



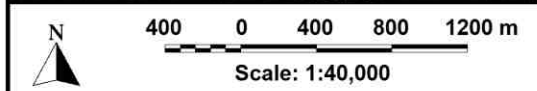
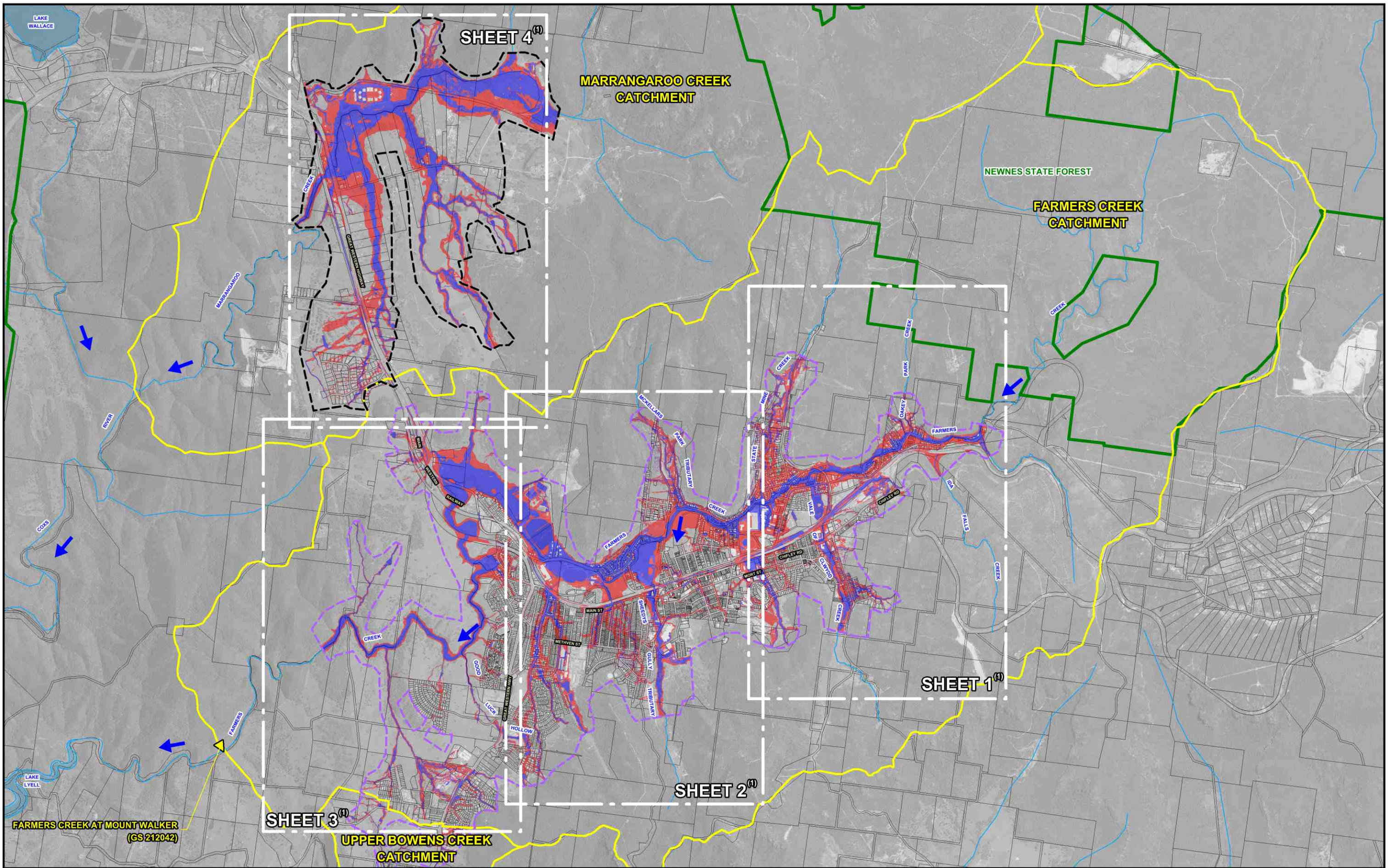
## LITHGOW FLOOD STUDY REVIEW

### VOLUME 2 – FIGURES








MAY 2017

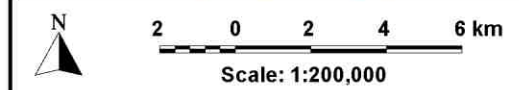
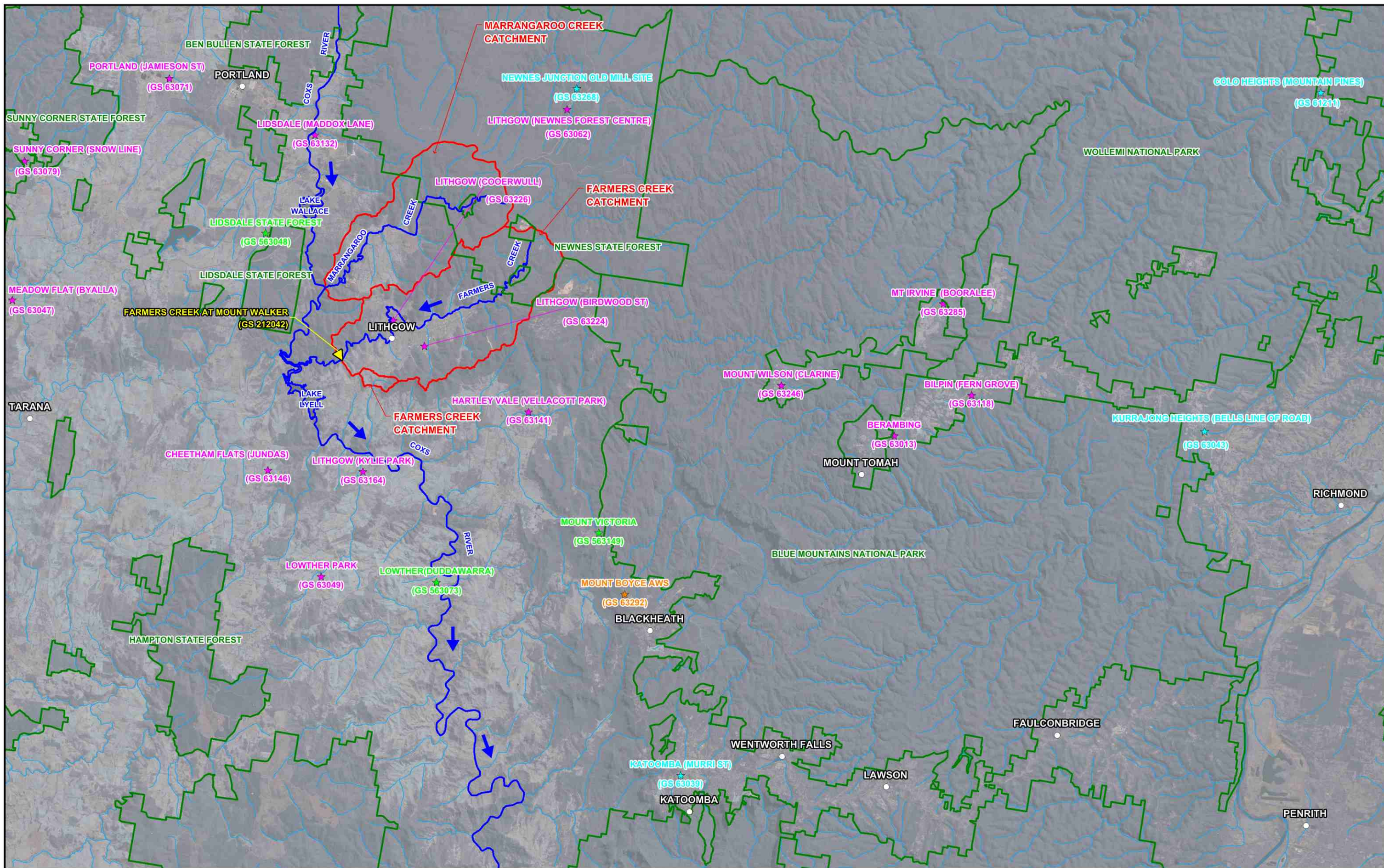
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**NOTE:**  
1. Extent of area covered by sheet in series of figures referred to in Main Report.

LEGEND	
	Catchment Boundary
	Extent of Farmers Creek TUFLOW Model
	Extent of Marrangaroo Creek TUFLOW Model
	DPIOW Stream Gauge
	Area Inundated by 1 in 100 year ARI Flood
	Limit of Flood Prone Land
	Reserve Boundary

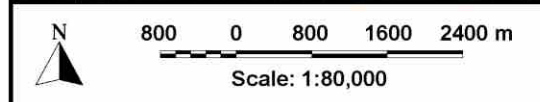
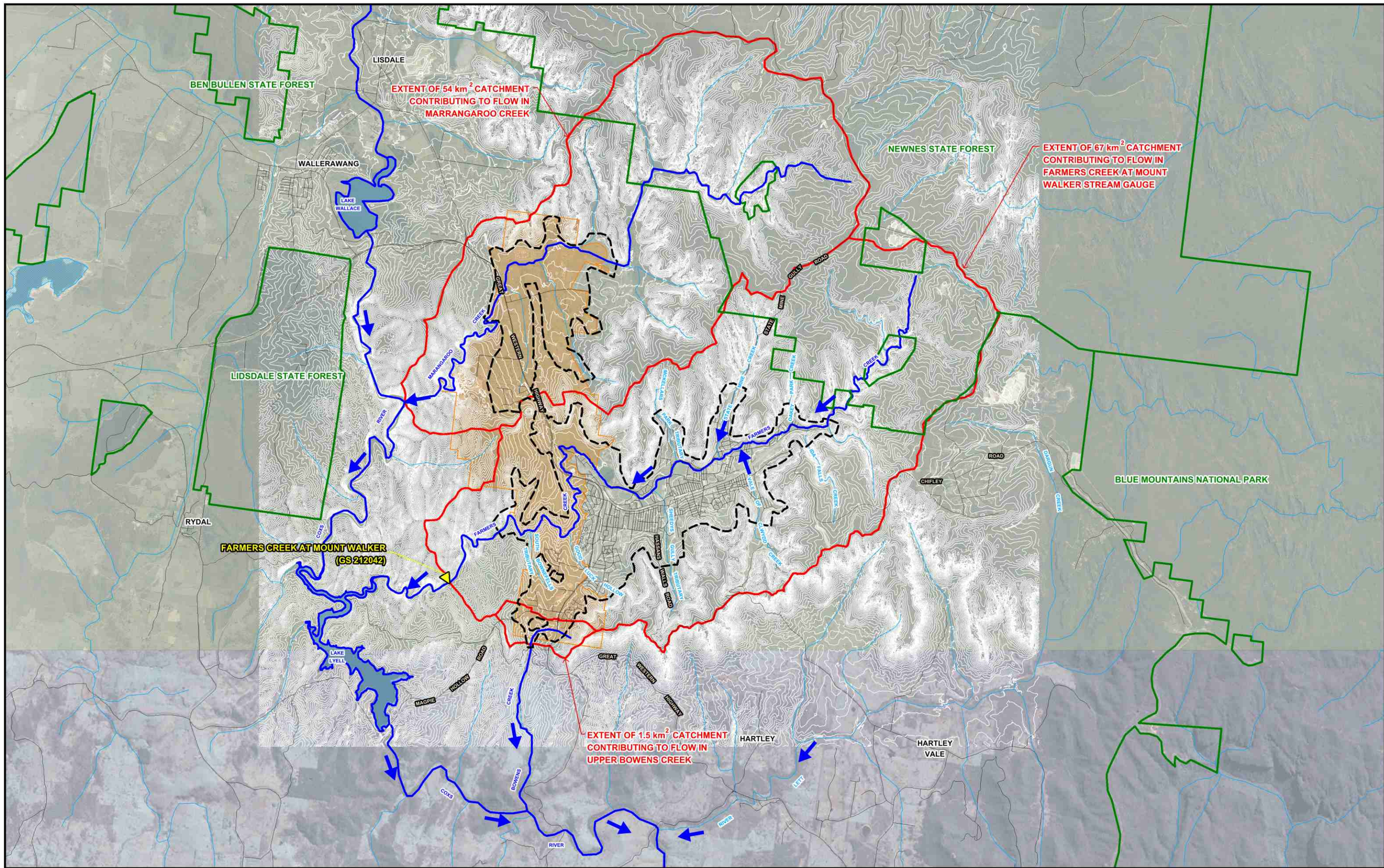


**LEGEND**

- ★ BoM All Weather Station (AWS)
- ★ BoM Pluviographic Rainfall Station
- ★ SWC Pluviographic Rainfall Station
- ★ BoM Daily Rainfall Station
- ▼ DPIOW Stream and Pluviographic Rain Gauge
- Extent of Two-Dimensional Model Domain
- Reserve Boundary

**LITHGOW FLOOD STUDY REVIEW**

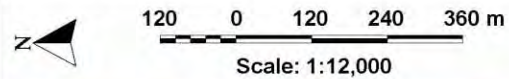
Figure 1.1



LEGEND	
	DPIOW Stream Gauge
	Future Growth Areas
	Extent of Two-Dimensional Model Domain
	Reserve Boundary



