

GUNDAGAI FLOODPLAIN RISK MANAGEMENT STUDY AND PLAN DRAFT FOR PUBLIC EXHIBITION

VOLUME 2

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**FIGURE 1
LOCALITY MAP**

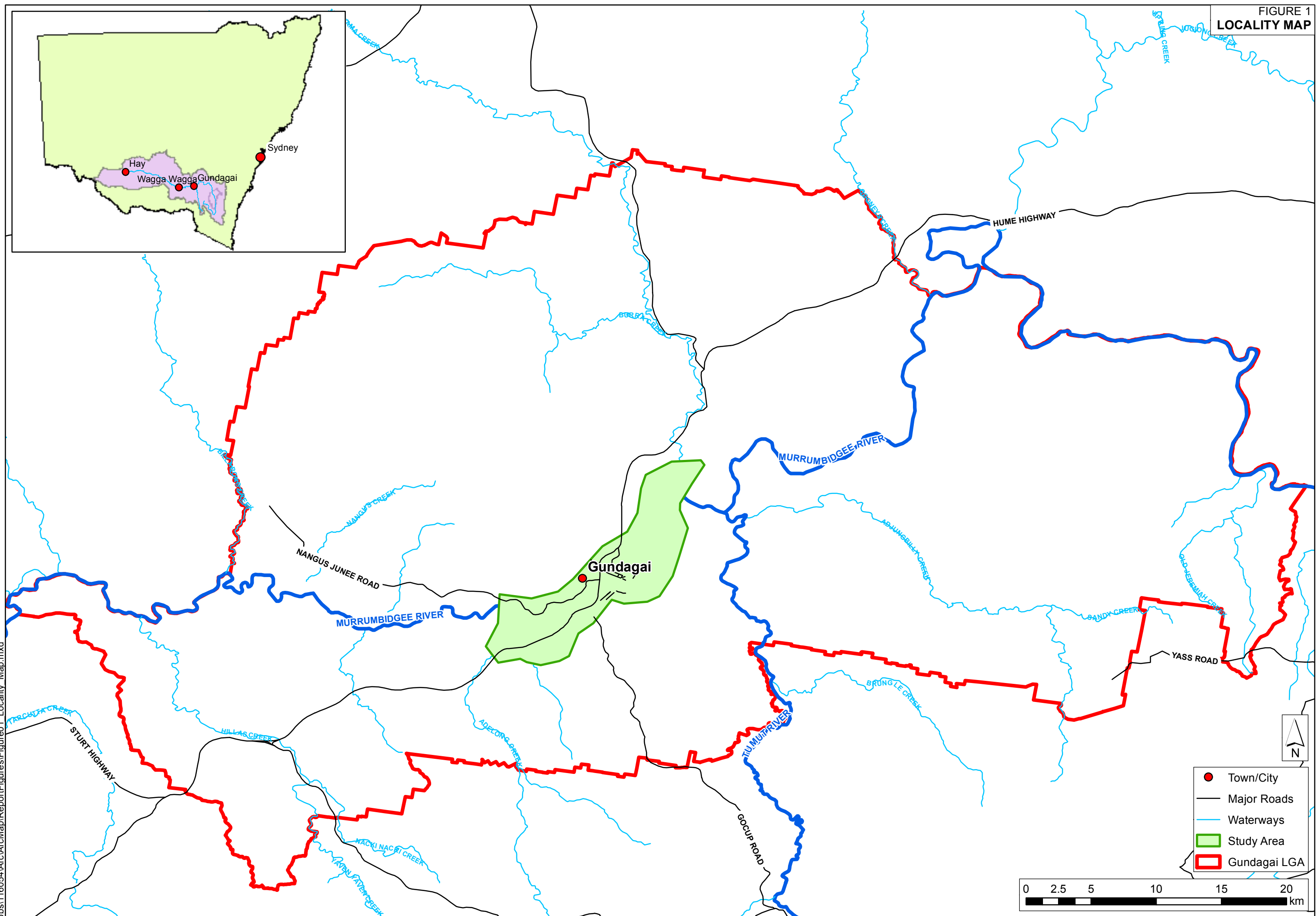


FIGURE 2

STUDY AREA

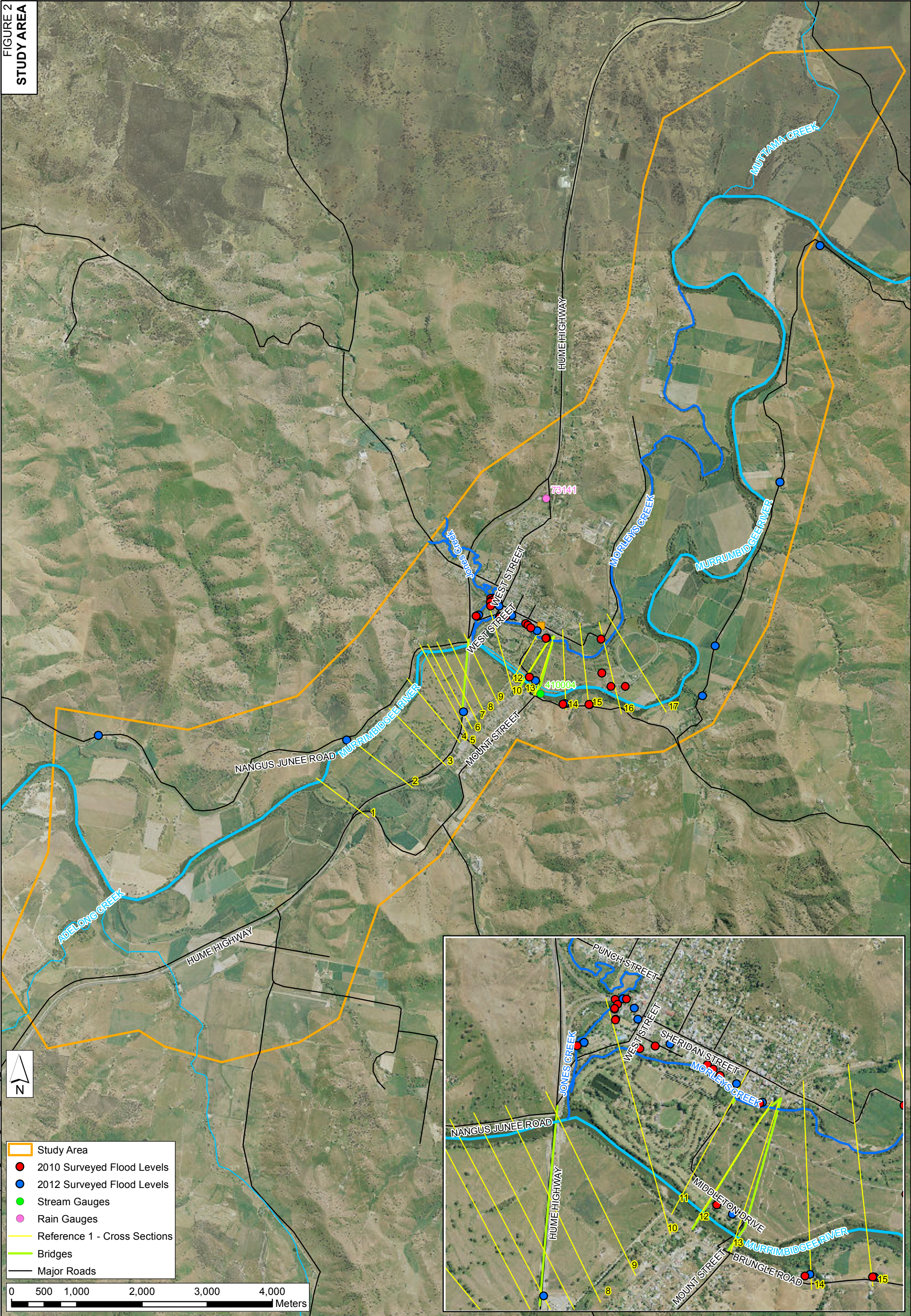


FIGURE 3
DIGITAL ELEVATION MODEL AND HYDROSURVEY SECTIONS

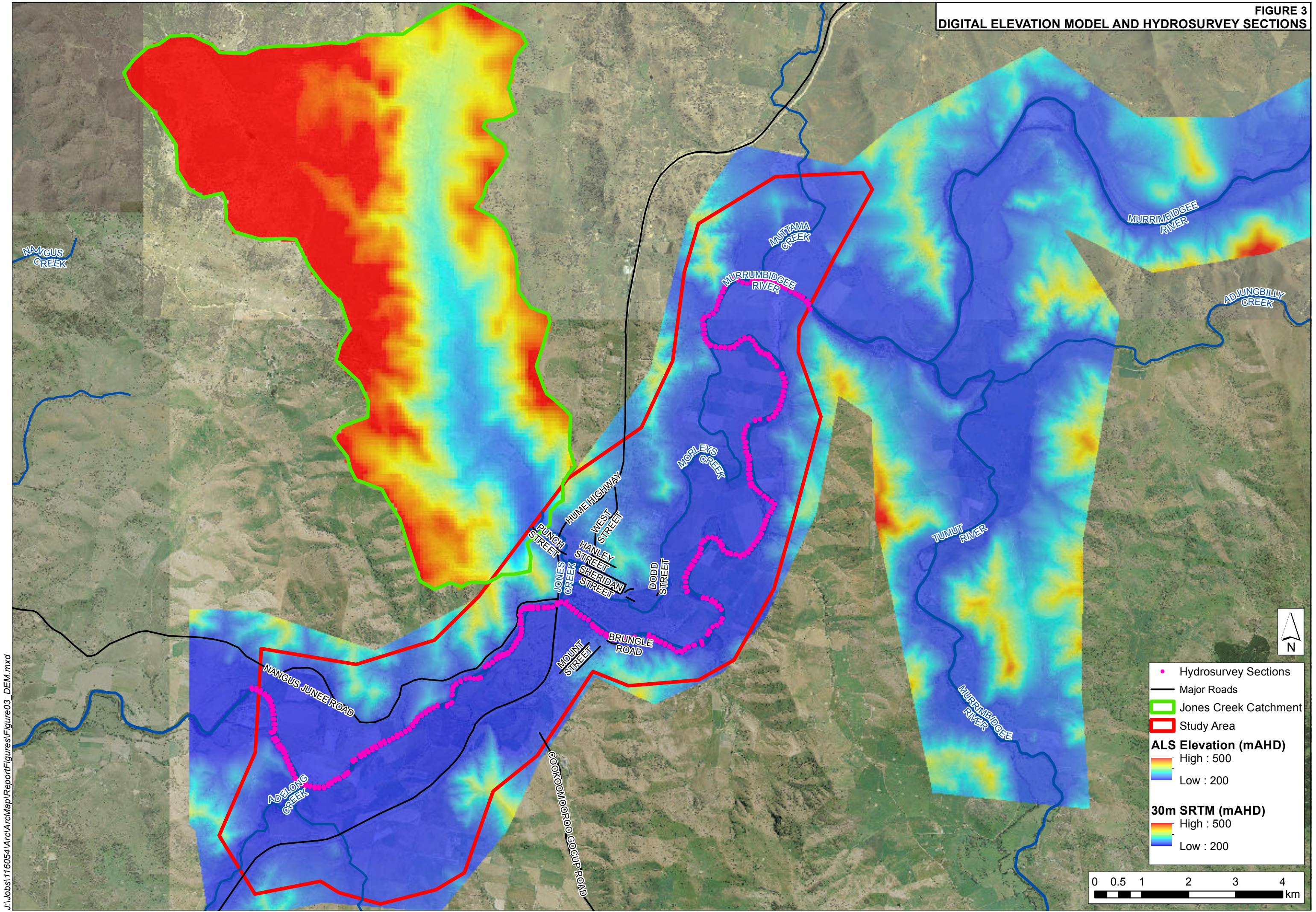
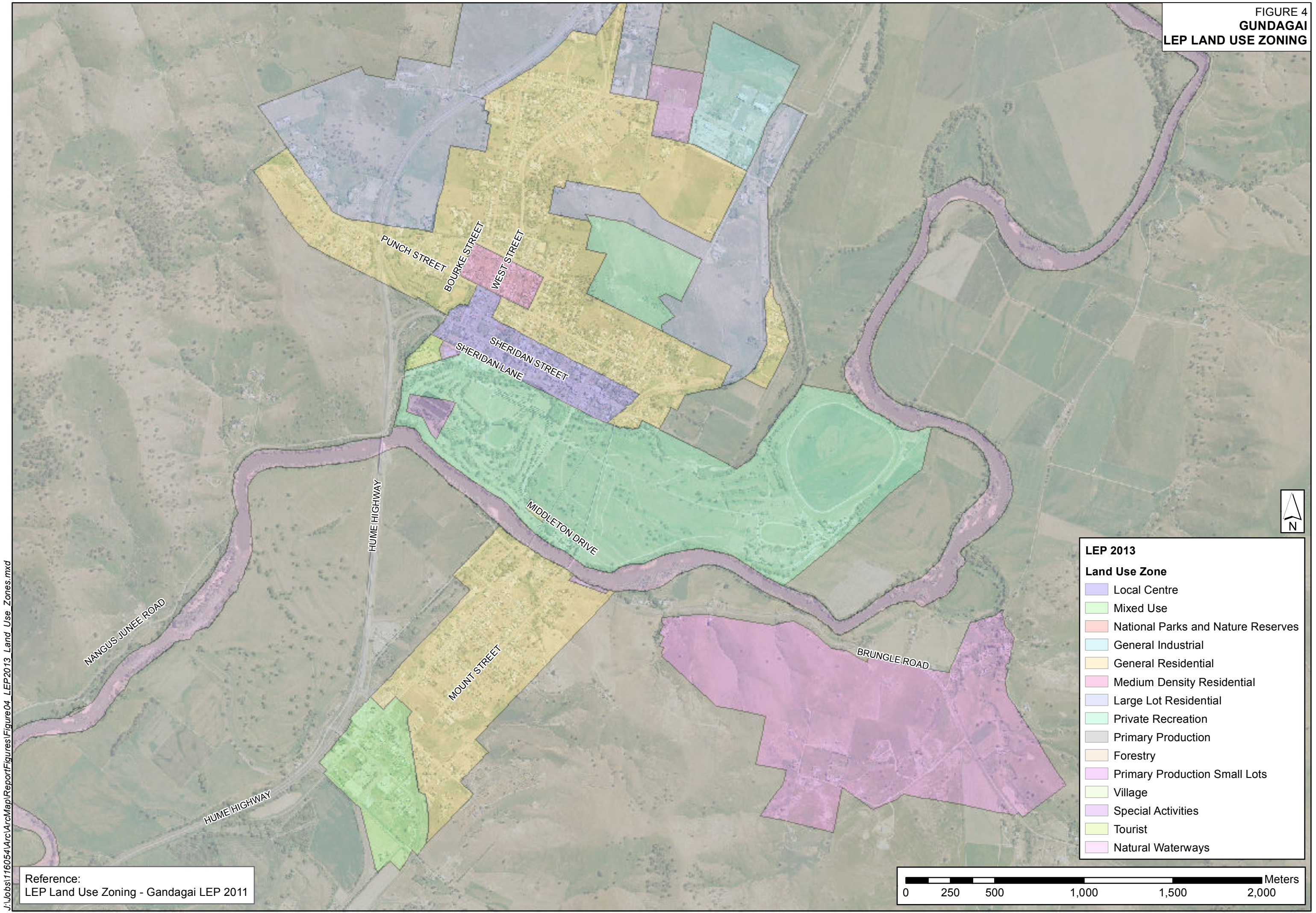


FIGURE 4
GUNDAGAI
LEP LAND USE ZONING



