source: Austar Coal Mine (2017)

0 0.25 0.5 1.0km
 1:20 000

Legend

- Approved LWA3-A19 and LWB1-B3 Longwall Panels
- Dwelling
- Other Structure

Hazard Category

- Low Hazard - Unclassified hazard
- Low Hazard - Vehicles unstable
- High Hazard - Wading unsafe
- High Hazard - Damage to light structures

FIGURE A9

**100% AEP Storm Event:
 Maximum Modelled Flood Hazard,
 Predicted Subsidence Approved LWA3-A19 and LWB1-B3**

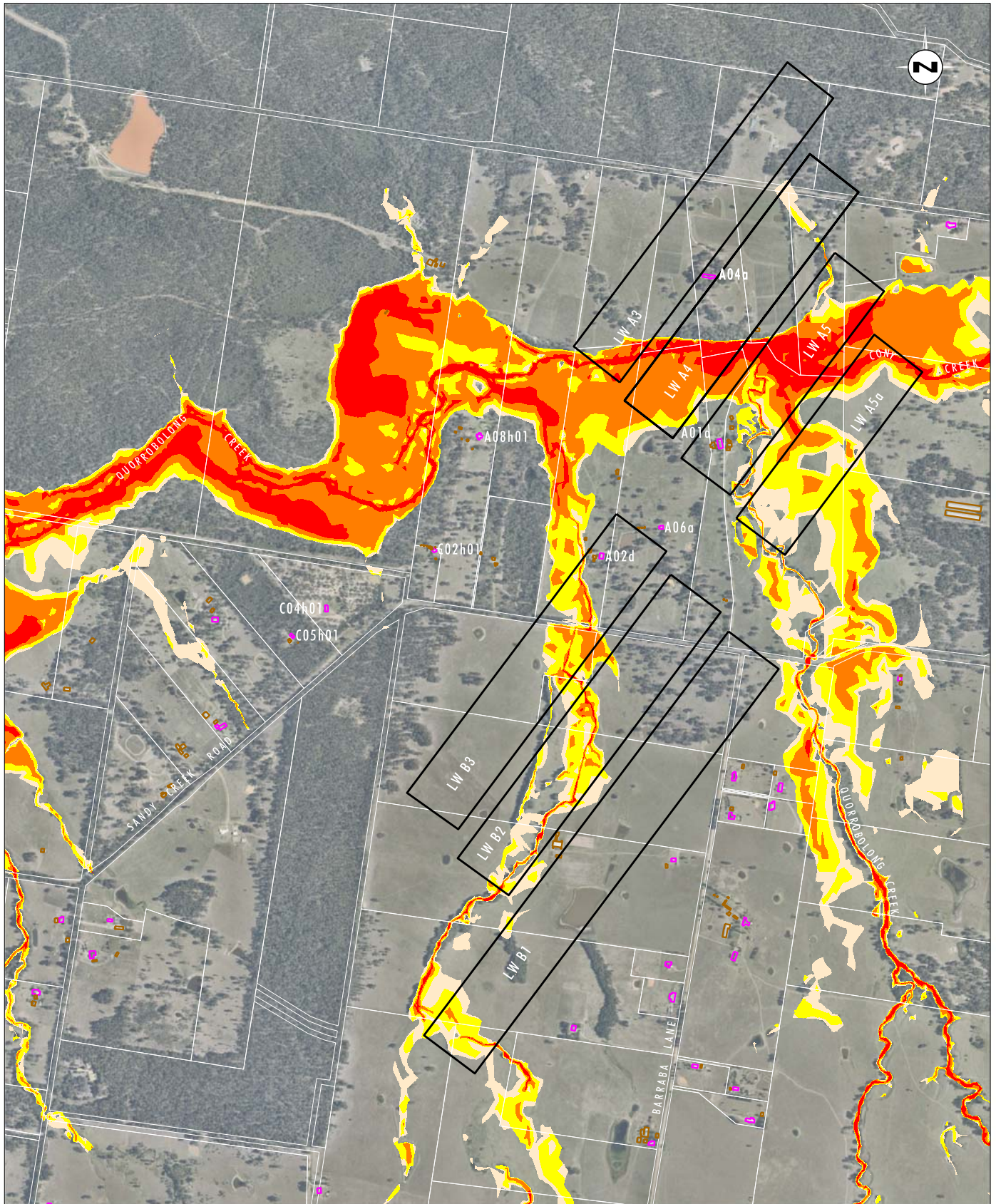


Image Source: Nearmap (2017)
 Data Source: Austar Coal Mine (2017)