JOINS SHEET 2



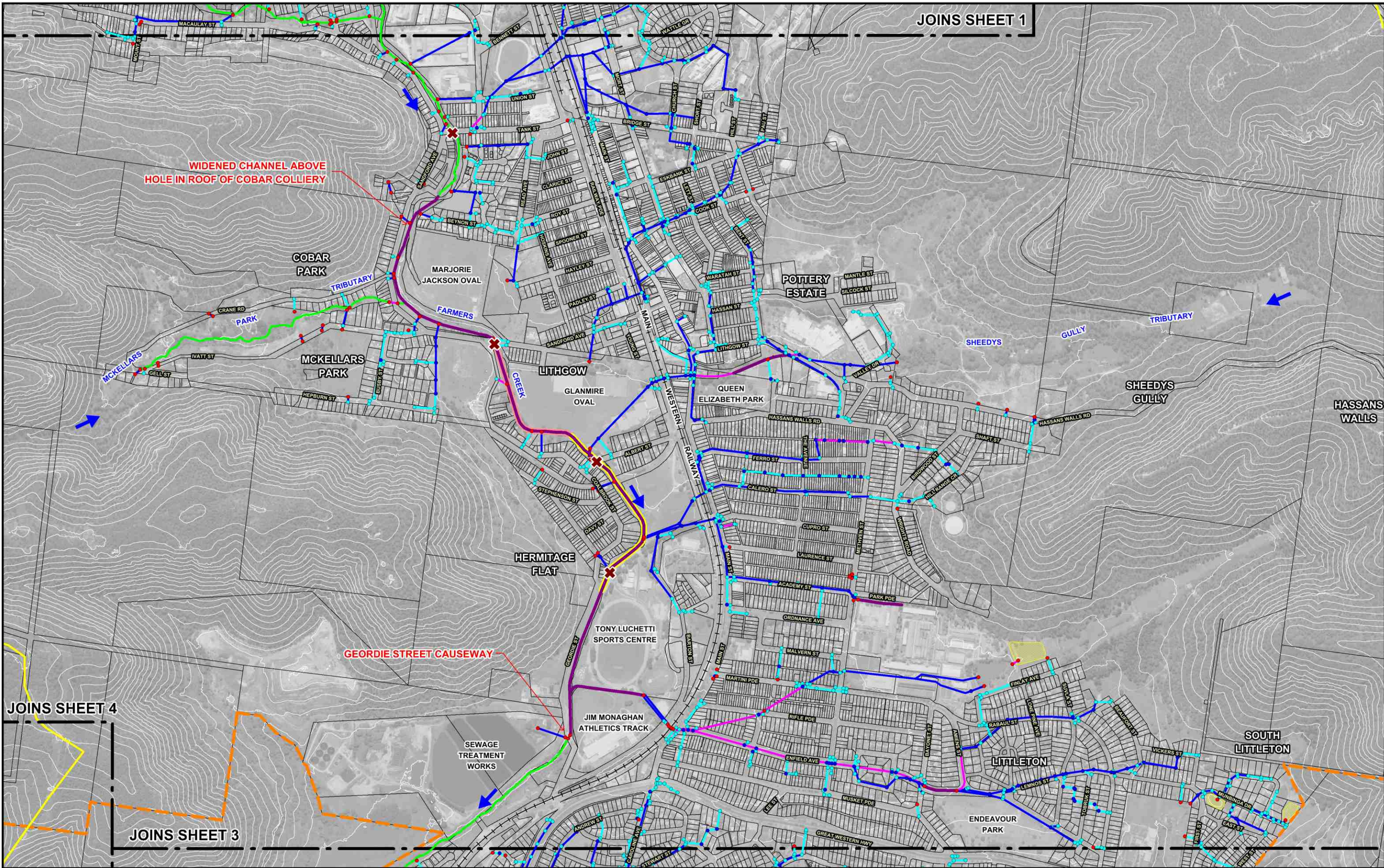
LEGEND

- Inlet Pit
- Junction Pit
- Headwall
- ✕ Bridge
- Pipe < 450 mm Diameter
- Pipe ≥ 450 mm Diameter
- Box Culvert
- Unlined Channel
- Catchment Boundary

LITHGOW FLOOD STUDY REVIEW

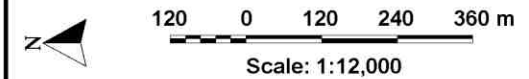
Figure 2.2  
(Sheet 1 of 4)

EXISTING STORMWATER DRAINAGE SYSTEM AT LITHGOW



JOINS SHEET 4

JOINS SHEET 3



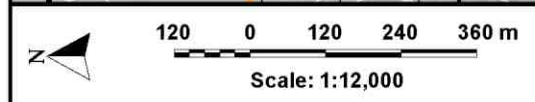
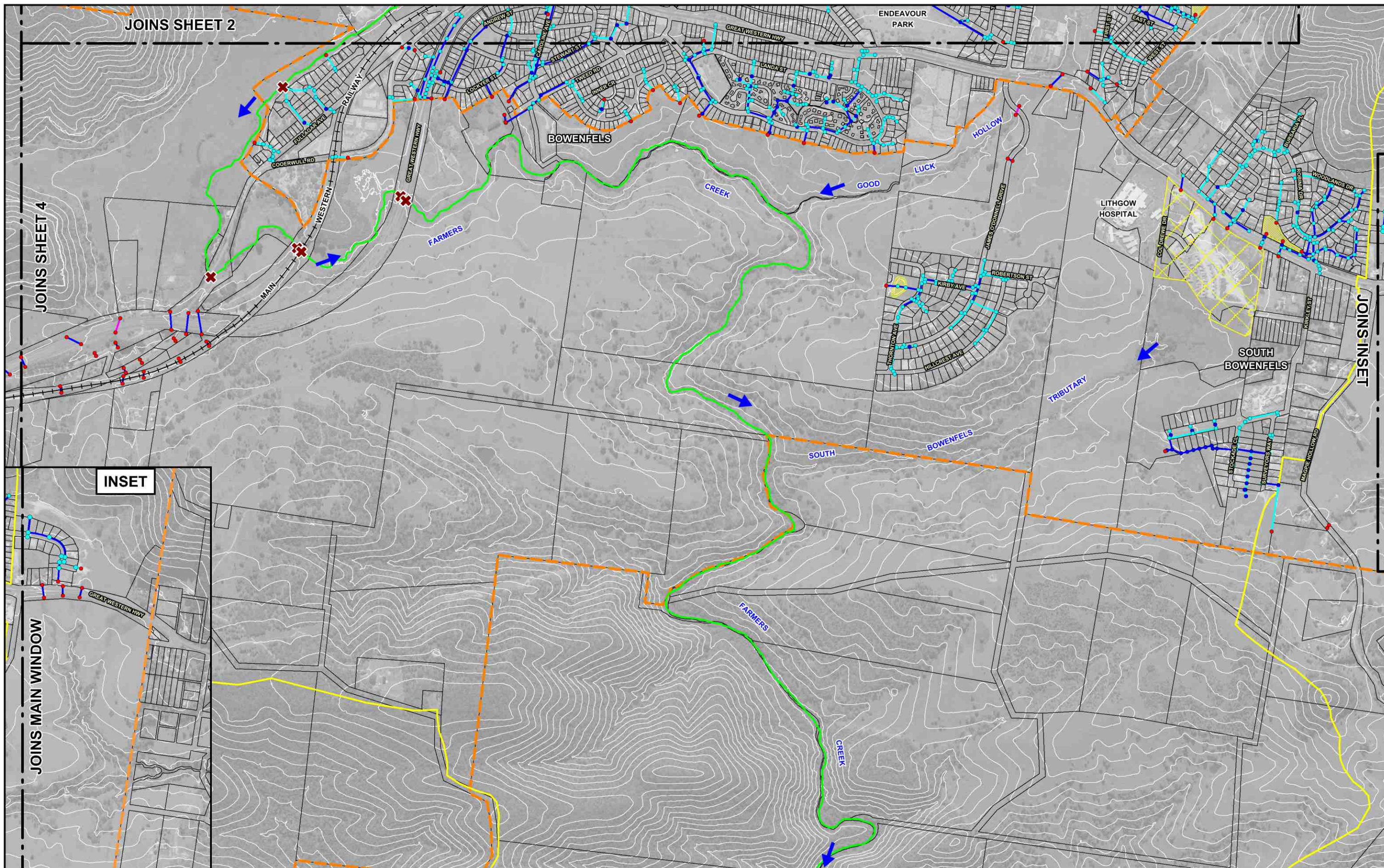
LEGEND

Inlet Pit	Pipe <math>< 450\text{ mm}</math> Diameter	Concrete Lined Channel
Junction Pit	Pipe <math>\ge 450\text{ mm}</math> Diameter	Extent of Future Stages 3 and 4 Flood Modification Works
Headwall	Box Culvert	Extent of Stages 1 and 2 Flood Modification Works
Detention Basin	Extent of Future Growth Area	Unlined Channel
Bridge	Catchment Boundary	

LITHGOW FLOOD STUDY REVIEW

Figure 2.2 (Sheet 2 of 4)

EXISTING STORMWATER DRAINAGE SYSTEM AT LITHGOW



**LEGEND**

<span style="color: cyan;">●</span> Inlet Pit	<span style="color: cyan;">—</span> Pipe < 450 mm Diameter
<span style="color: blue;">●</span> Junction Pit	<span style="color: blue;">—</span> Pipe ≥ 450 mm Diameter
<span style="color: red;">●</span> Headwall	<span style="color: magenta;">—</span> Box Culvert
<span style="background-color: yellow; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Detention Basin	<span style="color: orange;">—</span> Extent of Future Growth Area
<span style="color: red;">✕</span> Bridge	<span style="color: green;">—</span> Unlined Channel

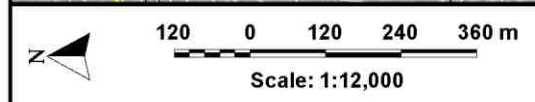
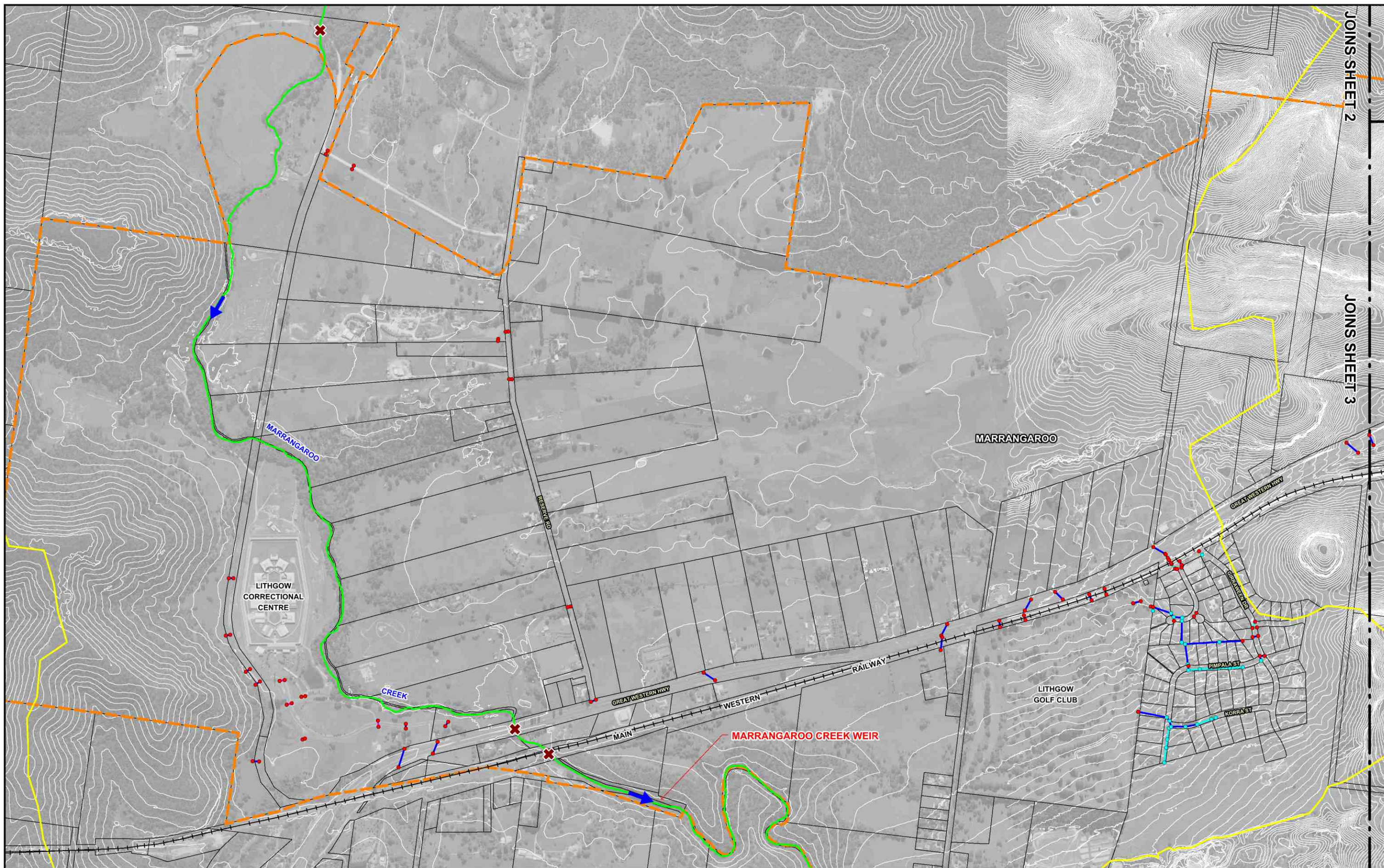
**LITHGOW FLOOD STUDY REVIEW**

<span style="background-color: yellow; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span> Extent of Recent Subdivision Development. Details of New Stormwater Drainage System have not been Incorporated in Farmers Creek TUFLOW Model
<span style="color: yellow;">—</span> Catchment Boundary

Figure 2.2  
(Sheet 3 of 4)