- LEP 2013**
- Land Use Zone**
- Local Centre
 - Mixed Use
 - National Parks and Nature Reserves
 - General Industrial
 - General Residential
 - Medium Density Residential
 - Large Lot Residential
 - Private Recreation
 - Primary Production
 - Forestry
 - Primary Production Small Lots
 - Village
 - Special Activities
 - Tourist
 - Natural Waterways

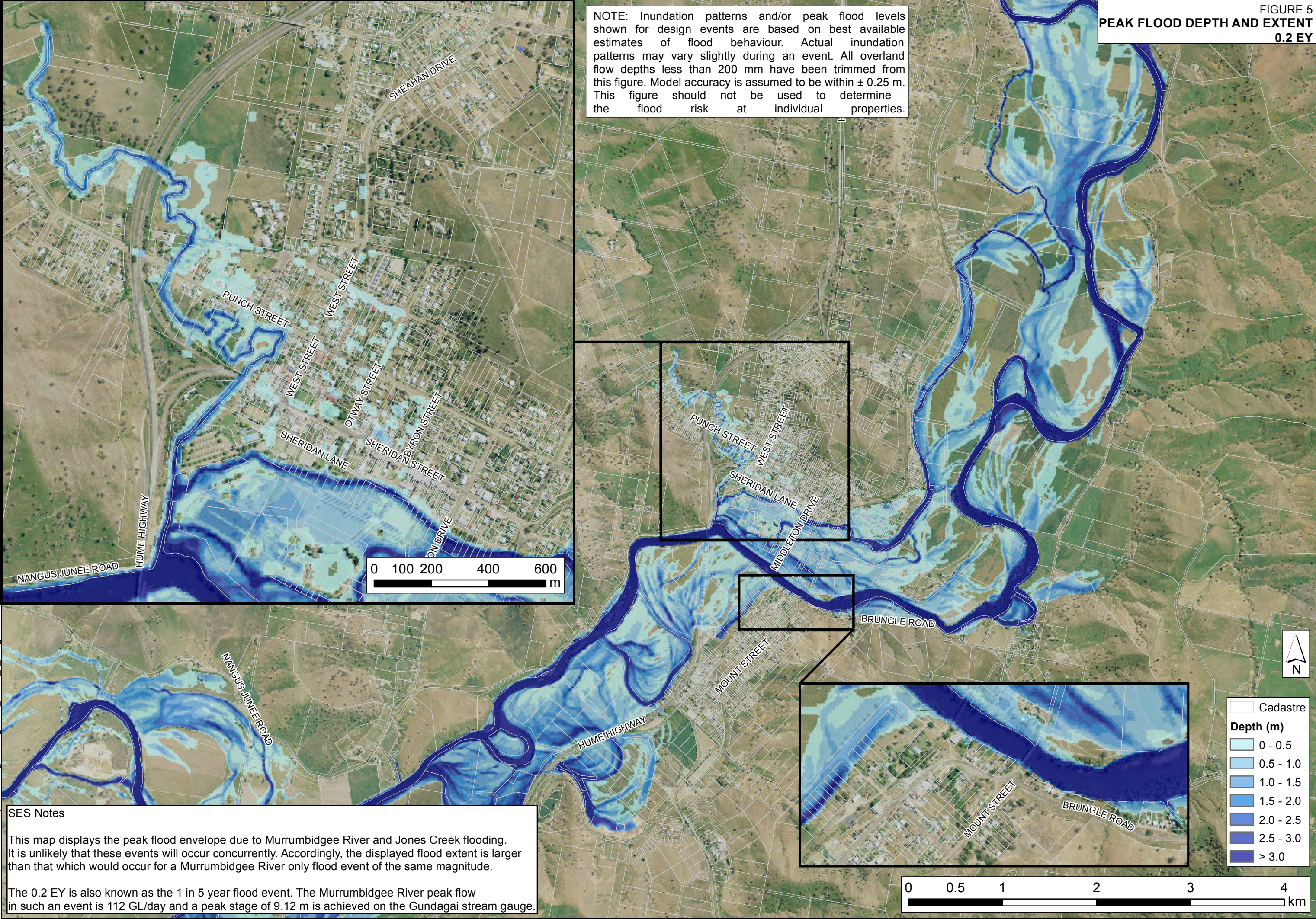
Reference:
LEP Land Use Zoning - Gandagai LEP 2011