0 0.25 0.5 1.0 km
 1:20 000

Legend

- Approved LWA3-A19 and LWB1-B3 Longwall Panels
- Dwelling
- Other Structure

Hazard Category

- Low Hazard - Unclassified hazard
- Low Hazard - Vehicles unstable
- High Hazard - Wading unsafe
- High Hazard - Damage to light structures

FIGURE A10

**5% AEP Storm Event:
 Maximum Modelled Flood Hazard,
 Predicted Subsidence Approved LWA3-A19 and LWB1-B3**

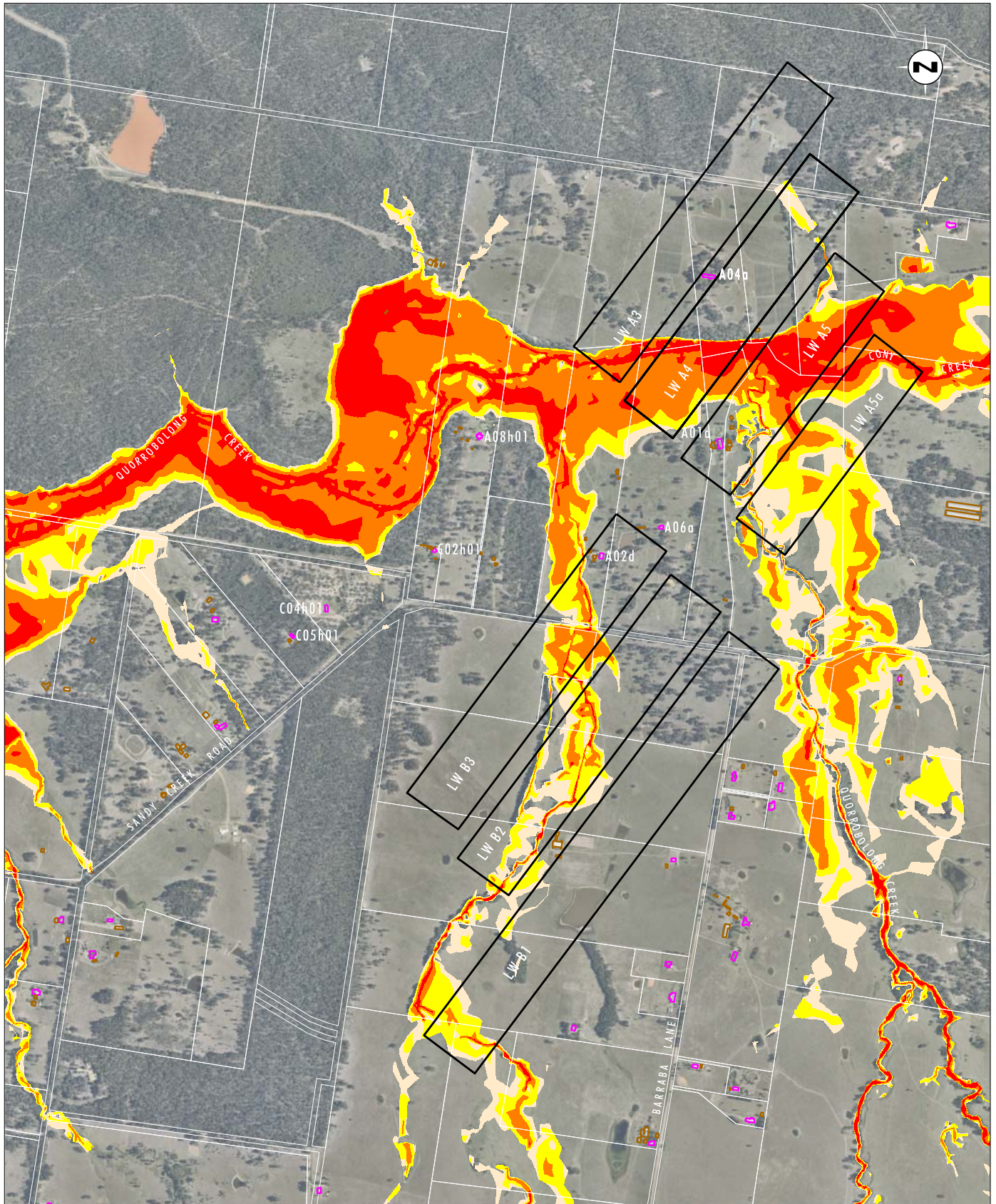


Image Source: Nearmap (2017)
 Data Source: Austar Coal Mine (2017)

0 0.25 0.5 1.0 km
 1:20 000

Legend

- Approved LWA3-A19 and LWB1-B3 Longwall Panels
- Dwelling
- Other Structure

Hazard Category

- Low Hazard - Unclassified hazard
- Low Hazard - Vehicles unstable
- High Hazard - Wading unsafe
- High Hazard - Damage to light structures