**EXISTING STORMWATER DRAINAGE SYSTEM AT LITHGOW**





**LEGEND**

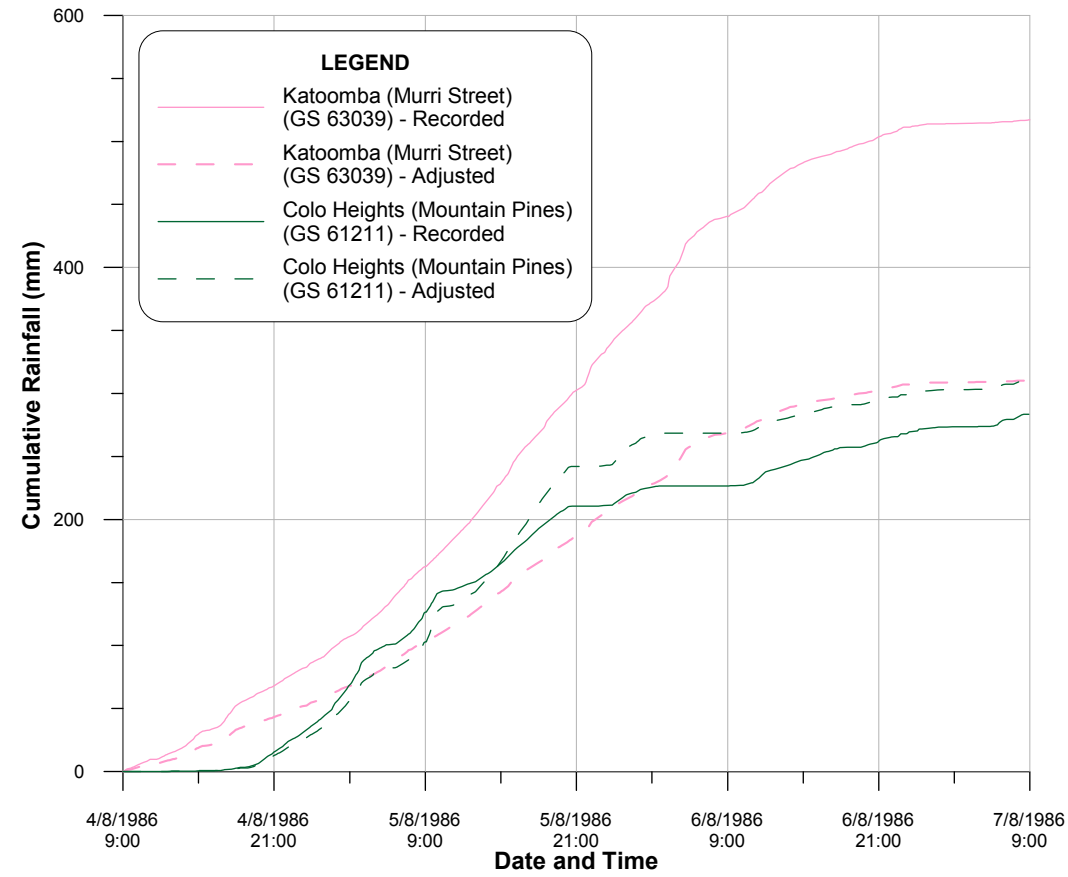
<span style="color: cyan;">●</span> Inlet Pit	<span style="color: cyan;">—</span> Pipe < 450 mm Diameter	<span style="color: orange;">—</span> Extent of Future Growth Area
<span style="color: blue;">●</span> Junction Pit	<span style="color: blue;">—</span> Pipe ≥ 450 mm Diameter	<span style="color: green;">—</span> Unlined Channel
<span style="color: red;">●</span> Headwall	<span style="color: magenta;">—</span> Box Culvert	<span style="color: yellow;">—</span> Catchment Boundary
<span style="color: red;">✕</span> Bridge		

**LITHGOW FLOOD STUDY REVIEW**

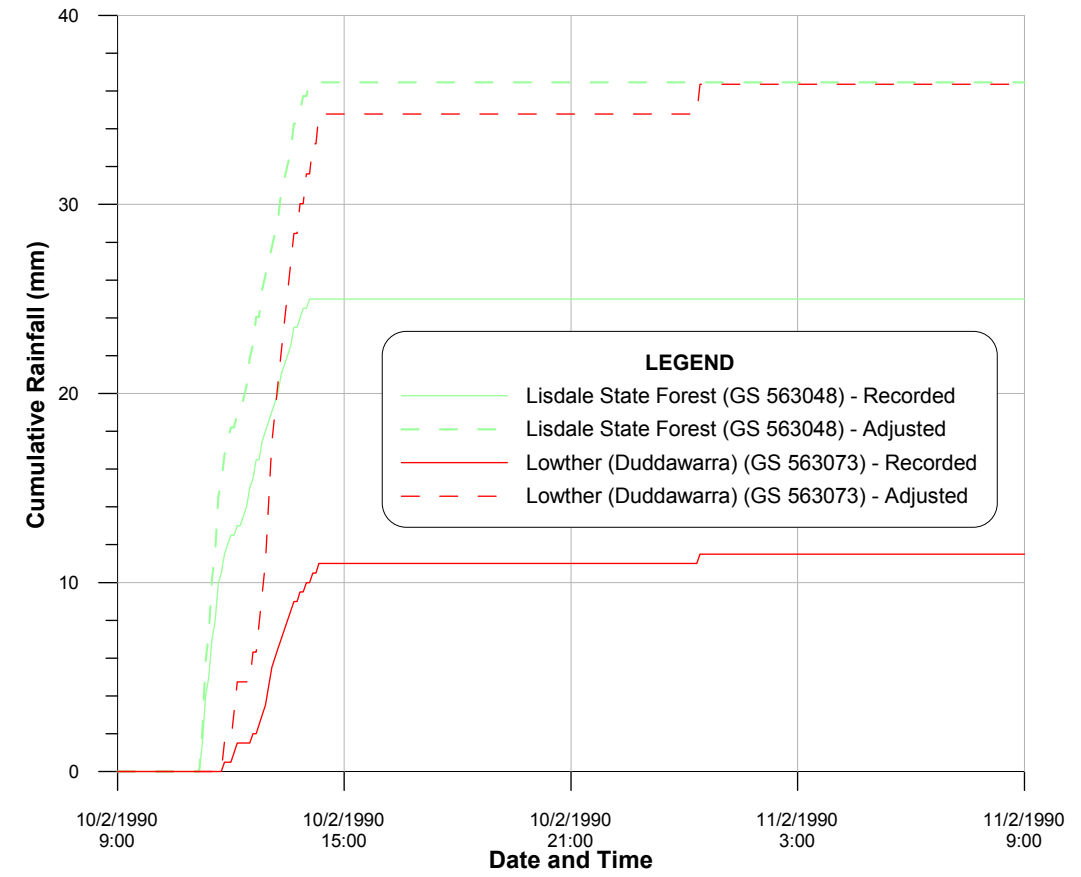
Figure 2.2  
(Sheet 4 of 4)

EXISTING STORMWATER DRAINAGE SYSTEM AT LITHGOW

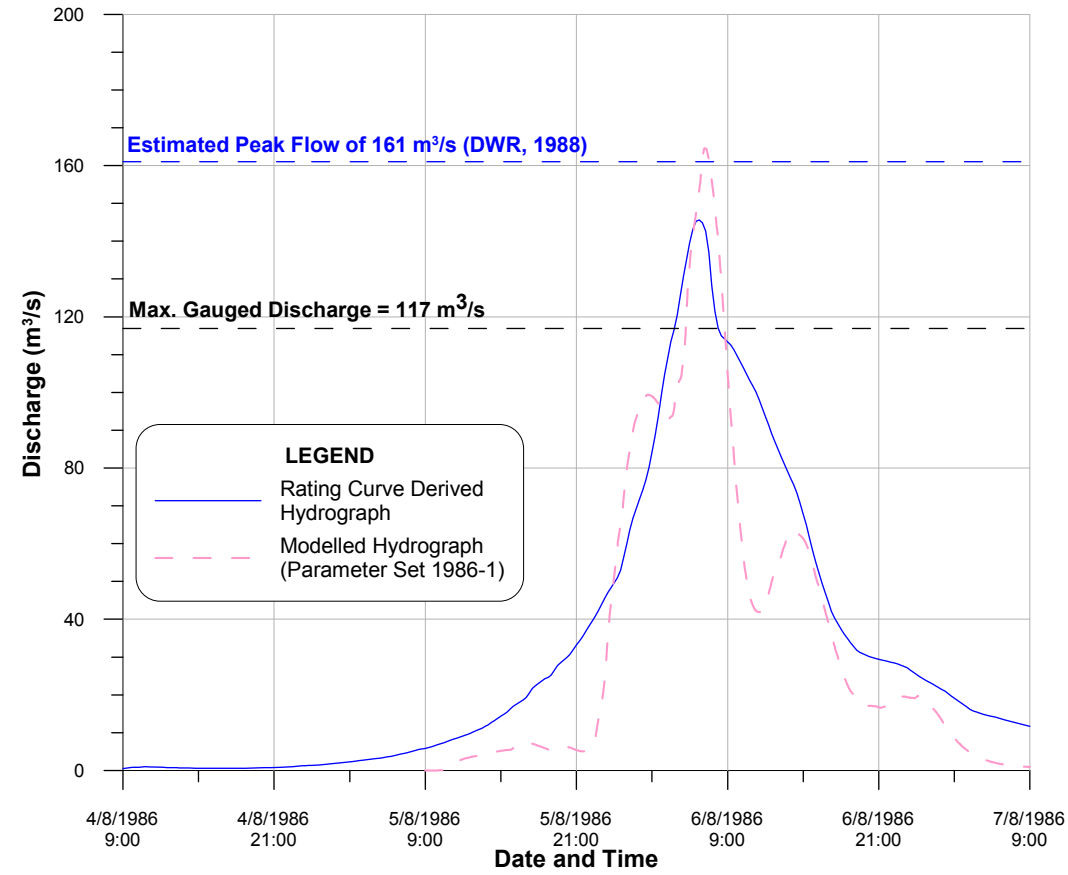
**CUMULATIVE RAINFALL  
AUGUST 1986 STORM**



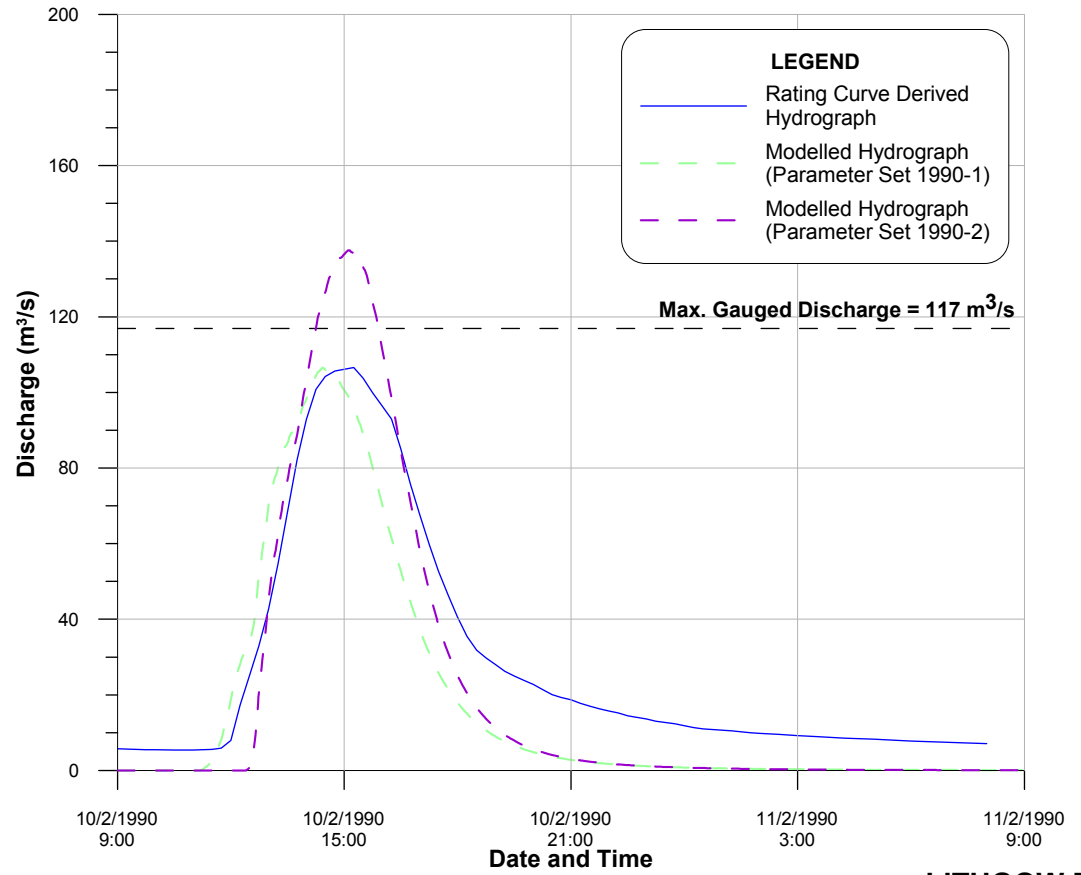
**CUMULATIVE RAINFALL  
FEBRUARY 1990 STORM**



**DISCHARGE HYDROGRAPH  
AUGUST 1986 STORM**



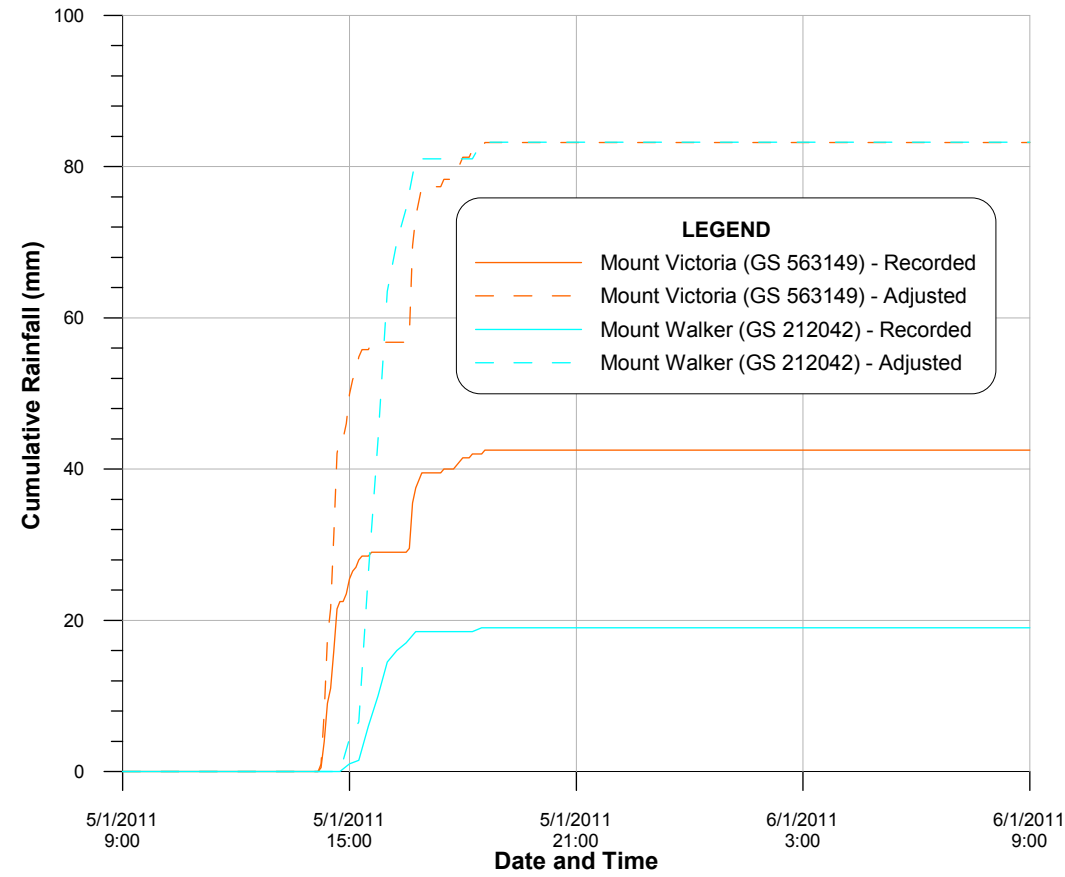
**DISCHARGE HYDROGRAPH  
FEBRUARY 1990 STORM**