0 250 500 1,000 1,500 2,000 Meters

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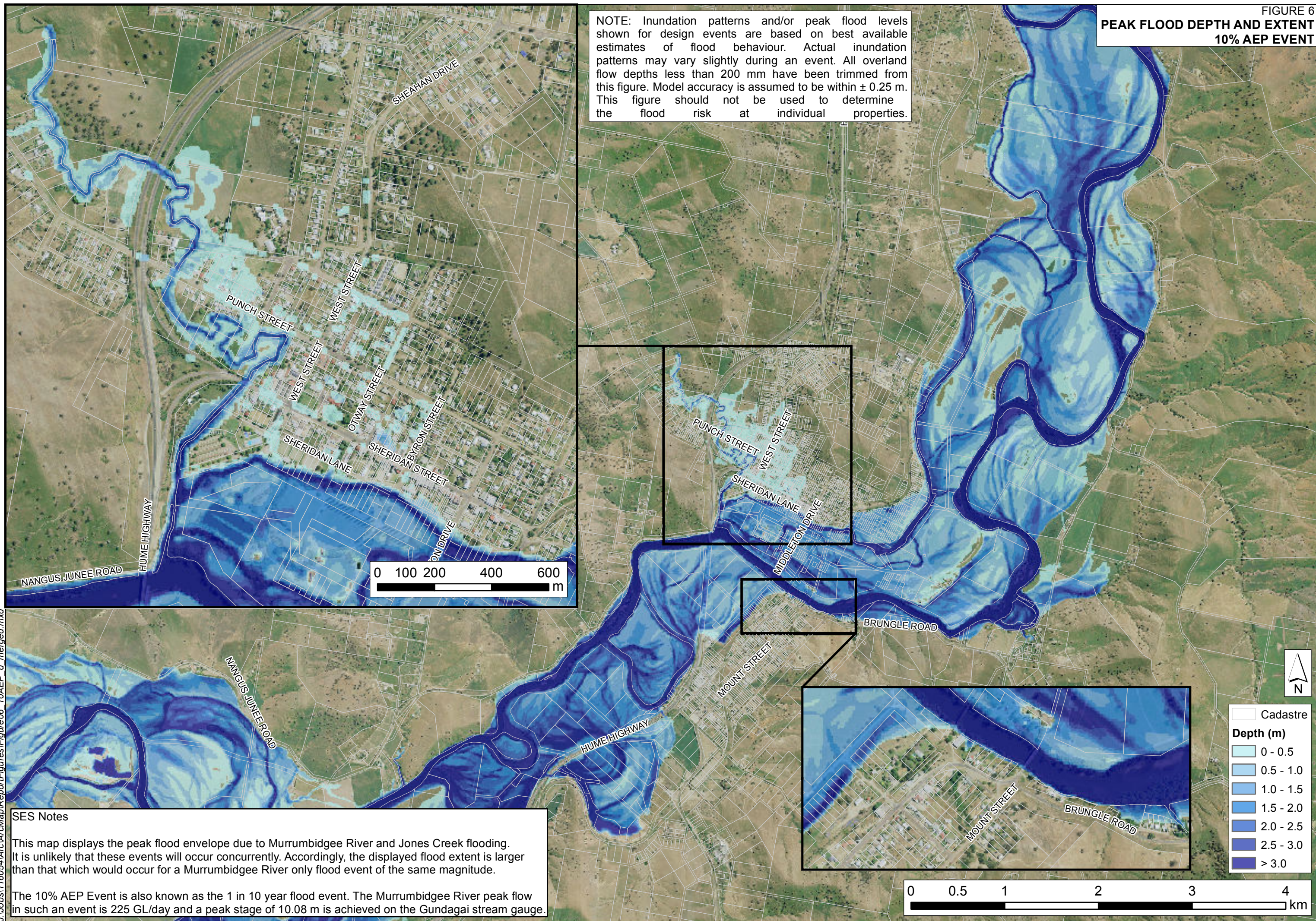
FIGURE 5
PEAK FLOOD DEPTH AND EXTENT
0.2 EY

NOTE: Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour. Actual inundation patterns may vary slightly during an event. All overland flow depths less than 200 mm have been trimmed from this figure. Model accuracy is assumed to be within ± 0.25 m. This figure should not be used to determine the flood risk at individual properties.



**PEAK FLOOD DEPTH AND EXTENT
10% AEP EVENT**

NOTE: Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour. Actual inundation patterns may vary slightly during an event. All overland flow depths less than 200 mm have been trimmed from this figure. Model accuracy is assumed to be within ± 0.25 m. This figure should not be used to determine the flood risk at individual properties.



SES Notes

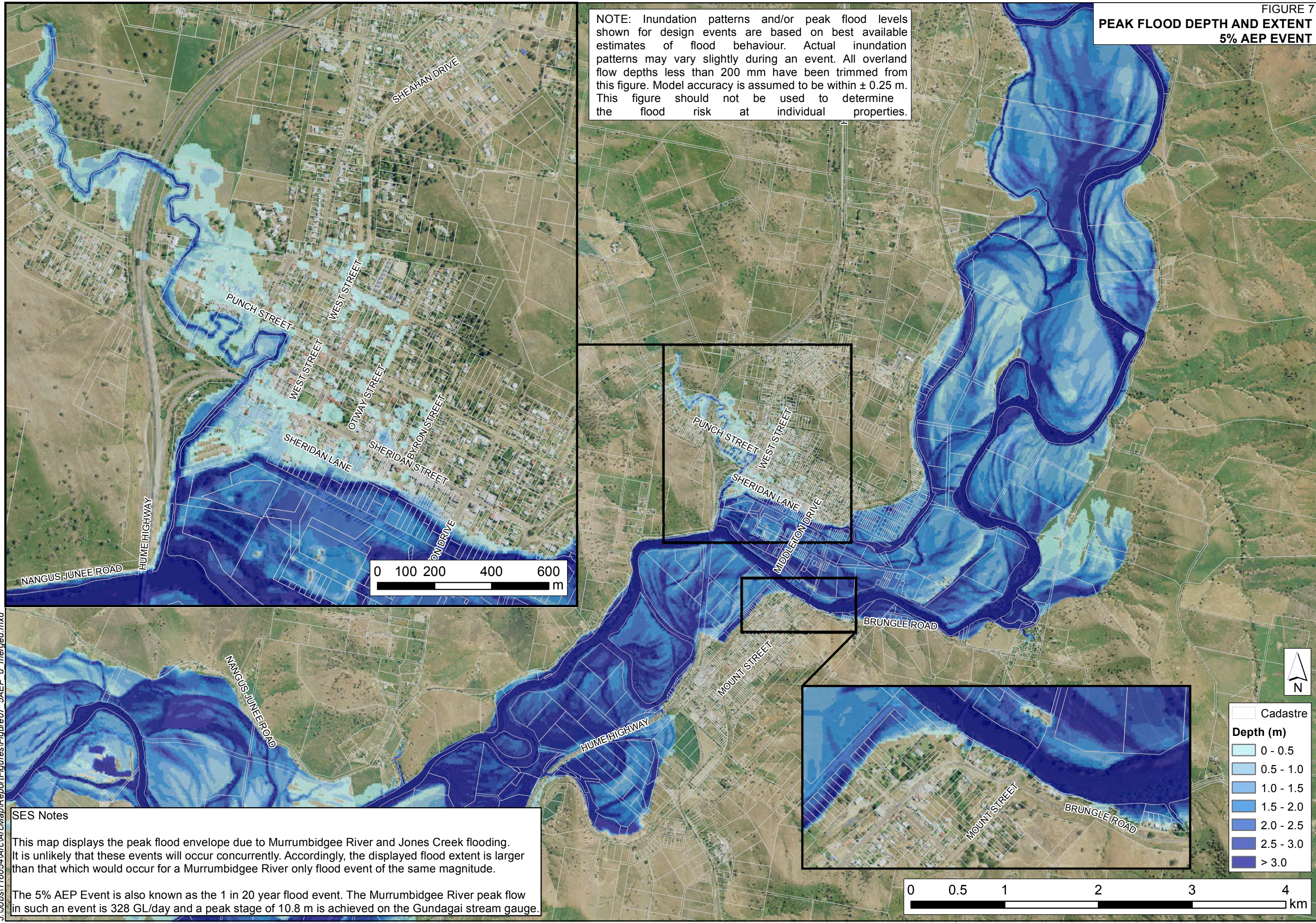
This map displays the peak flood envelope due to Murrumbidgee River and Jones Creek flooding. It is unlikely that these events will occur concurrently. Accordingly, the displayed flood extent is larger than that which would occur for a Murrumbidgee River only flood event of the same magnitude.

The 10% AEP Event is also known as the 1 in 10 year flood event. The Murrumbidgee River peak flow in such an event is 225 GL/day and a peak stage of 10.08 m is achieved on the Gundagai stream gauge.

FIGURE 7

**PEAK FLOOD DEPTH AND EXTENT
5% AEP EVENT**

NOTE: Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour. Actual inundation patterns may vary slightly during an event. All overland flow depths less than 200 mm have been trimmed from this figure. Model accuracy is assumed to be within ± 0.25 m. This figure should not be used to determine the flood risk at individual properties.