FIGURE A11

1% AEP Storm Event:
 Maximum Modelled Flood Hazard,
 Predicted Subsidence Approved LWA3-A19 and LWB1-B3

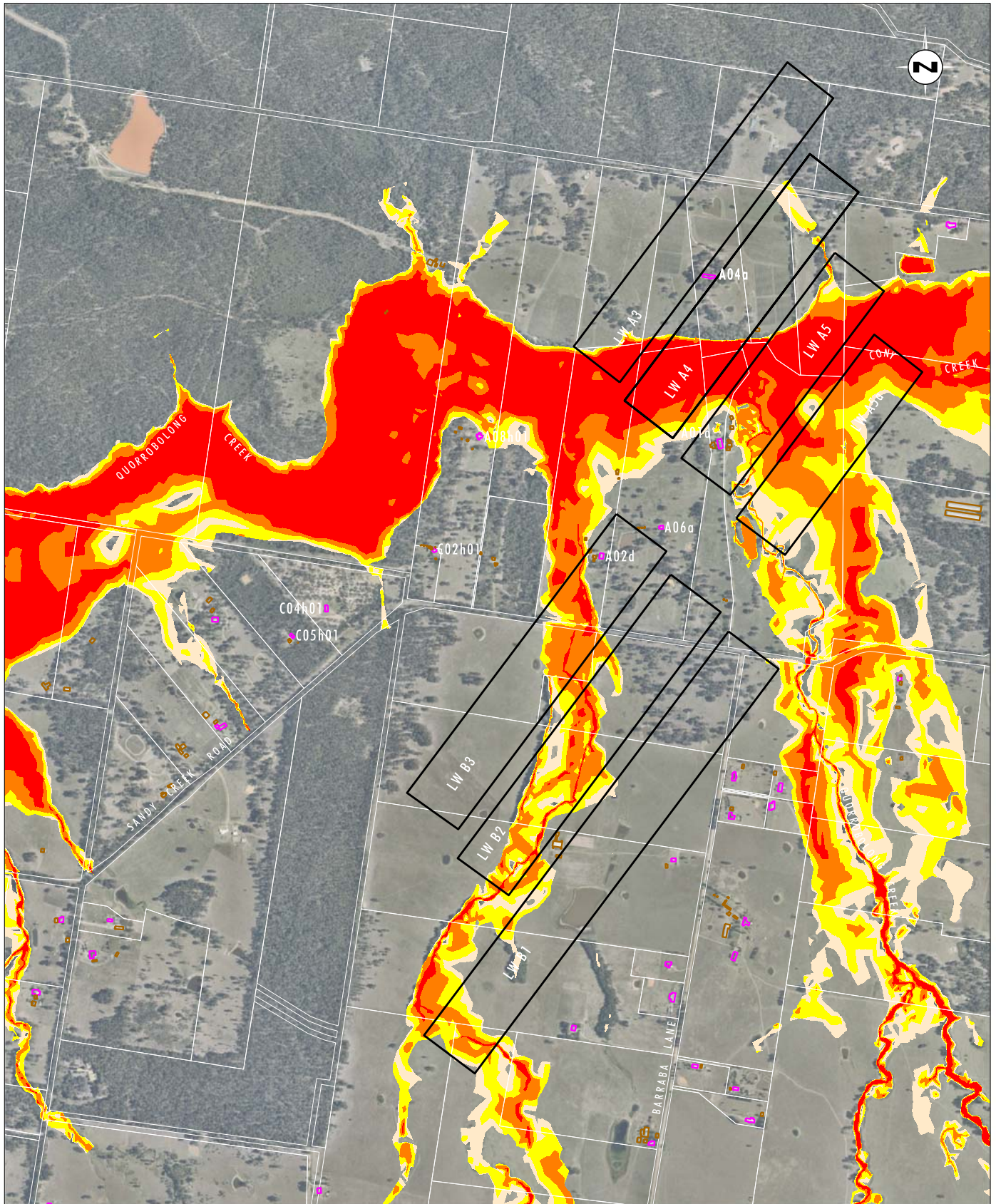


Image Source: Nearmap (2017)
 Data Source: Austar Coal Mine (2017)

0 0.25 0.5 1.0 km
 1:20 000

Legend

- Approved LWA3-A19 and LWB1-B3 Longwall Panels
- Dwelling
- Other Structure

Hazard Category

- Low Hazard - Unclassified hazard
- Low Hazard - Vehicles unstable
- High Hazard - Wading unsafe
- High Hazard - Damage to light structures

FIGURE A12

PMF Event:
 Maximum Modelled Flood Hazard,
 Predicted Subsidence Approved LWA3-A19 and LWB1-B3