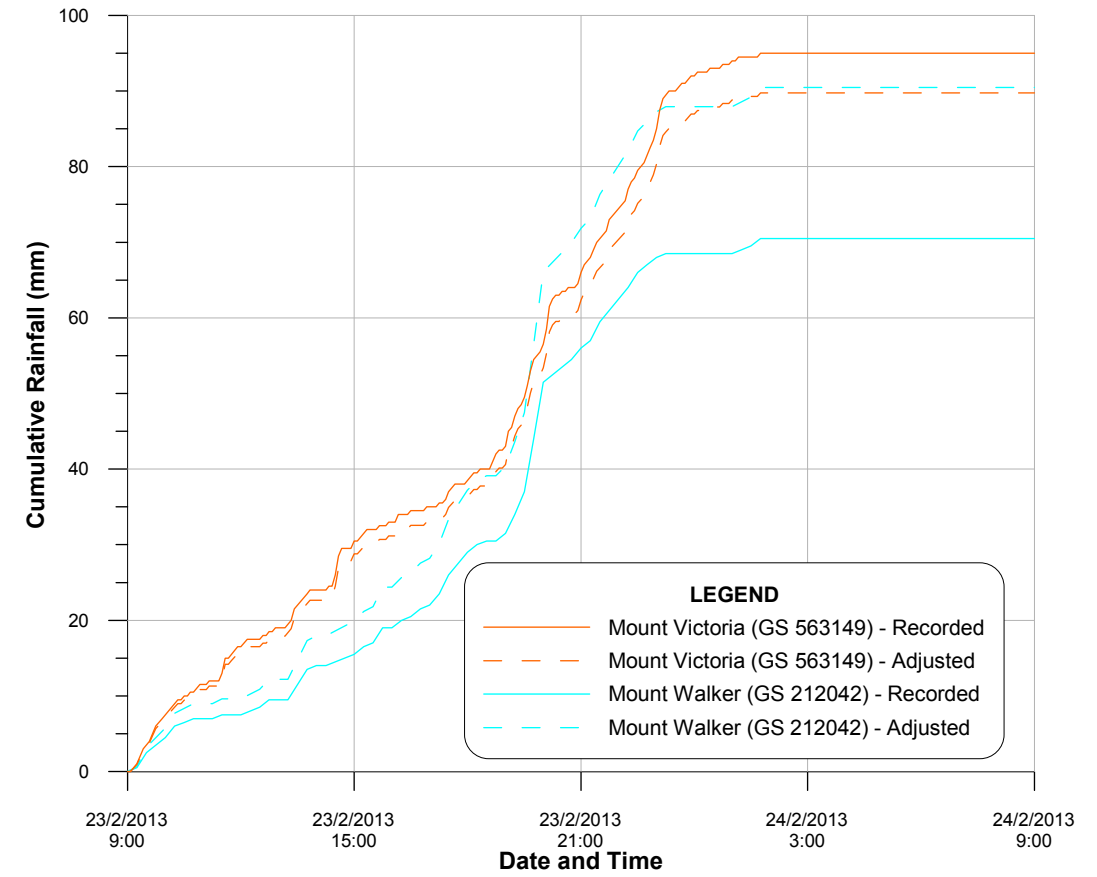
**NOTE:**  
Refer Table 3.1 for details of parameter set.



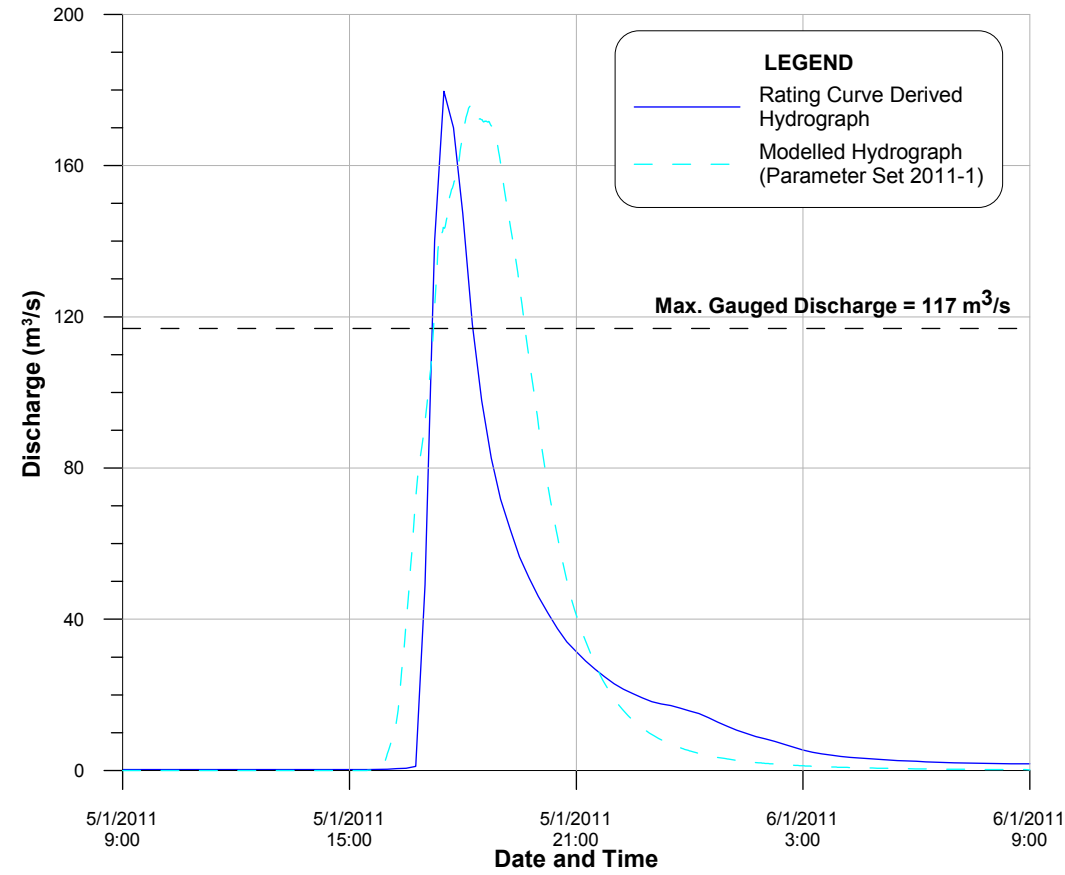
**CUMULATIVE RAINFALL  
JANUARY 2011 STORM**



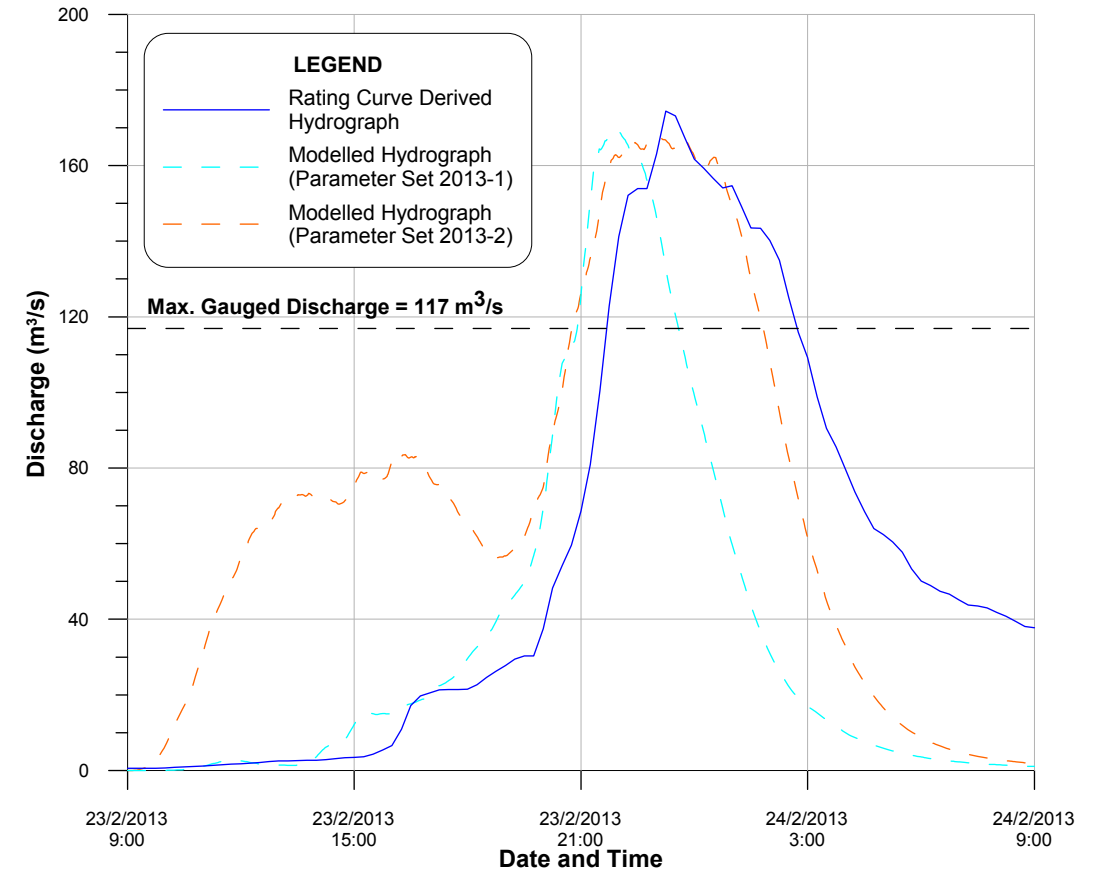
**CUMULATIVE RAINFALL  
FEBRUARY 2013 STORM**



**DISCHARGE HYDROGRAPH  
JANUARY 2011 STORM**



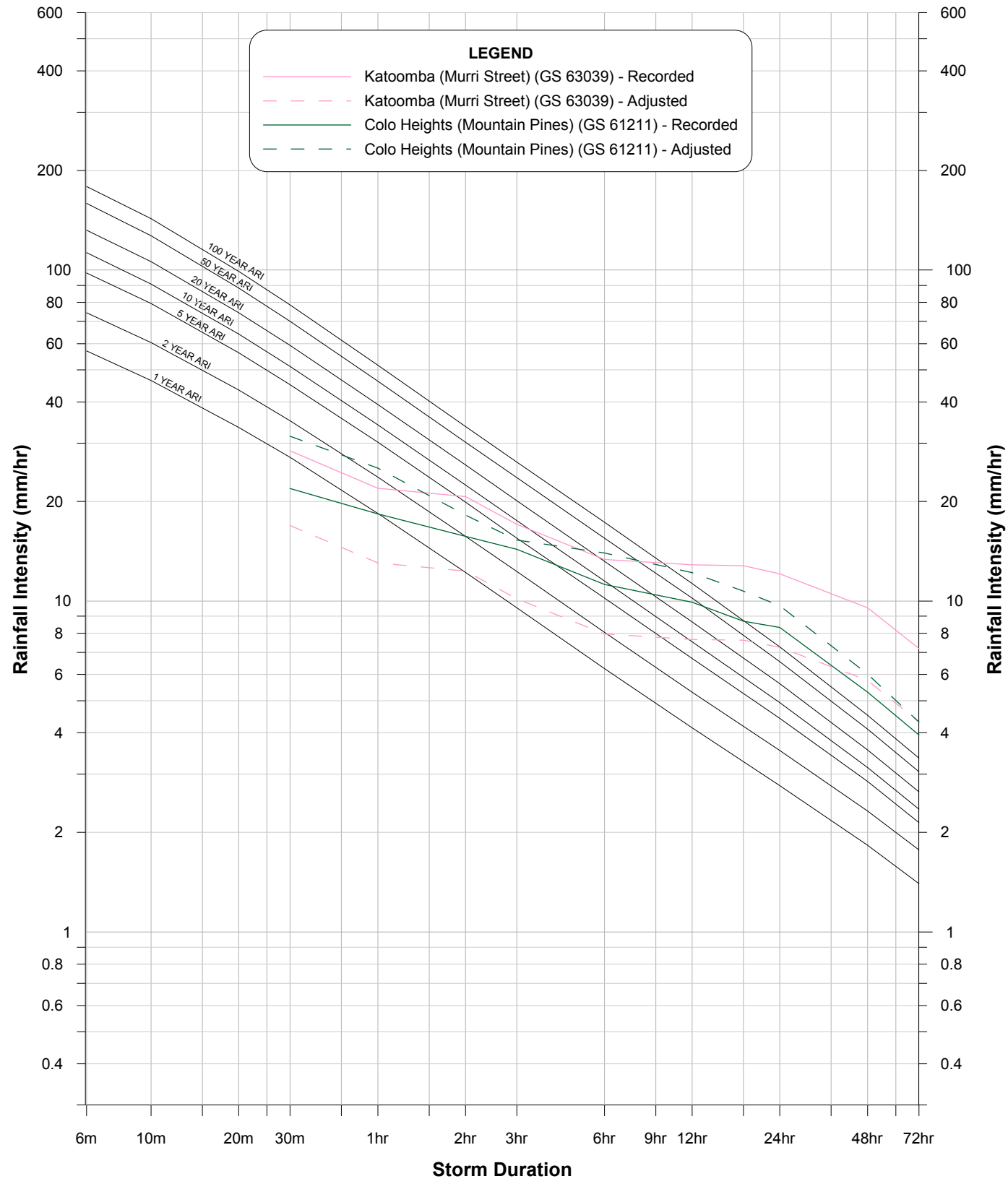
**DISCHARGE HYDROGRAPH  
FEBRUARY 2013 STORM**