SES Notes

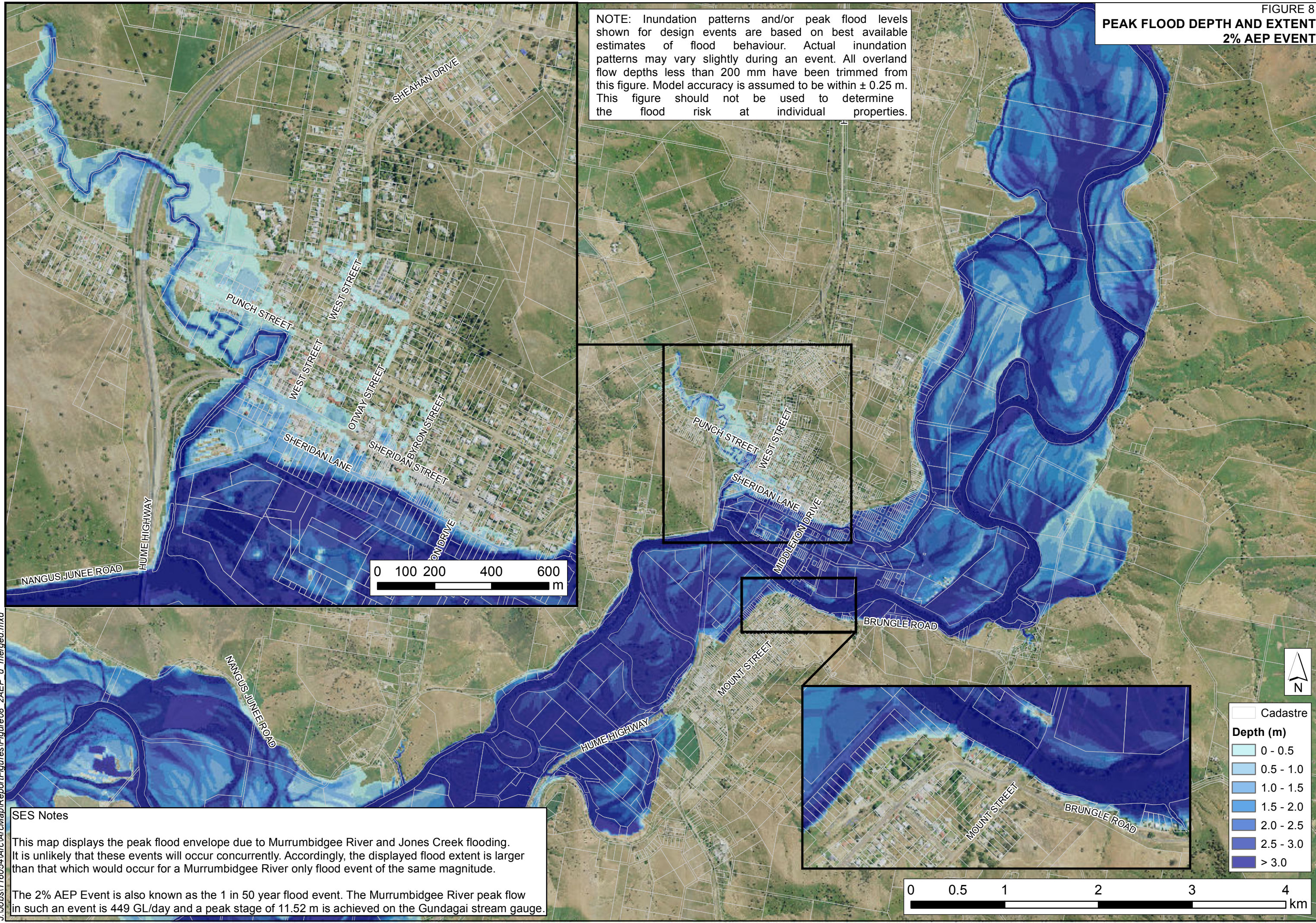
This map displays the peak flood envelope due to Murrumbidgee River and Jones Creek flooding. It is unlikely that these events will occur concurrently. Accordingly, the displayed flood extent is larger than that which would occur for a Murrumbidgee River only flood event of the same magnitude.

The 5% AEP Event is also known as the 1 in 20 year flood event. The Murrumbidgee River peak flow in such an event is 328 GL/day and a peak stage of 10.8 m is achieved on the Gundagai stream gauge.

FIGURE 8

PEAK FLOOD DEPTH AND EXTENT
2% AEP EVENT

NOTE: Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour. Actual inundation patterns may vary slightly during an event. All overland flow depths less than 200 mm have been trimmed from this figure. Model accuracy is assumed to be within ± 0.25 m. This figure should not be used to determine the flood risk at individual properties.



SES Notes

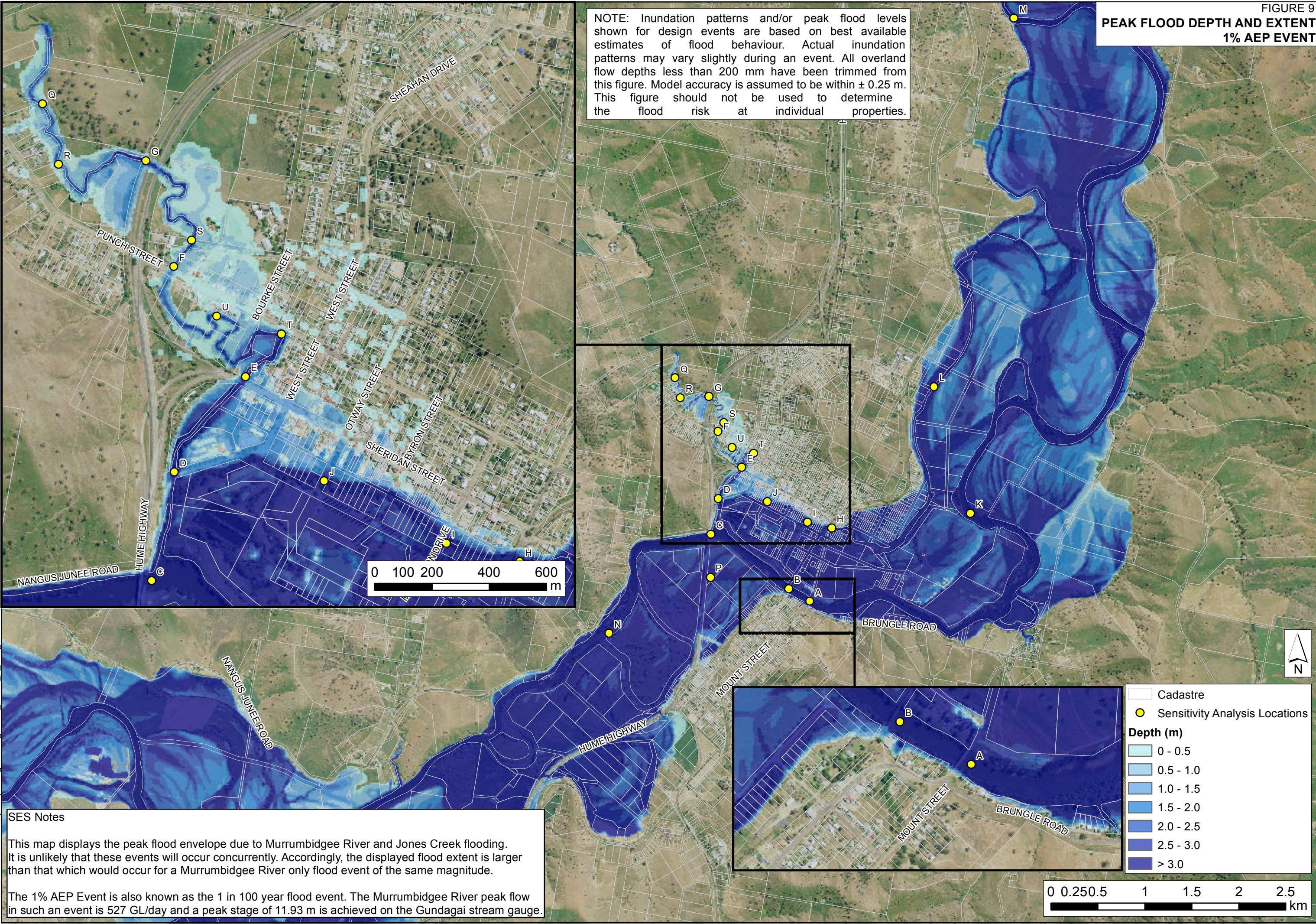
This map displays the peak flood envelope due to Murrumbidgee River and Jones Creek flooding. It is unlikely that these events will occur concurrently. Accordingly, the displayed flood extent is larger than that which would occur for a Murrumbidgee River only flood event of the same magnitude.

The 2% AEP Event is also known as the 1 in 50 year flood event. The Murrumbidgee River peak flow in such an event is 449 GL/day and a peak stage of 11.52 m is achieved on the Gundagai stream gauge.

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PEAK FLOOD DEPTH AND EXTENT
1% AEP EVENT

NOTE: Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour. Actual inundation patterns may vary slightly during an event. All overland flow depths less than 200 mm have been trimmed from this figure. Model accuracy is assumed to be within ± 0.25 m. This figure should not be used to determine the flood risk at individual properties.