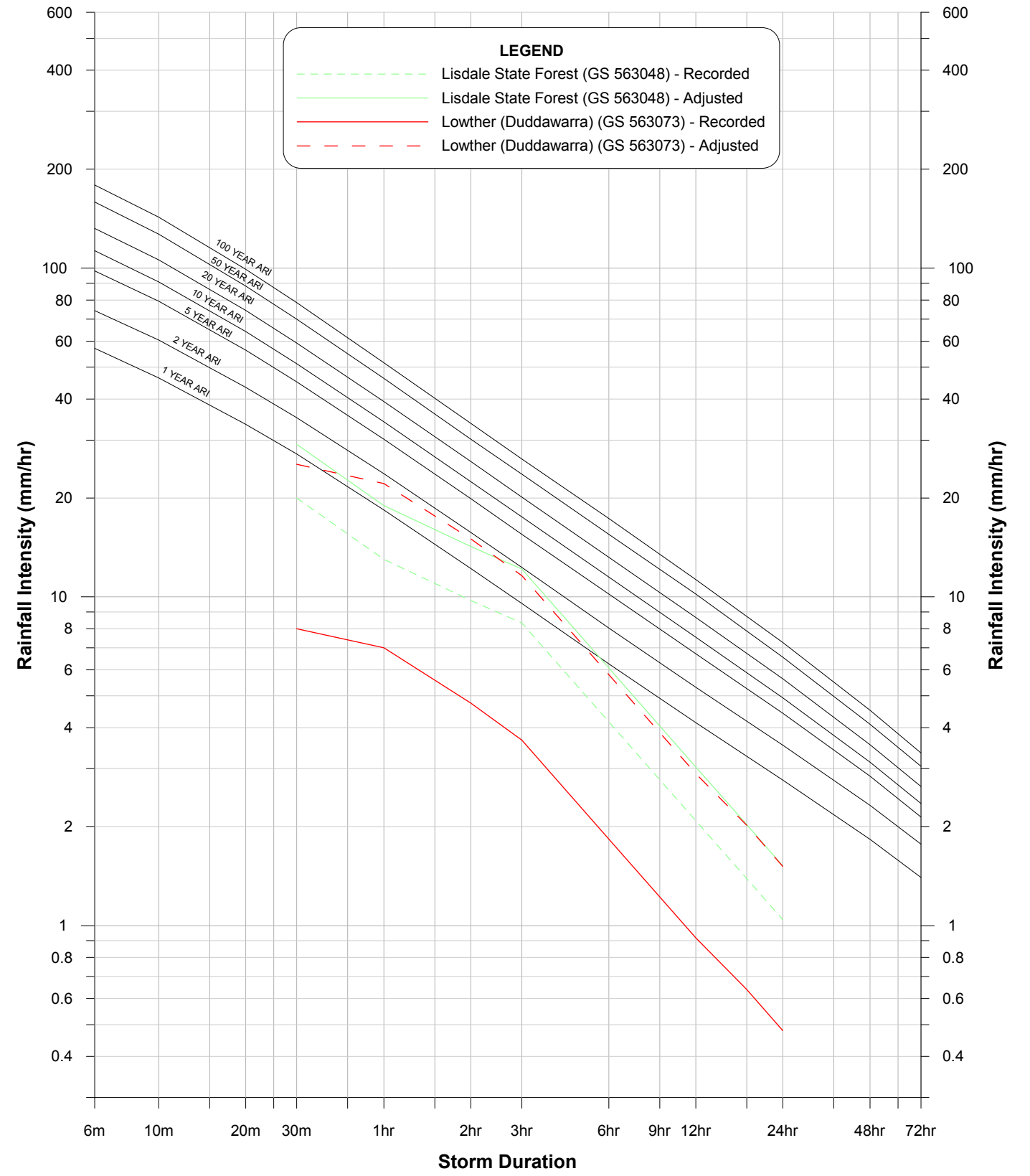
NOTE:  
Refer Table 3.1 for details of parameter set.



**AUGUST 1986 STORM**



**FEBRUARY 1990 STORM**



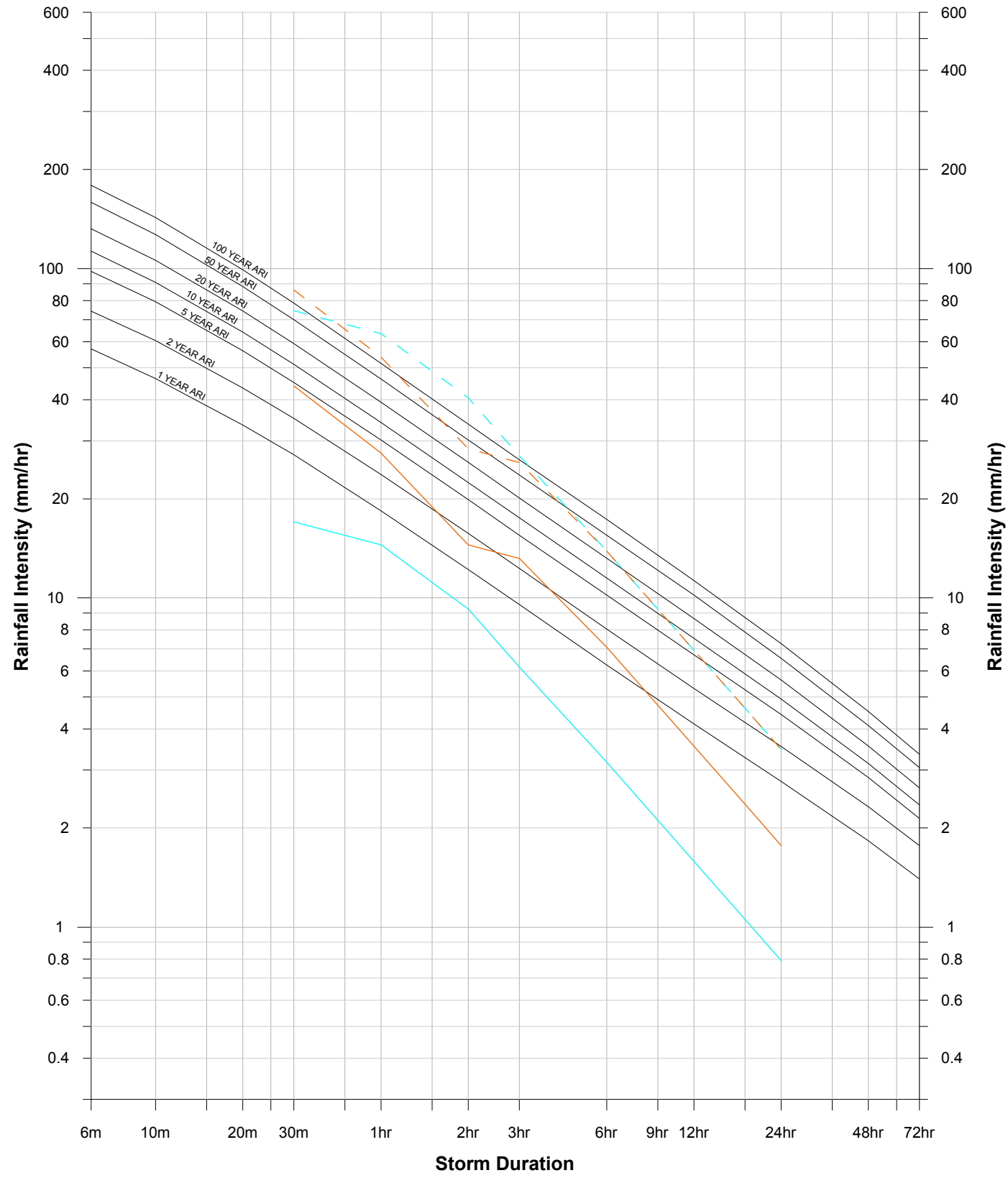
**LITHGOW FLOOD STUDY REVIEW**

Figure 2.4  
(Sheet 1 of 2)

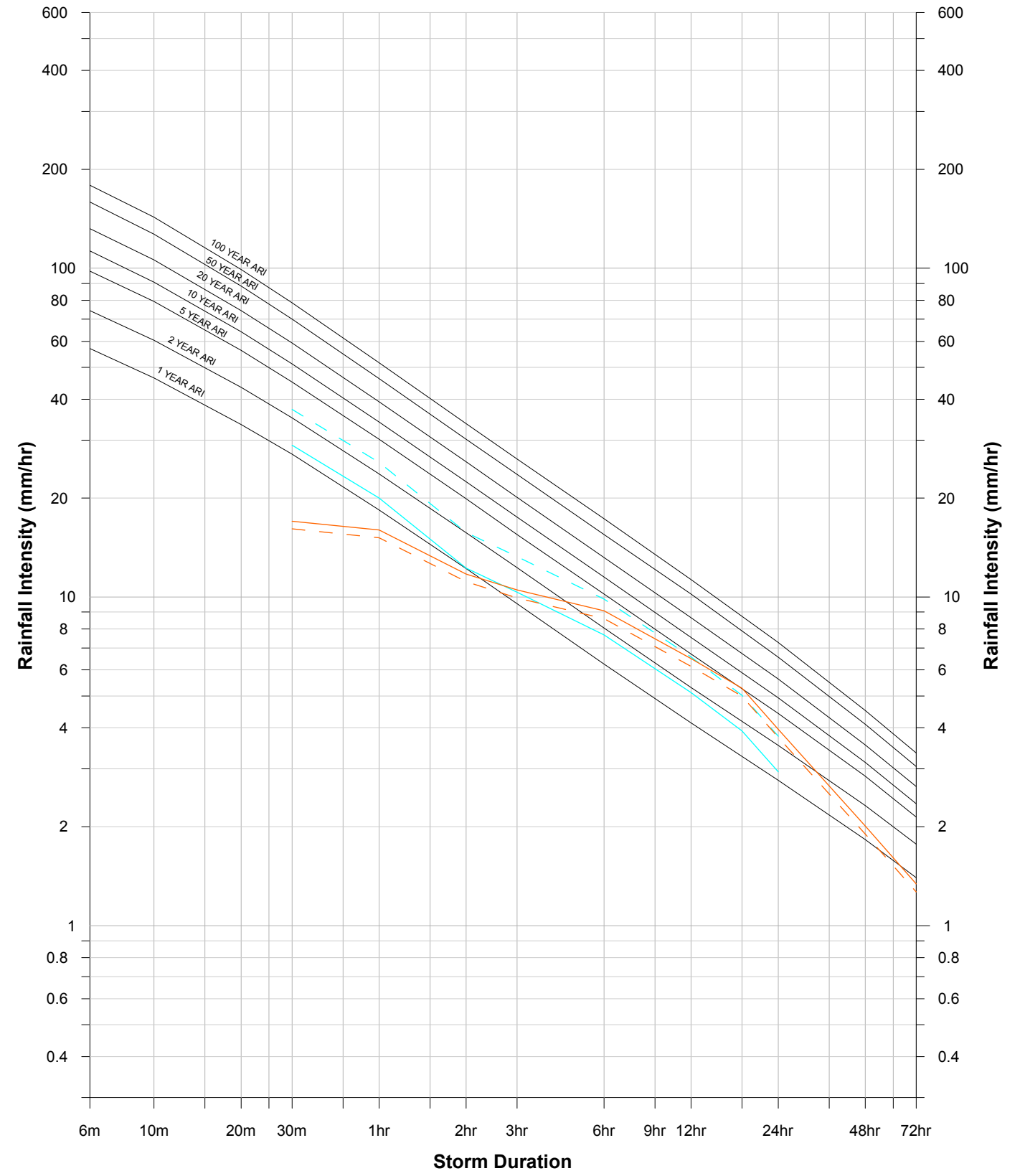
INTENSITY-FREQUENCY-DURATION CURVES  
AND HISTORIC RAINFALL



**JANUARY 2011 STORM**



**FEBRUARY 2013 STORM**



**LEGEND**

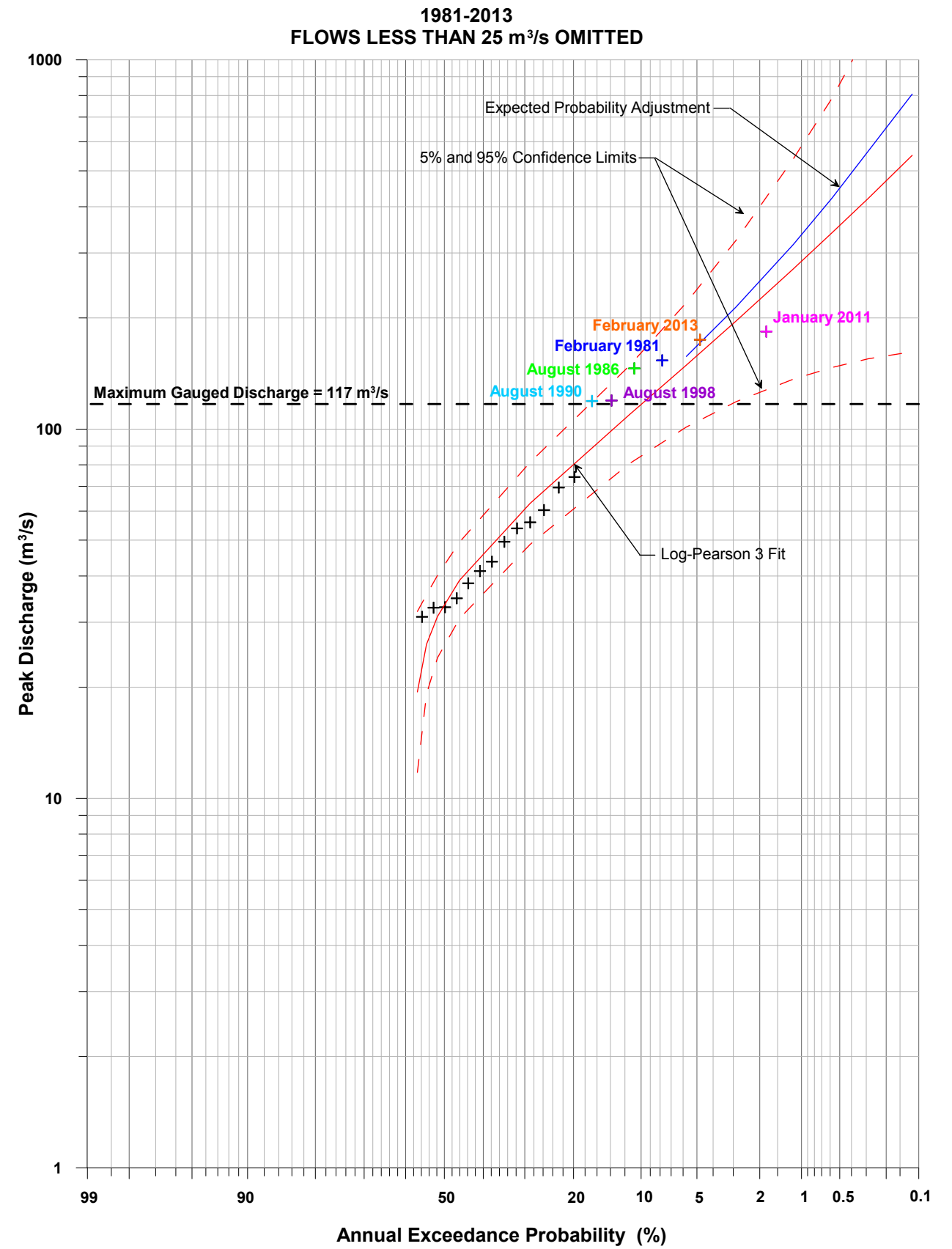
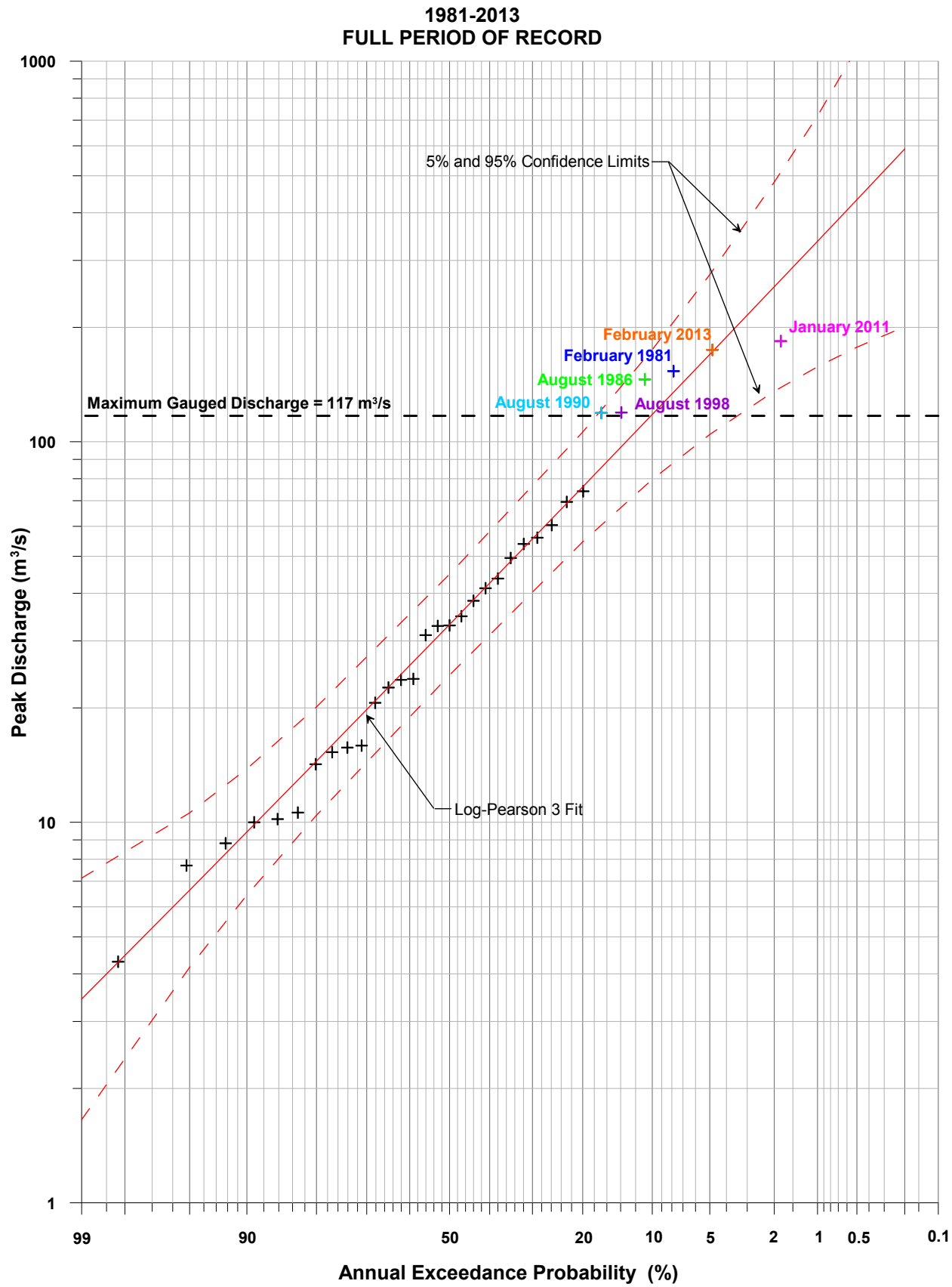
- Mount Walker (GS 212042) - Recorded
- - - Mount Walker (GS 212042) - Adjusted
- Mount Victoria (GS 563149) - Recorded
- - - Mount Victoria (GS 563149) - Adjusted



**LITHGOW FLOOD STUDY REVIEW**

Figure 2.4  
(Sheet 2 of 2)

INTENSITY-FREQUENCY-DURATION CURVES  
AND HISTORIC RAINFALL

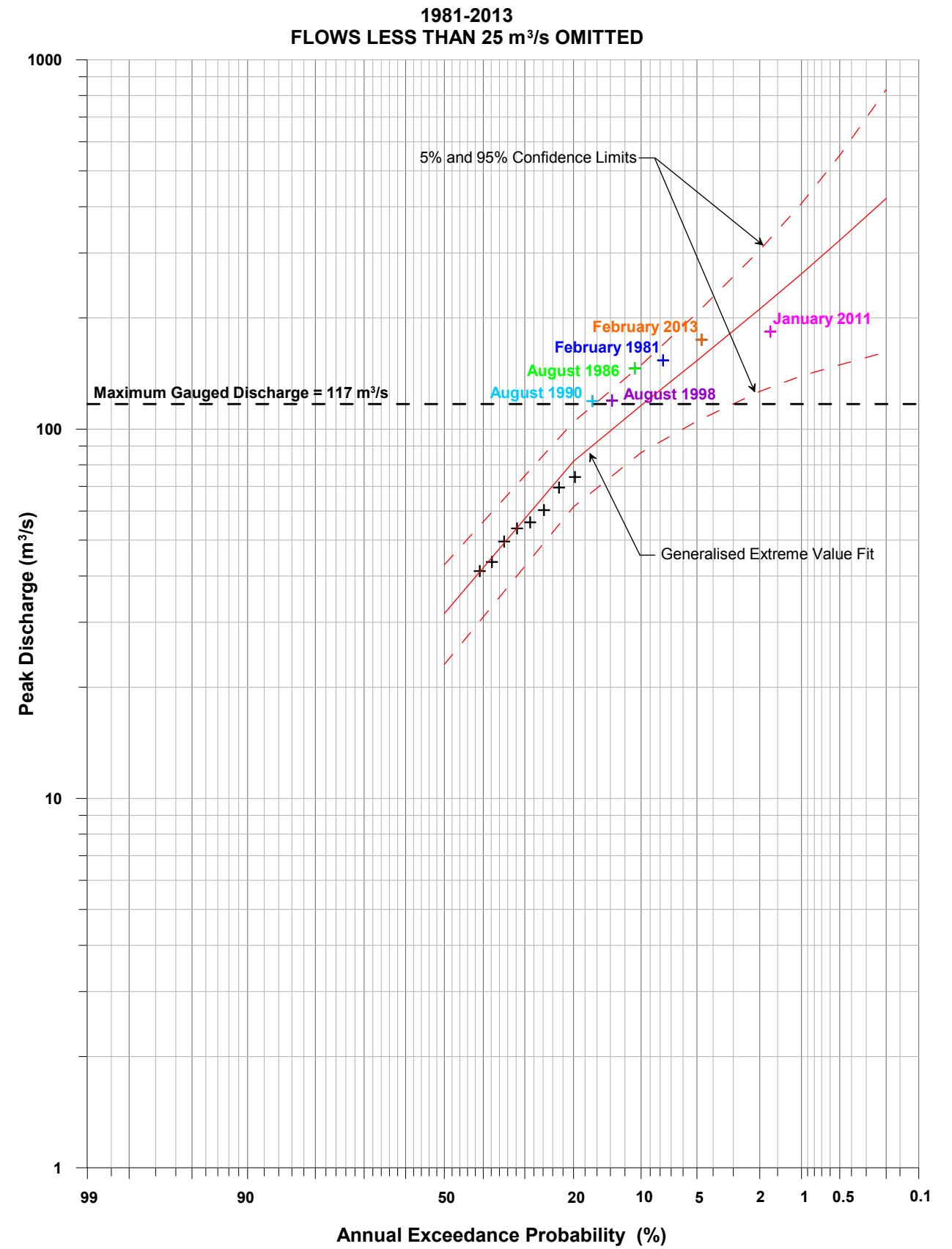
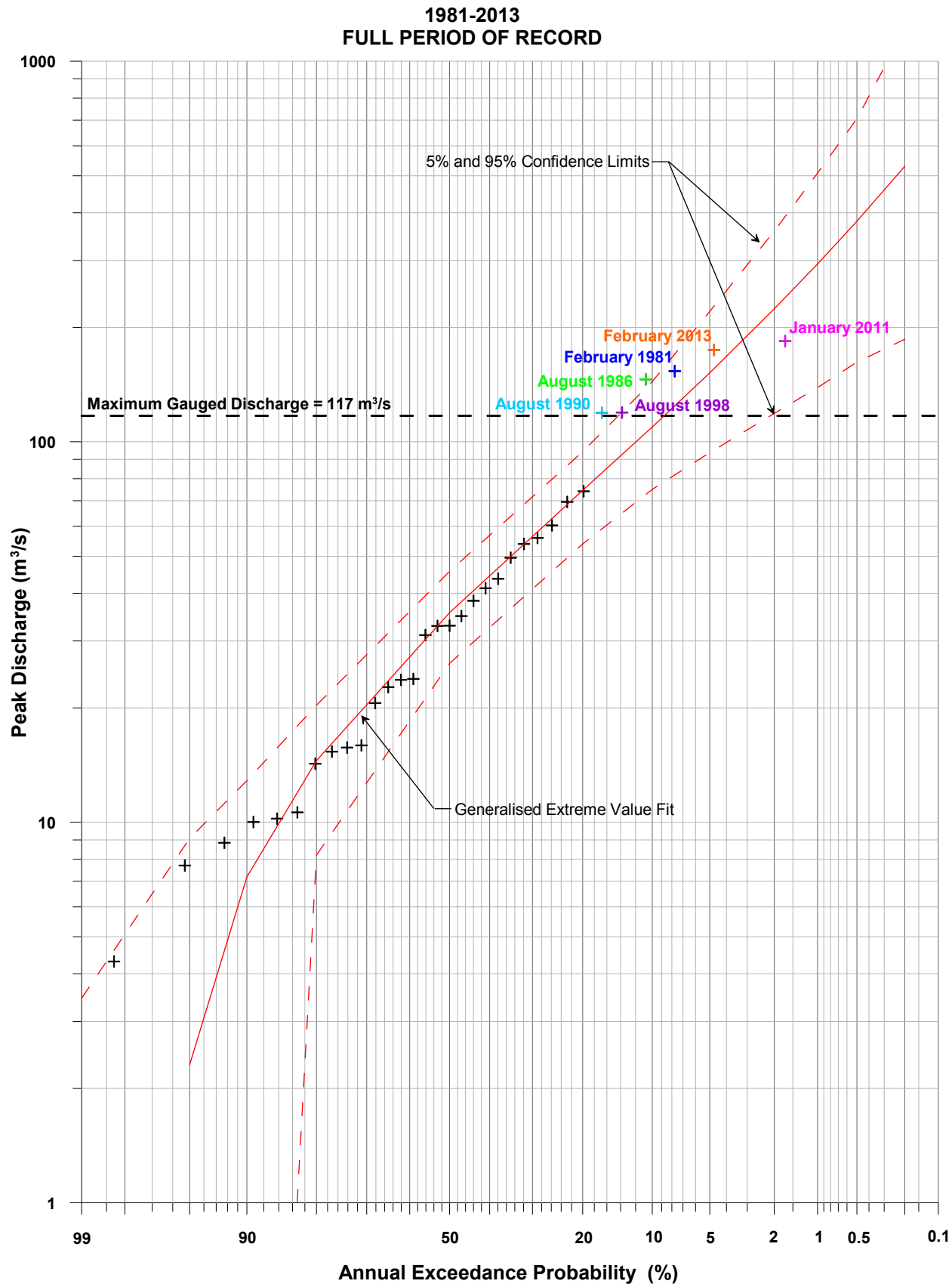


**LITHGOW FLOOD STUDY REVIEW**

Figure 2.5

FLOOD FREQUENCY RELATIONSHIP  
LOG-PEARSON 3 ANNUAL SERIES  
FARMERS CREEK AT MOUNT WALKER STREAM GAUGE (GS 212042)