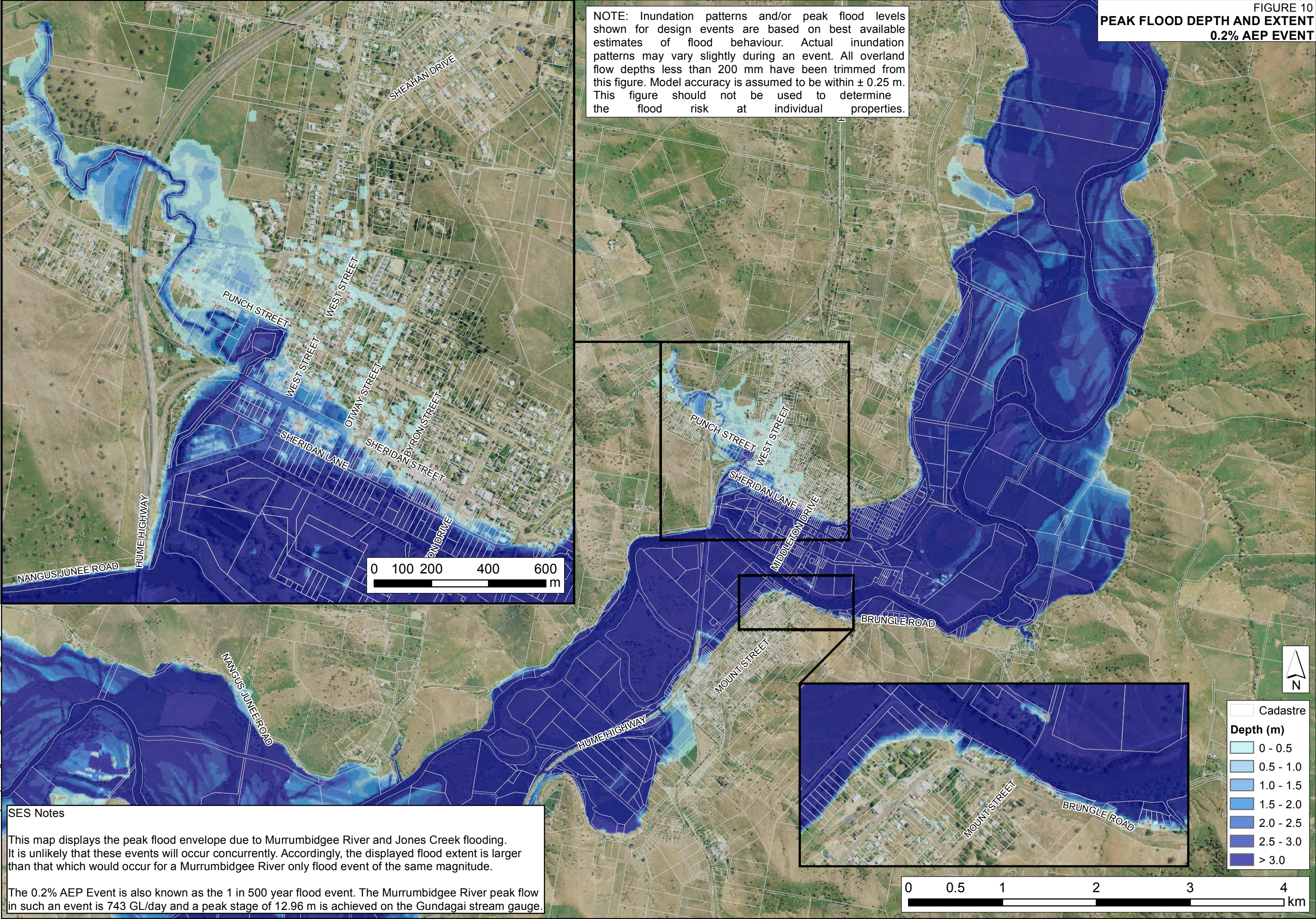
SES Notes

This map displays the peak flood envelope due to Murrumbidgee River and Jones Creek flooding. It is unlikely that these events will occur concurrently. Accordingly, the displayed flood extent is larger than that which would occur for a Murrumbidgee River only flood event of the same magnitude.

The 1% AEP Event is also known as the 1 in 100 year flood event. The Murrumbidgee River peak flow in such an event is 527 GL/day and a peak stage of 11.93 m is achieved on the Gundagai stream gauge.

FIGURE 10
PEAK FLOOD DEPTH AND EXTENT
0.2% AEP EVENT

NOTE: Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour. Actual inundation patterns may vary slightly during an event. All overland flow depths less than 200 mm have been trimmed from this figure. Model accuracy is assumed to be within ± 0.25 m. This figure should not be used to determine the flood risk at individual properties.



NOTE: Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour. Actual inundation patterns may vary slightly during an event. All overland flow depths less than 200 mm have been trimmed from this figure. Model accuracy is assumed to be within ± 0.25 m. This figure should not be used to determine the flood risk at individual properties.

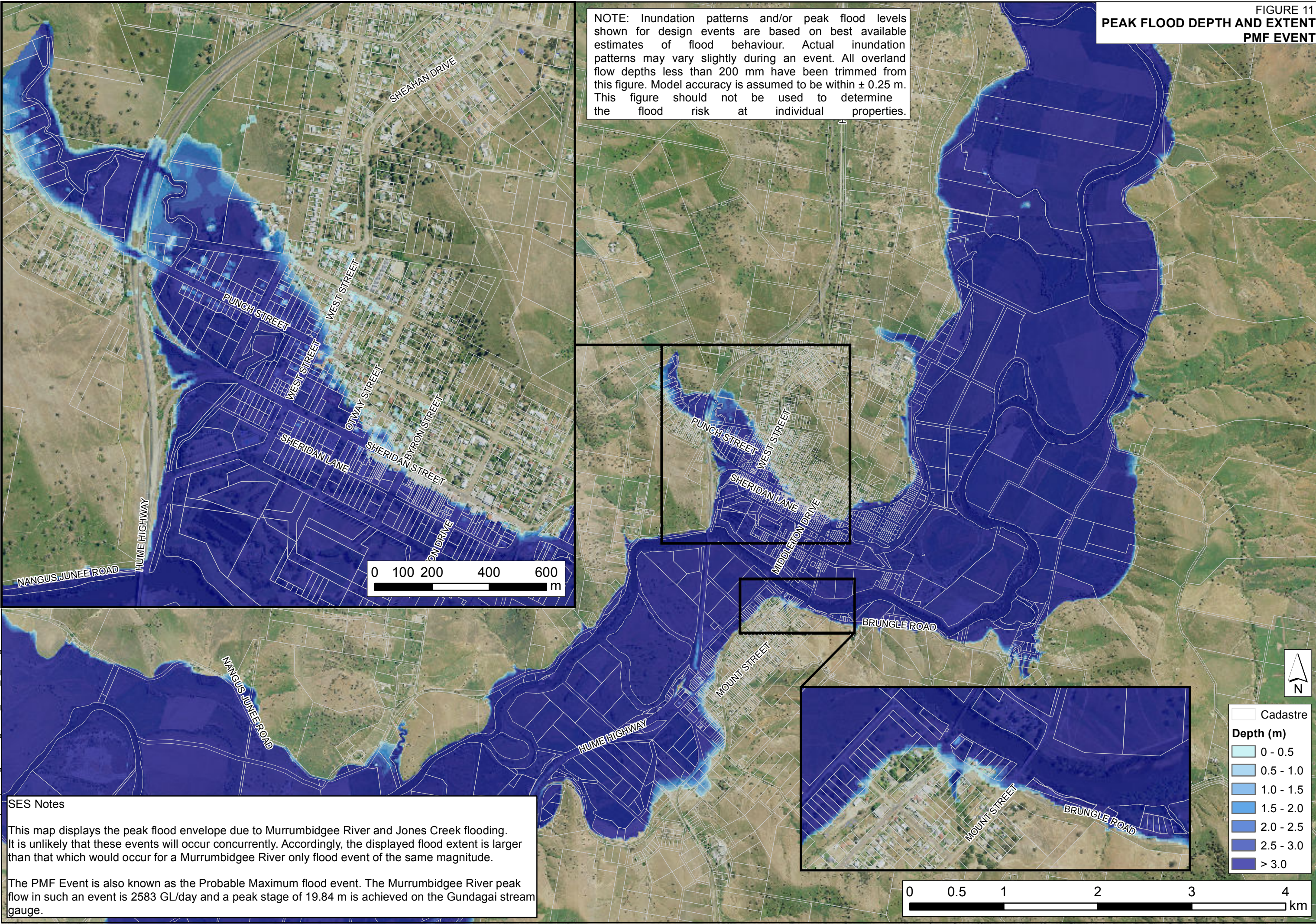


FIGURE 12
HYDRAULIC CATEGORISATION
5% AEP EVENT

NOTE: Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour. Actual inundation patterns may vary slightly during an event. All overland flow depths less than 200 mm have been trimmed from this figure. Model accuracy is assumed to be within ± 0.25 m. This figure should not be used to determine the flood risk at individual properties.

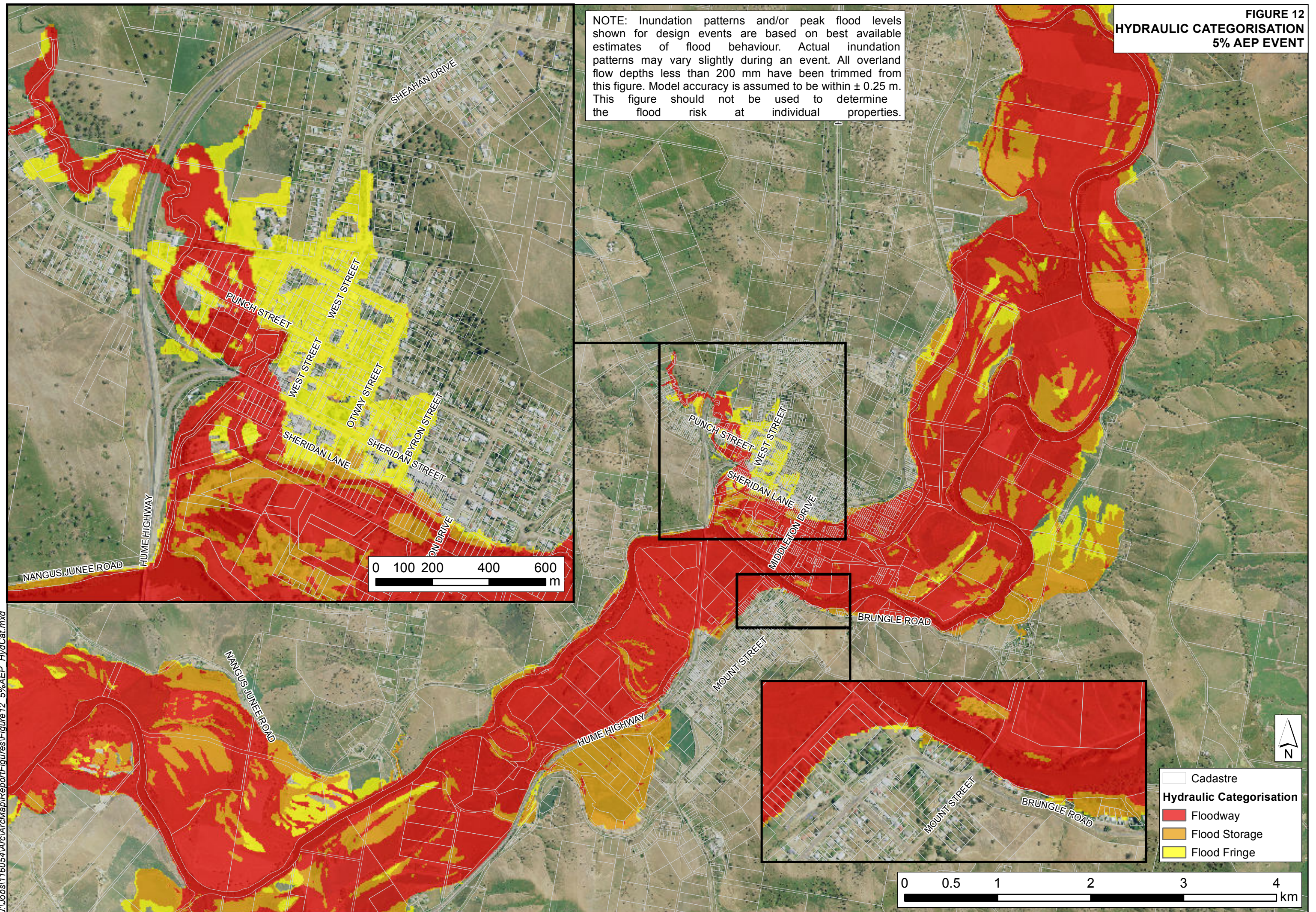


FIGURE 13
HYDRAULIC CATEGORISATION
1% AEP EVENT

NOTE: Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour. Actual inundation patterns may vary slightly during an event. All overland flow depths less than 200 mm have been trimmed from this figure. Model accuracy is assumed to be within ± 0.25 m. This figure should not be used to determine the flood risk at individual properties.

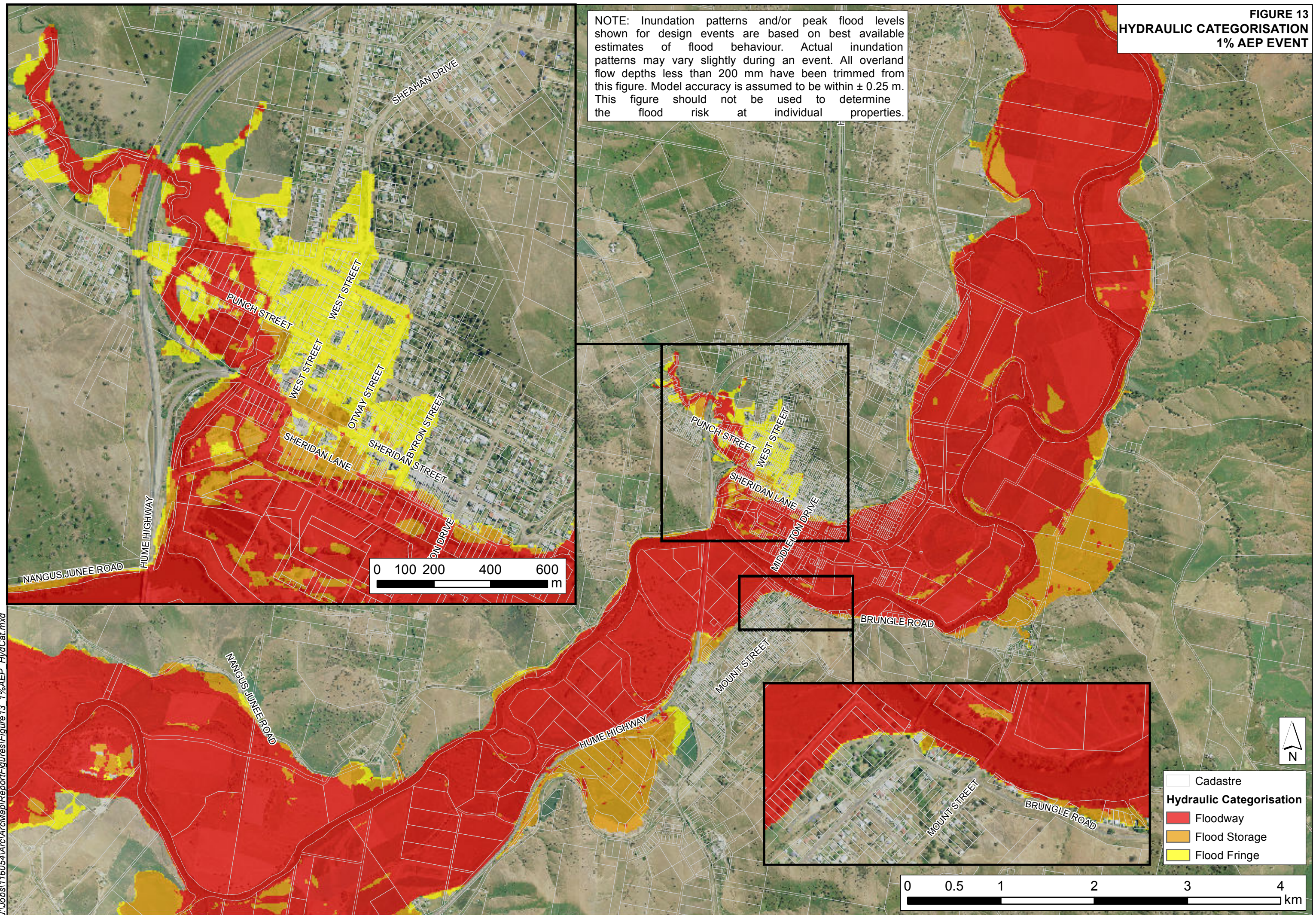
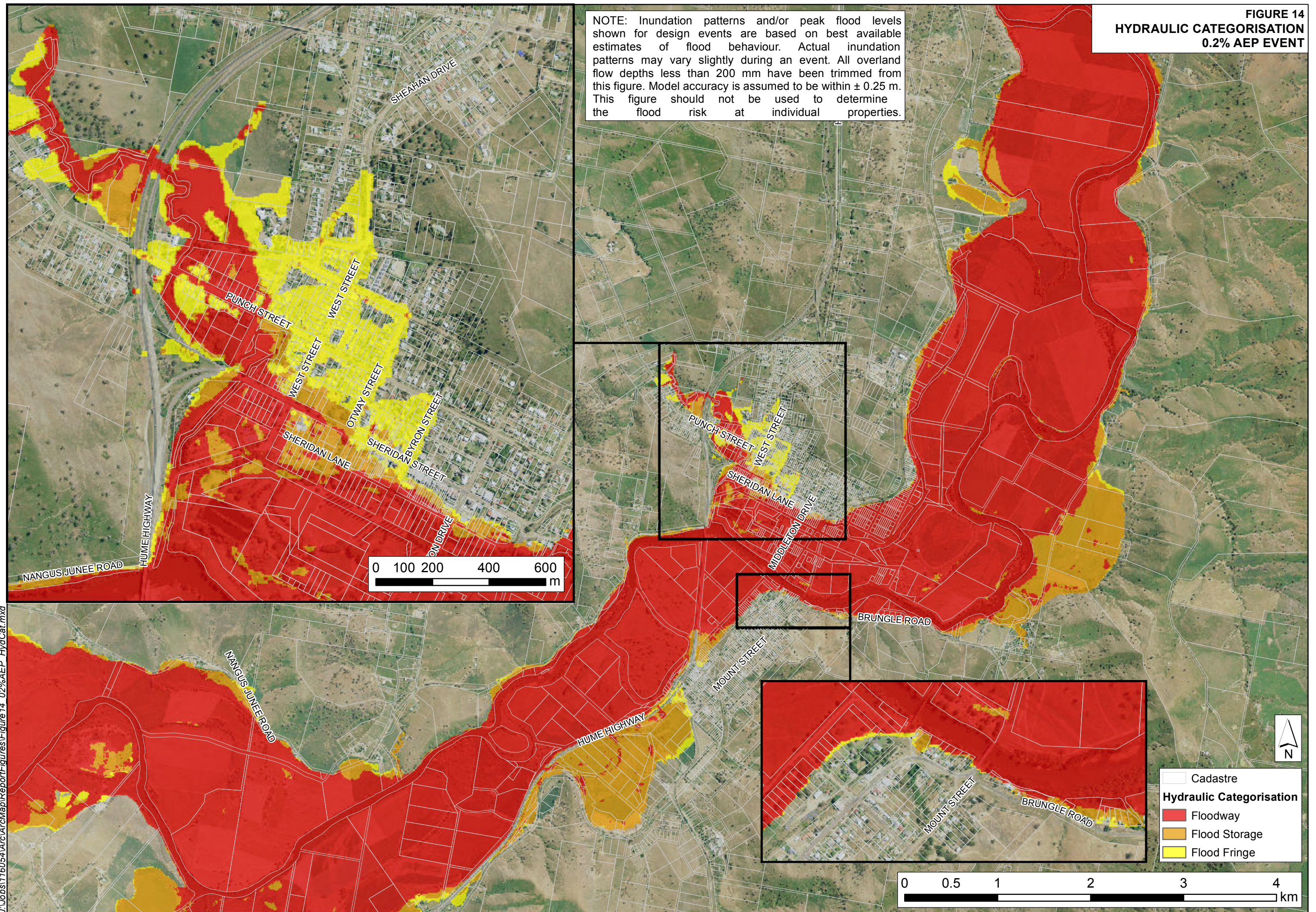


FIGURE 14
HYDRAULIC CATEGORISATION
0.2% AEP EVENT

NOTE: Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour. Actual inundation patterns may vary slightly during an event. All overland flow depths less than 200 mm have been trimmed from this figure. Model accuracy is assumed to be within ± 0.25 m. This figure should not be used to determine the flood risk at individual properties.