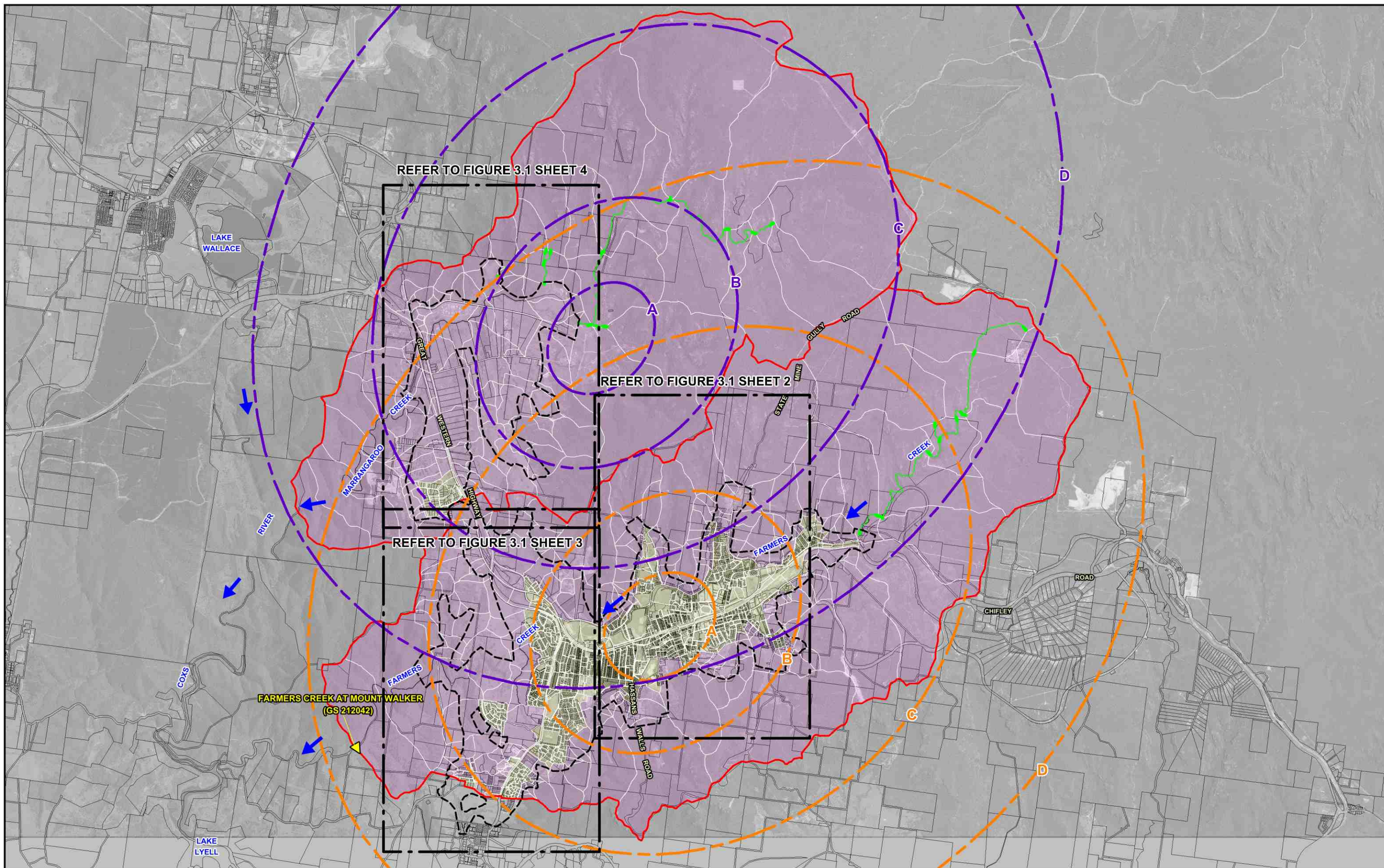


**LITHGOW FLOOD STUDY REVIEW**

Figure 2.6

FLOOD FREQUENCY RELATIONSHIP  
GENERALISED EXTREME VALUE ANNUAL SERIES  
FARMERS CREEK AT MOUNT WALKER STREAM GAUGE (GS 212042)



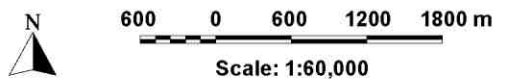


REFER TO FIGURE 3.1 SHEET 4

REFER TO FIGURE 3.1 SHEET 2

REFER TO FIGURE 3.1 SHEET 3

FARMERS CREEK AT MOUNT WALKER (GS 212042)



LEGEND	
	Study Catchment
	Sub-Catchment Boundary
	DPIOW Stream Gauge
	Farmers Creek PMP Ellipse
	Marrangaroo Creek PMP Ellipse
	DRAINS Sub-Catchment
	RAFTS Sub-Catchment
	RAFTS Sub-Catchment Link
	TUFLOW Model Layout

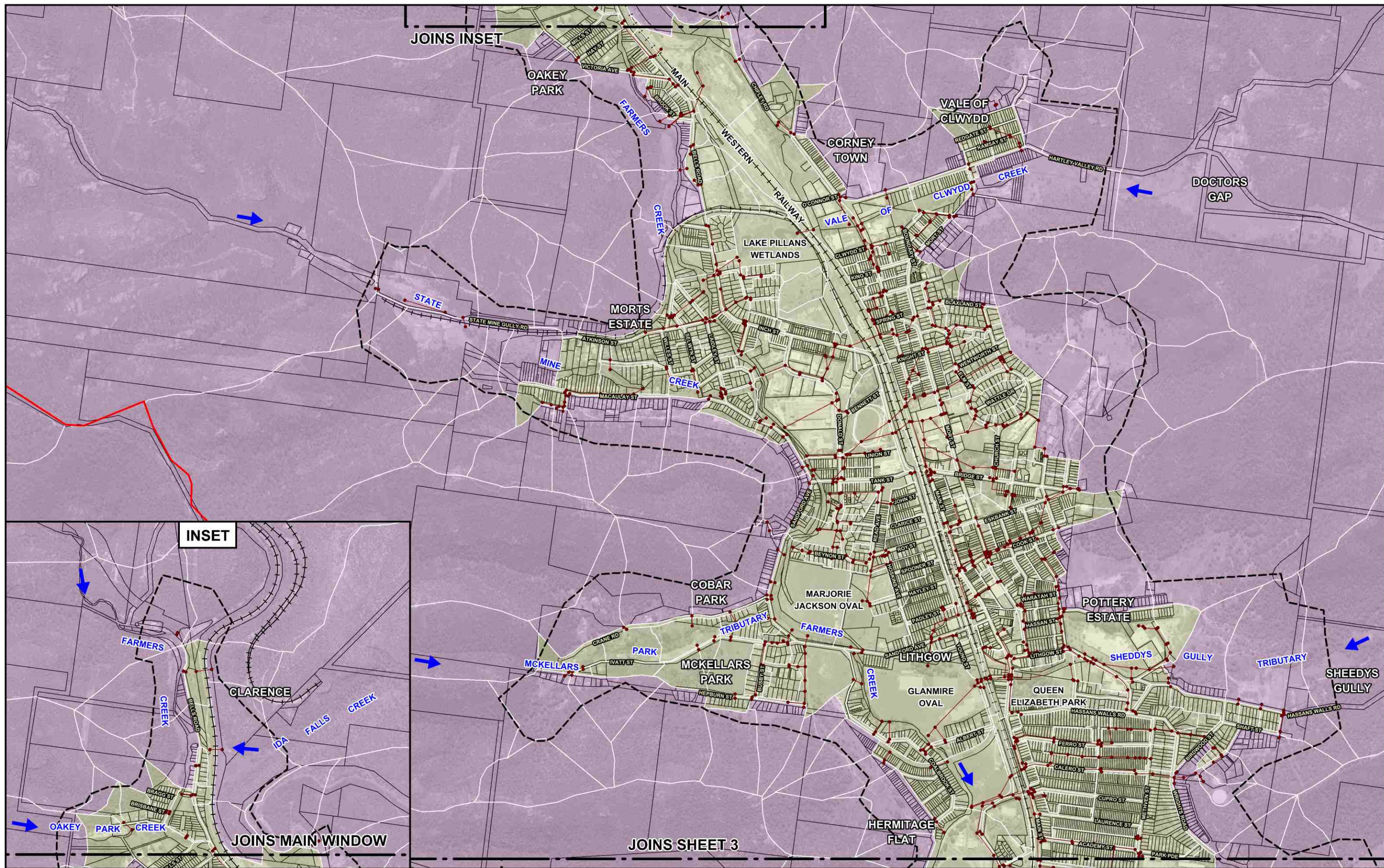
LITHGOW FLOOD STUDY REVIEW



Figure 3.1 (Sheet 1 of 4)

HYDROLOGIC MODEL LAYOUT





**LITHGOW FLOOD STUDY REVIEW**

Figure 3.1  
(Sheet 2 of 4)

HYDROLOGIC MODEL LAYOUT

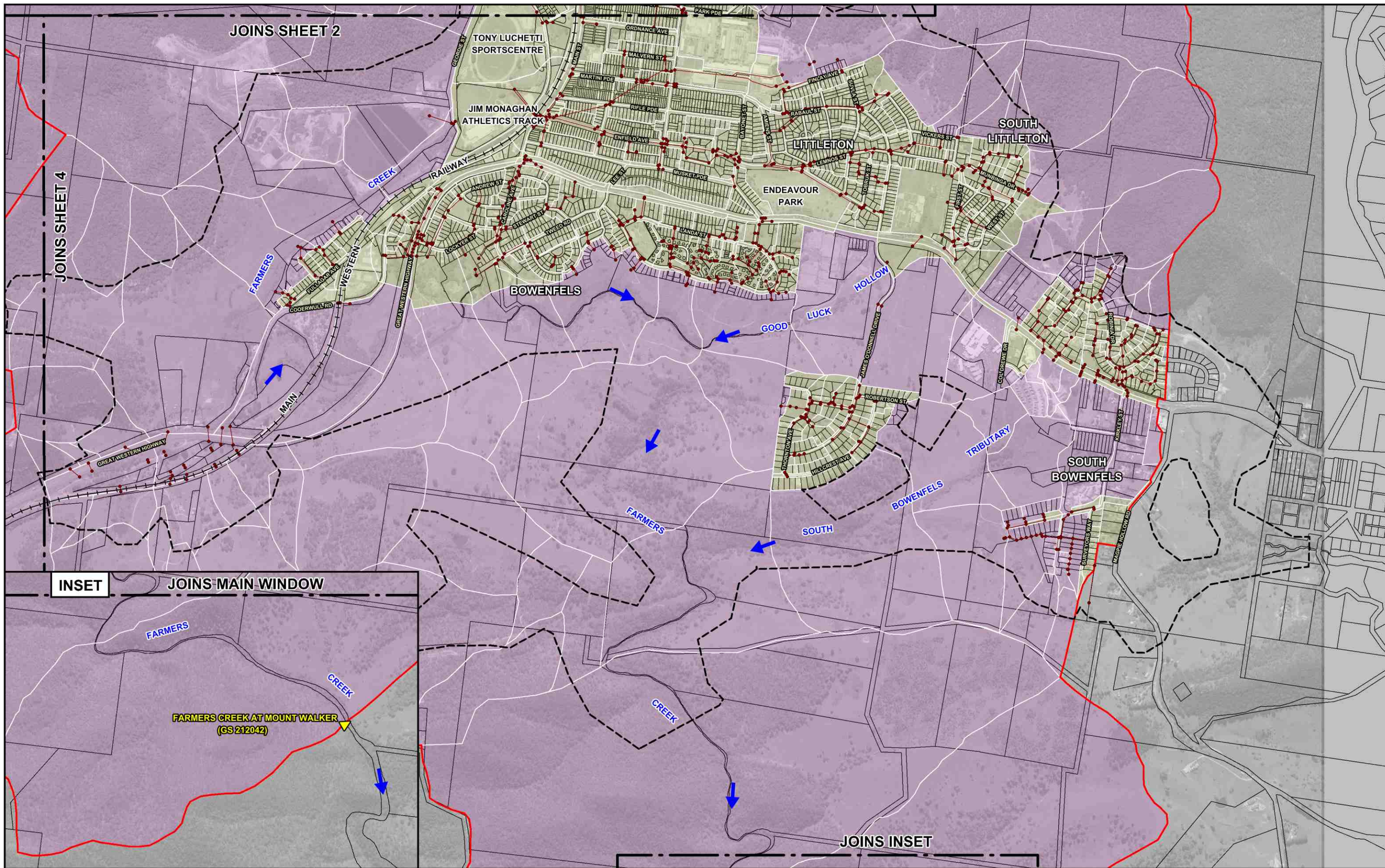
150 0 150 300 450 m

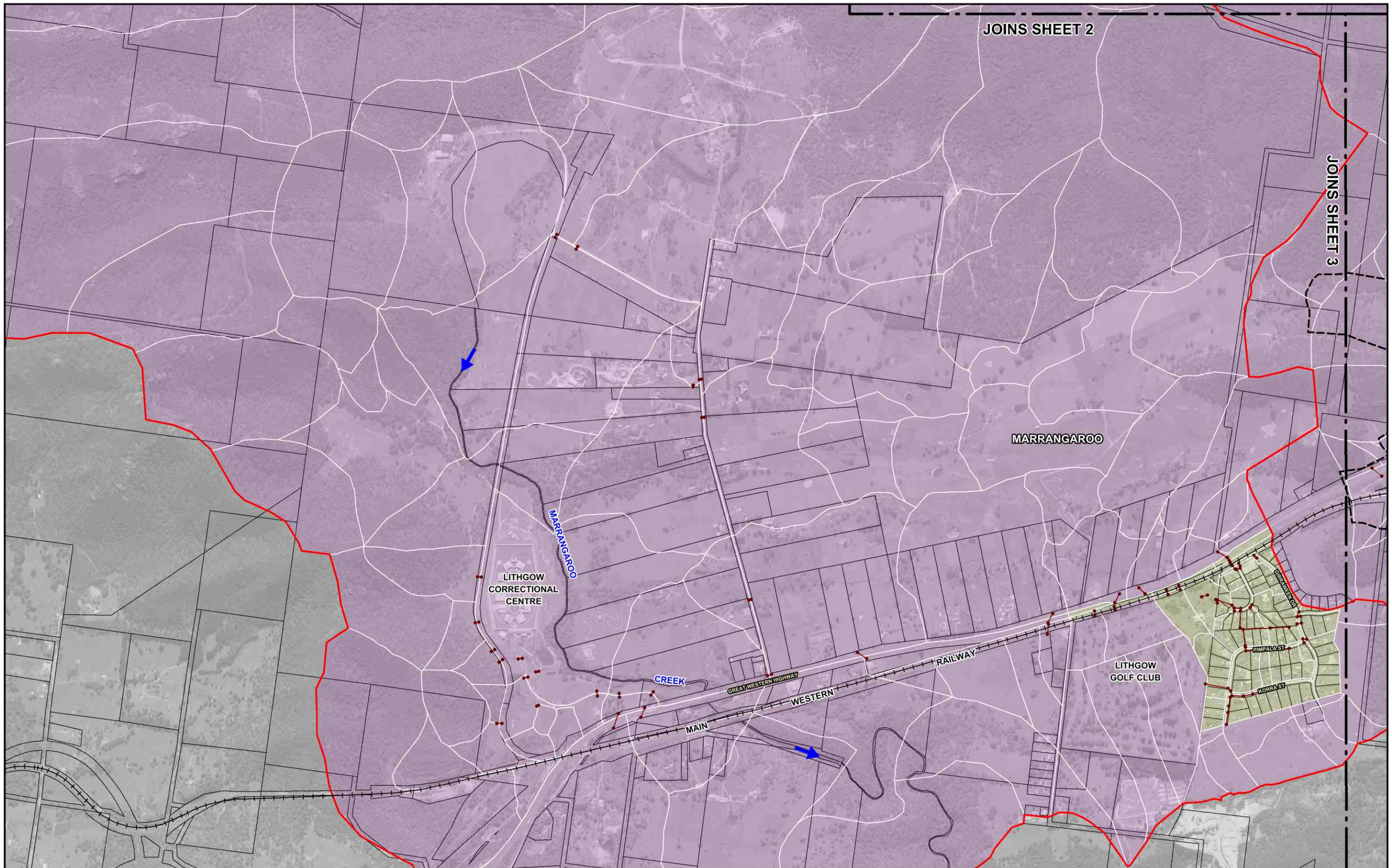
Scale: 1:15,000

**LEGEND**

- Study Catchment
- Sub-Catchment Boundary
- Stormwater Drainage System
- DRAINS Sub-Catchment
- RAFTS Sub-Catchment
- Two-Dimensional Model Boundary