— Cadastre

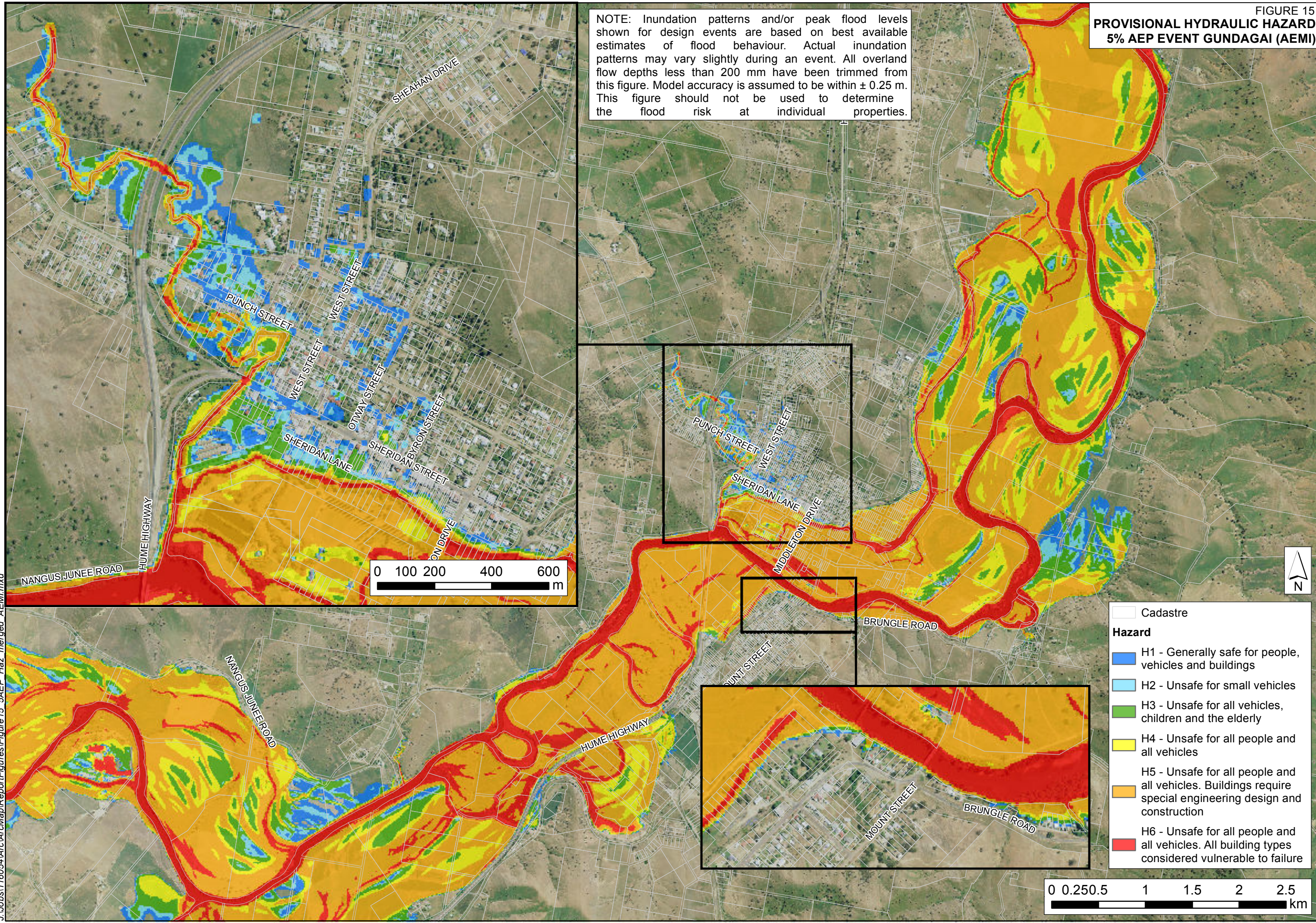
Hydraulic Categorisation

- Floodway
- Flood Storage
- Flood Fringe

0 0.5 1 2 3 4 km

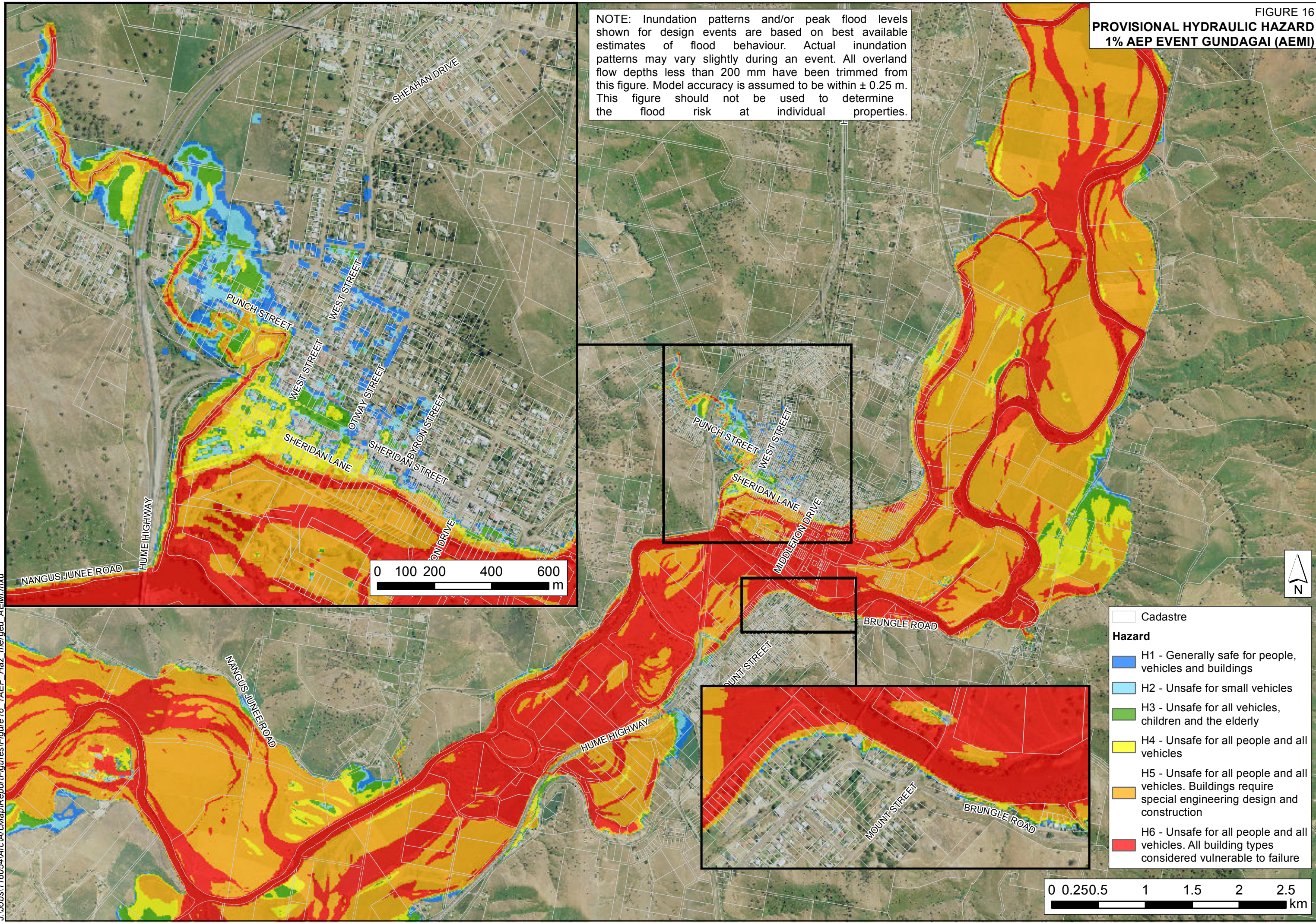
PROVISIONAL HYDRAULIC HAZARD
5% AEP EVENT GUNDAGAI (AEMI)

NOTE: Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour. Actual inundation patterns may vary slightly during an event. All overland flow depths less than 200 mm have been trimmed from this figure. Model accuracy is assumed to be within ± 0.25 m. This figure should not be used to determine the flood risk at individual properties.



PROVISIONAL HYDRAULIC HAZARD
1% AEP EVENT GUNDAGAI (AEMI)

NOTE: Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour. Actual inundation patterns may vary slightly during an event. All overland flow depths less than 200 mm have been trimmed from this figure. Model accuracy is assumed to be within ± 0.25 m. This figure should not be used to determine the flood risk at individual properties.

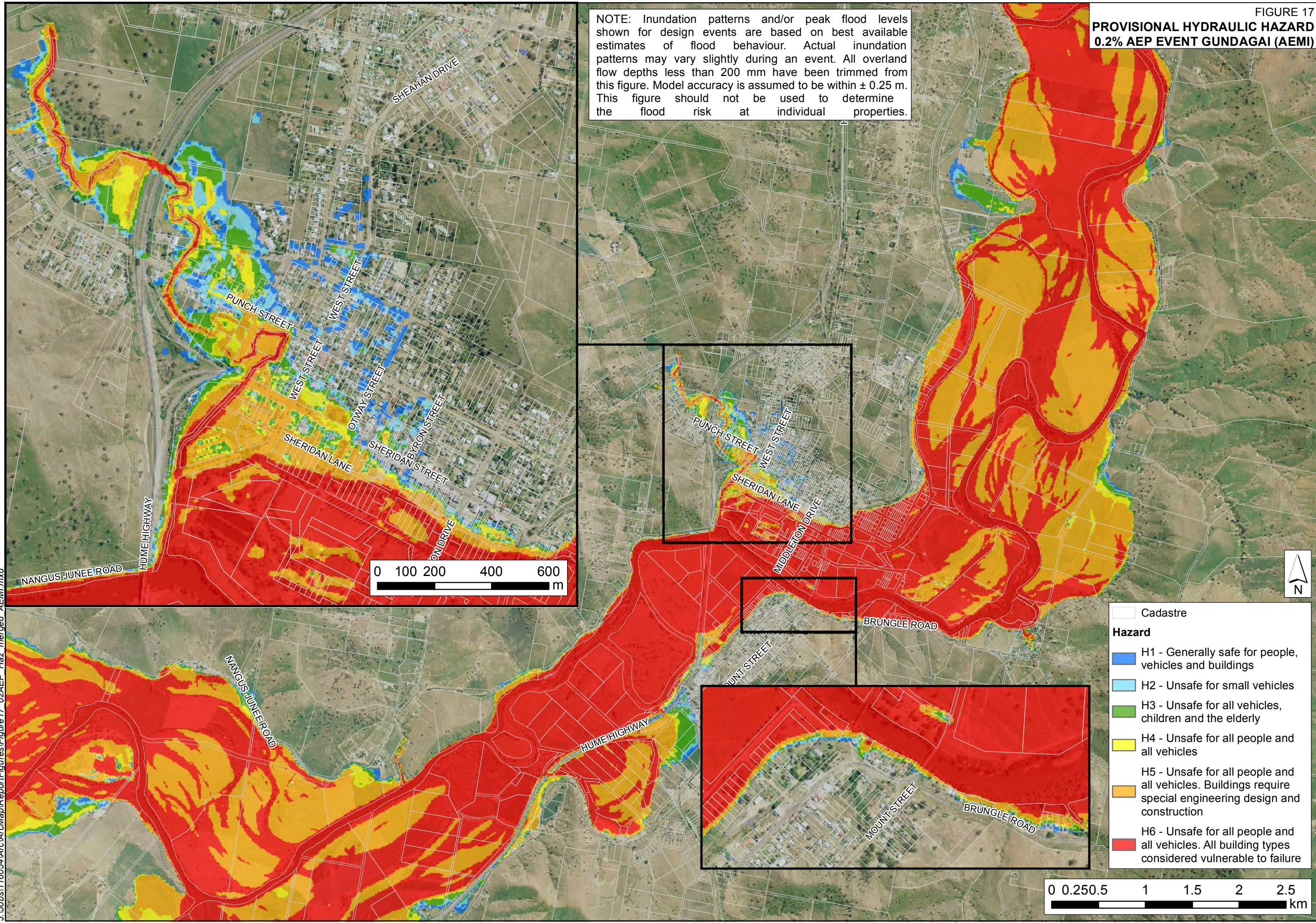


- Cadastre
- Hazard**
- H1 - Generally safe for people, vehicles and buildings
 - H2 - Unsafe for small vehicles
 - H3 - Unsafe for all vehicles, children and the elderly
 - H4 - Unsafe for all people and all vehicles
 - H5 - Unsafe for all people and all vehicles. Buildings require special engineering design and construction
 - H6 - Unsafe for all people and all vehicles. All building types considered vulnerable to failure

0 0.25 0.5 1 1.5 2 2.5 km

**PROVISIONAL HYDRAULIC HAZARD
0.2% AEP EVENT GUNDAGAI (AEMI)**

NOTE: Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour. Actual inundation patterns may vary slightly during an event. All overland flow depths less than 200 mm have been trimmed from this figure. Model accuracy is assumed to be within ± 0.25 m. This figure should not be used to determine the flood risk at individual properties.

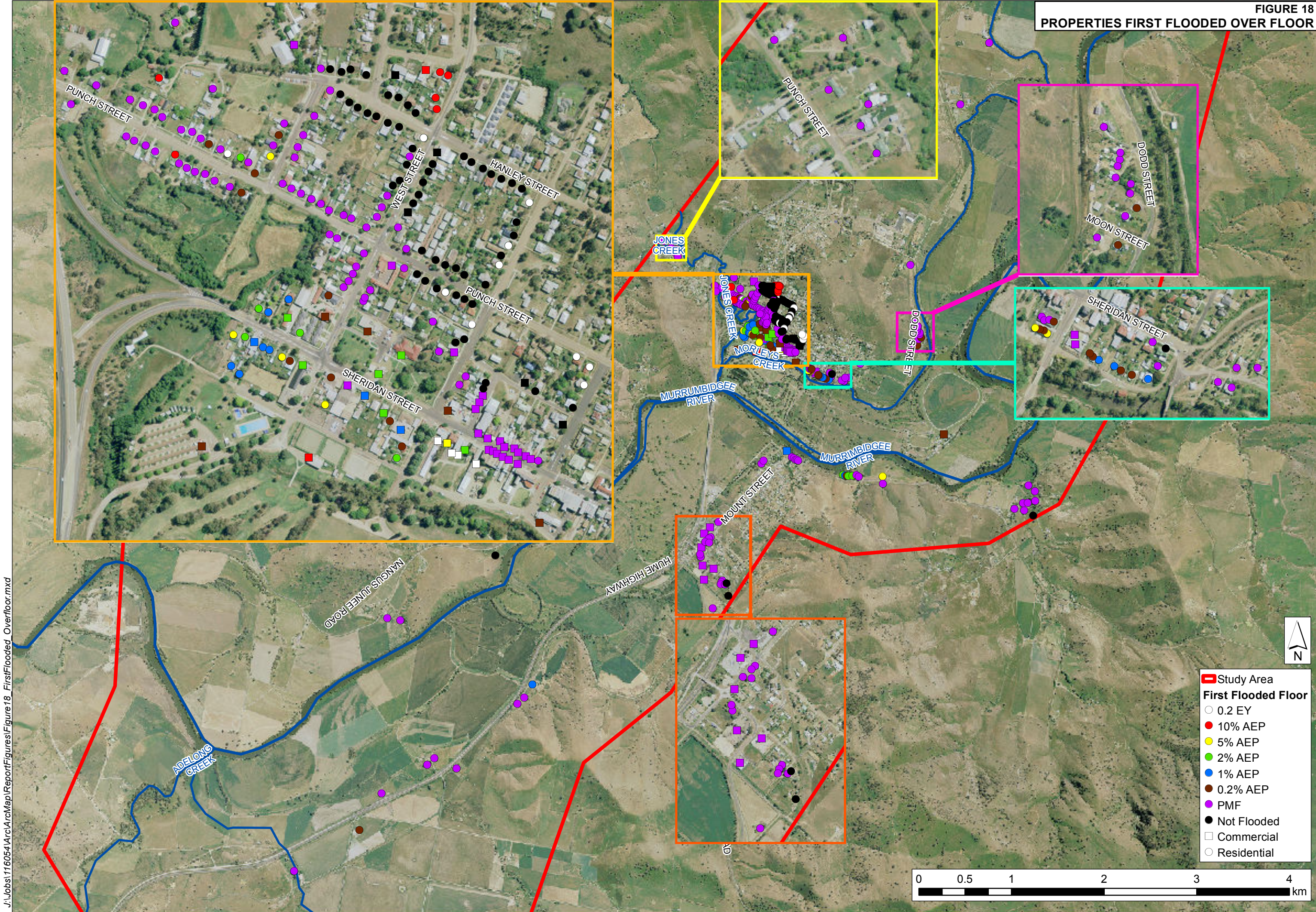


- Cadastre
- Hazard**
- H1 - Generally safe for people, vehicles and buildings
- H2 - Unsafe for small vehicles
- H3 - Unsafe for all vehicles, children and the elderly
- H4 - Unsafe for all people and all vehicles
- H5 - Unsafe for all people and all vehicles. Buildings require special engineering design and construction
- H6 - Unsafe for all people and all vehicles. All building types considered vulnerable to failure

0 0.25 0.5 1 1.5 2 2.5 km

FIGURE 18

PROPERTIES FIRST FLOODED OVER FLOOR



**FIGURE 19
FLOOD PLANNING AREA
GUNDAGAI**

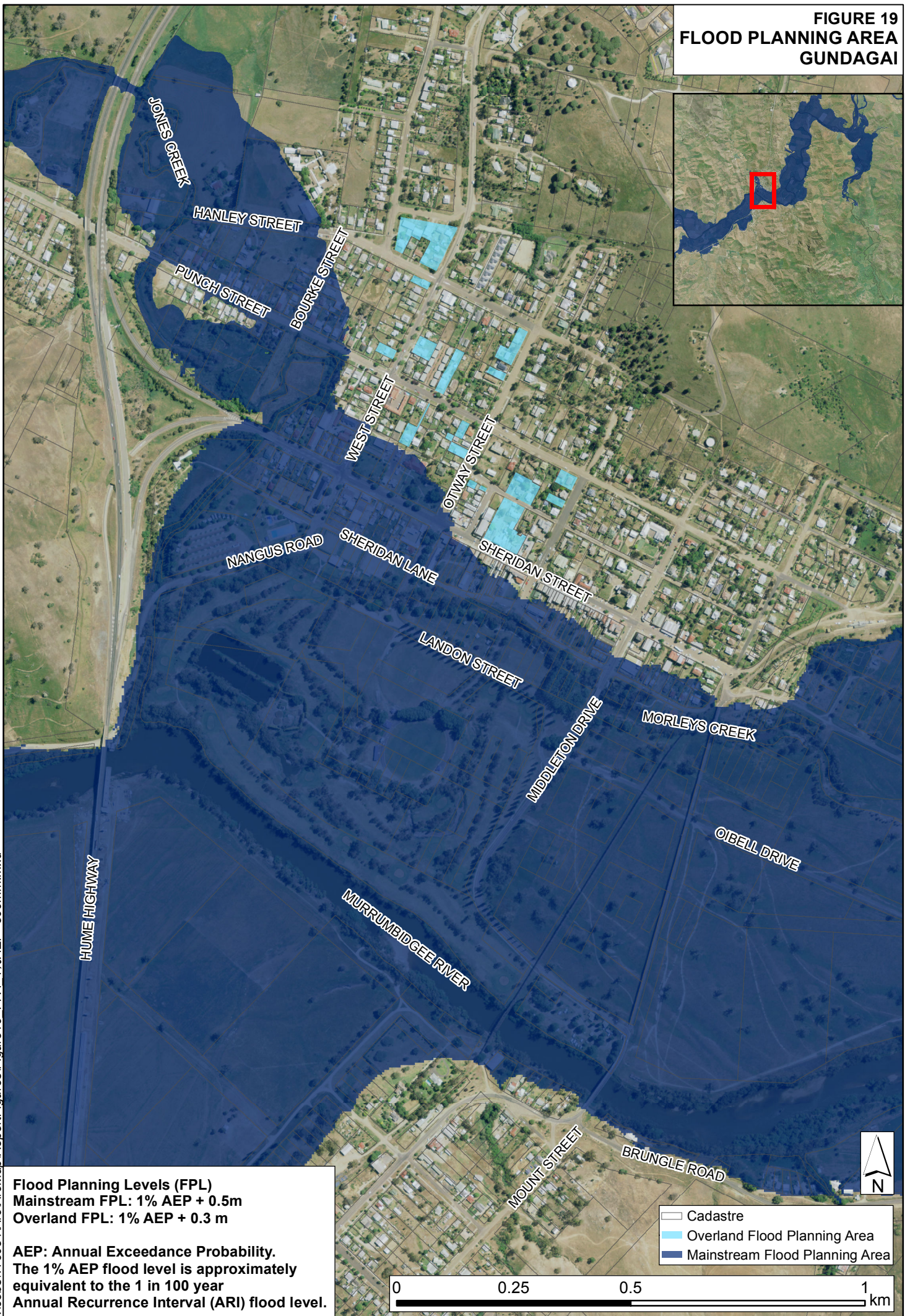


FIGURE F1
OPTION FM01 - EXCAVATE FLOOD CHANNEL
NEAR SHEAHAN BRIDGE SOUTHERN ABUTMENT
0.2 EY PEAK FLOOD LEVEL IMPACT
MURRUMBIDGEE RIVER