Lyall & Associates





150 0 150 300 450 m  
Scale: 1:15,000



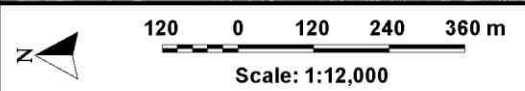
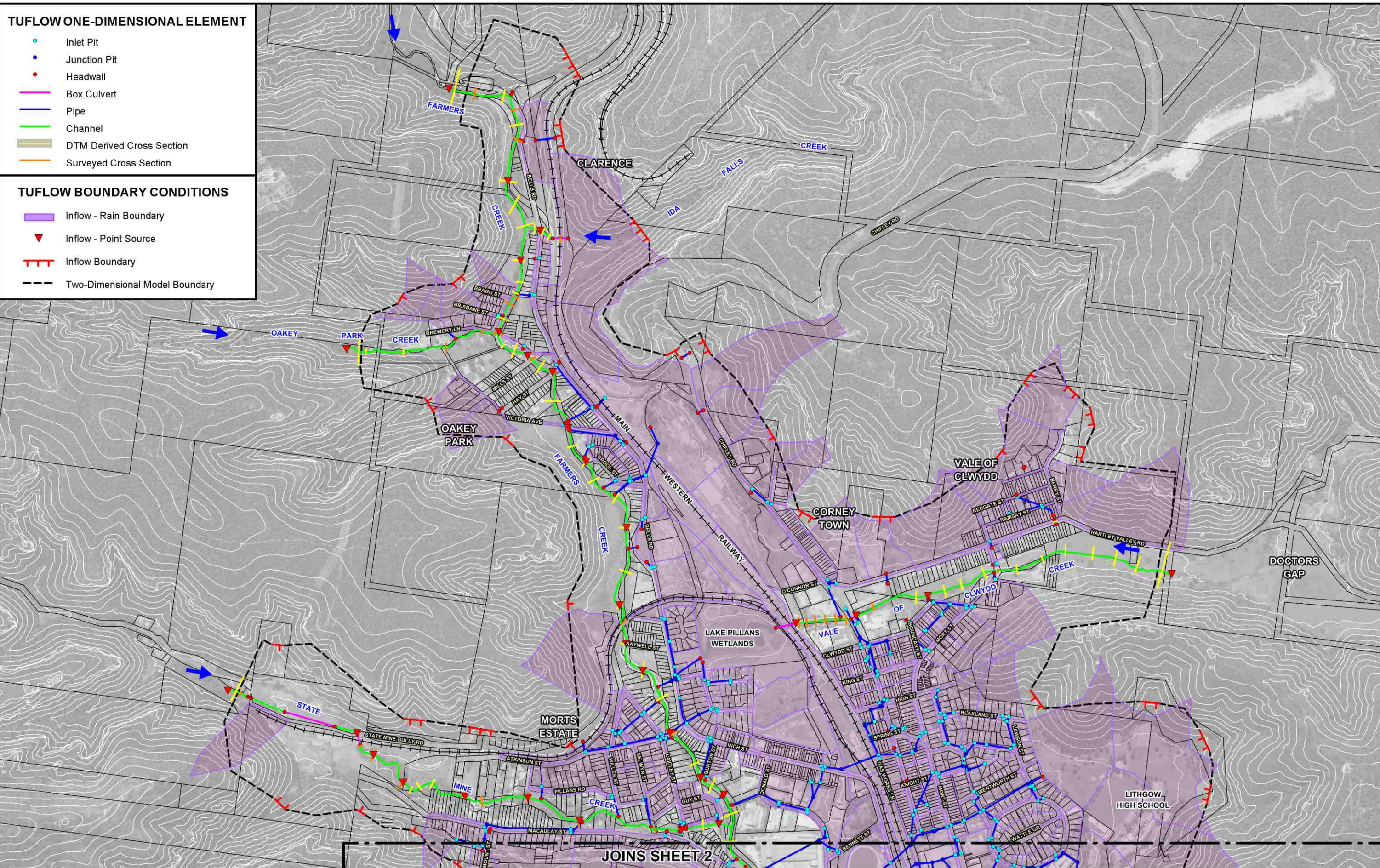
**LEGEND**

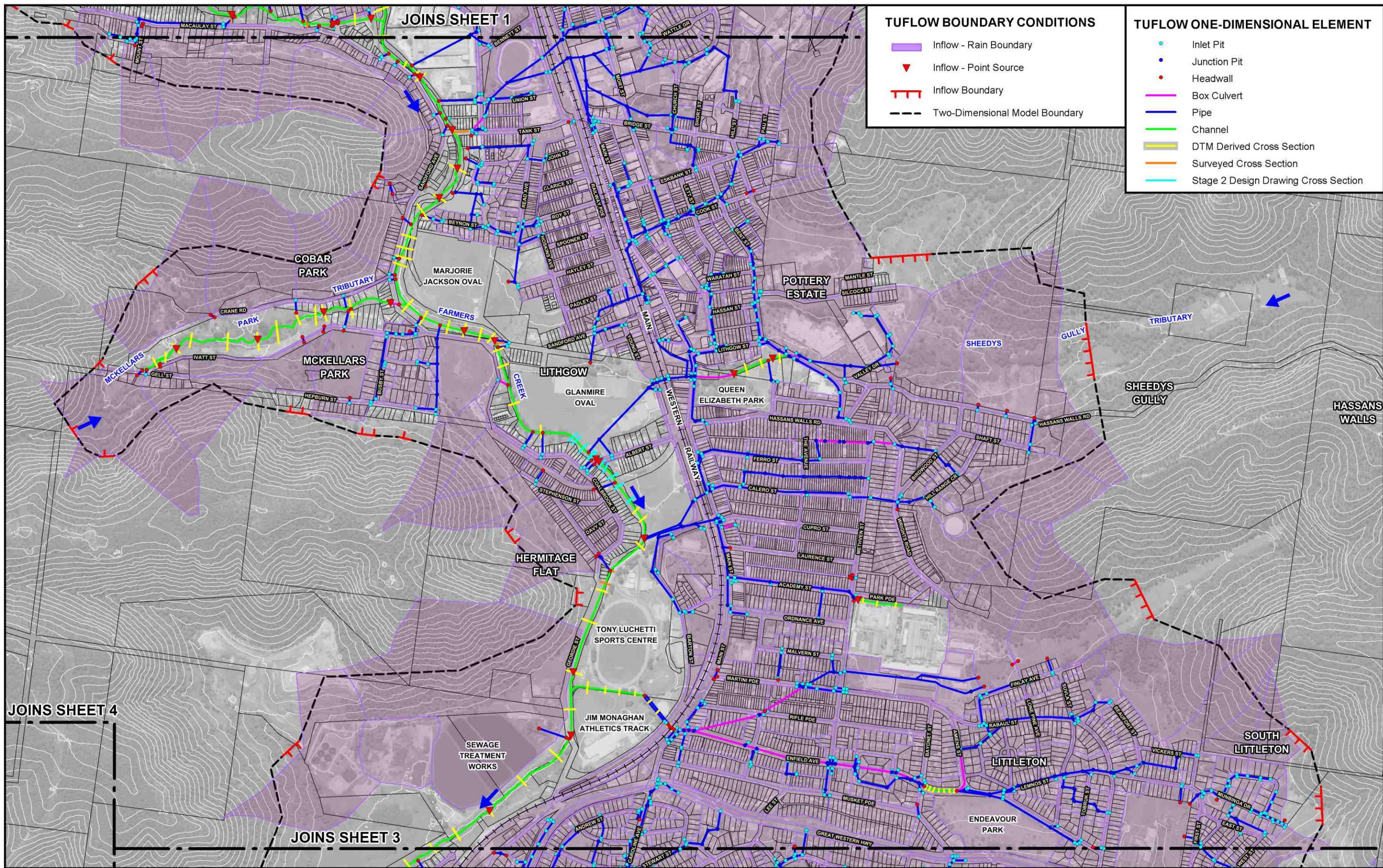
- Study Catchment
- Sub-Catchment Boundary
- Stormwater Drainage System
- DRAINS Sub-Catchment
- RAFTS Sub-Catchment
- Two-Dimensional Model Boundary

**LITHGOW FLOOD STUDY REVIEW**

Figure 3.1  
(Sheet 4 of 4)

HYDROLOGIC MODEL LAYOUT

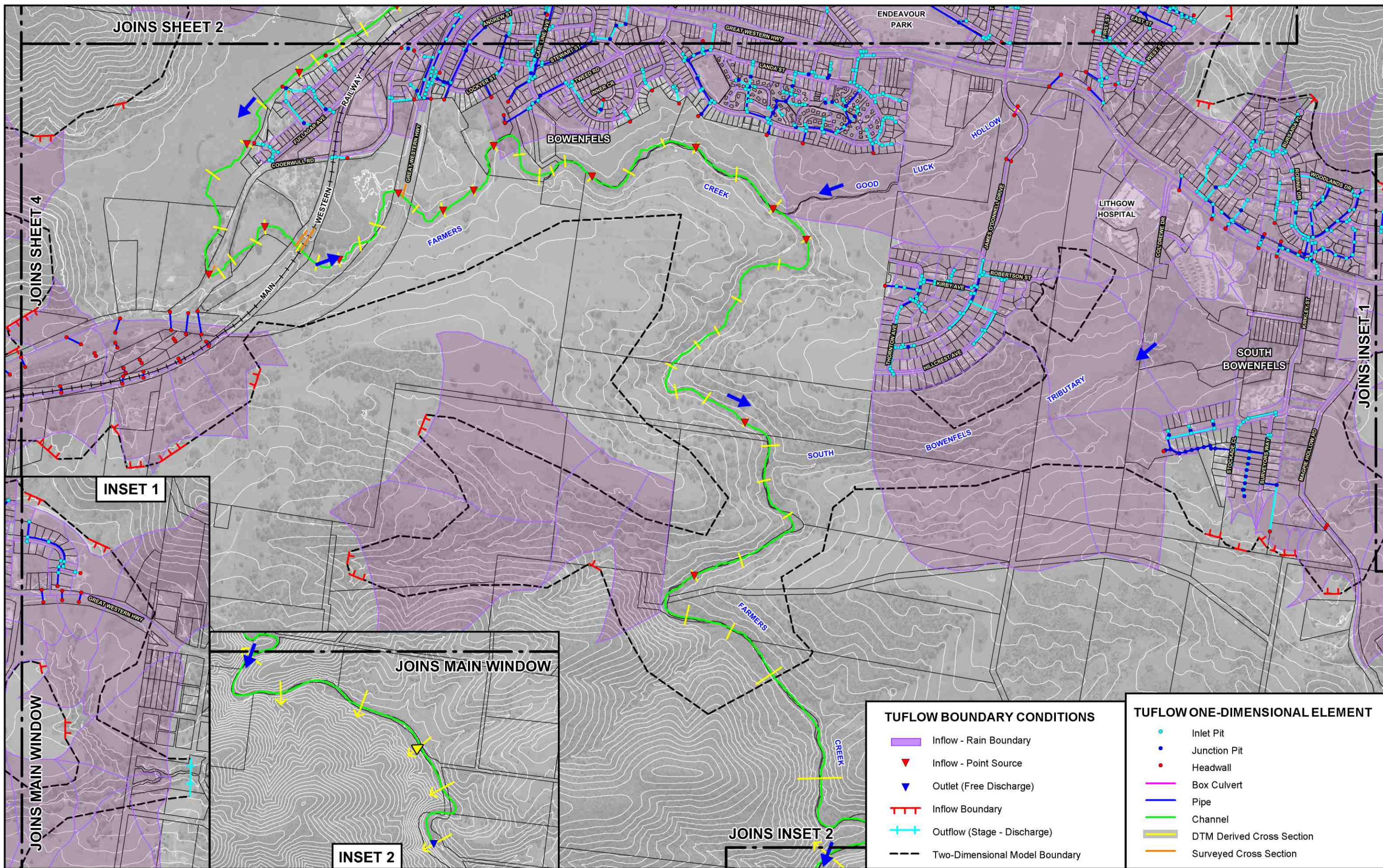




LITHGOW FLOOD STUDY REVIEW

Figure 4.1  
(Sheet 2 of 4)

TUFLOW MODEL LAYOUT



**TUFLOW BOUNDARY CONDITIONS**

- Inflow - Rain Boundary
- ▼ Inflow - Point Source
- ▼ Outlet (Free Discharge)
- |—|—| Inflow Boundary
- + + Outflow (Stage - Discharge)
- Two-Dimensional Model Boundary

**TUFLOW ONE-DIMENSIONAL ELEMENT**

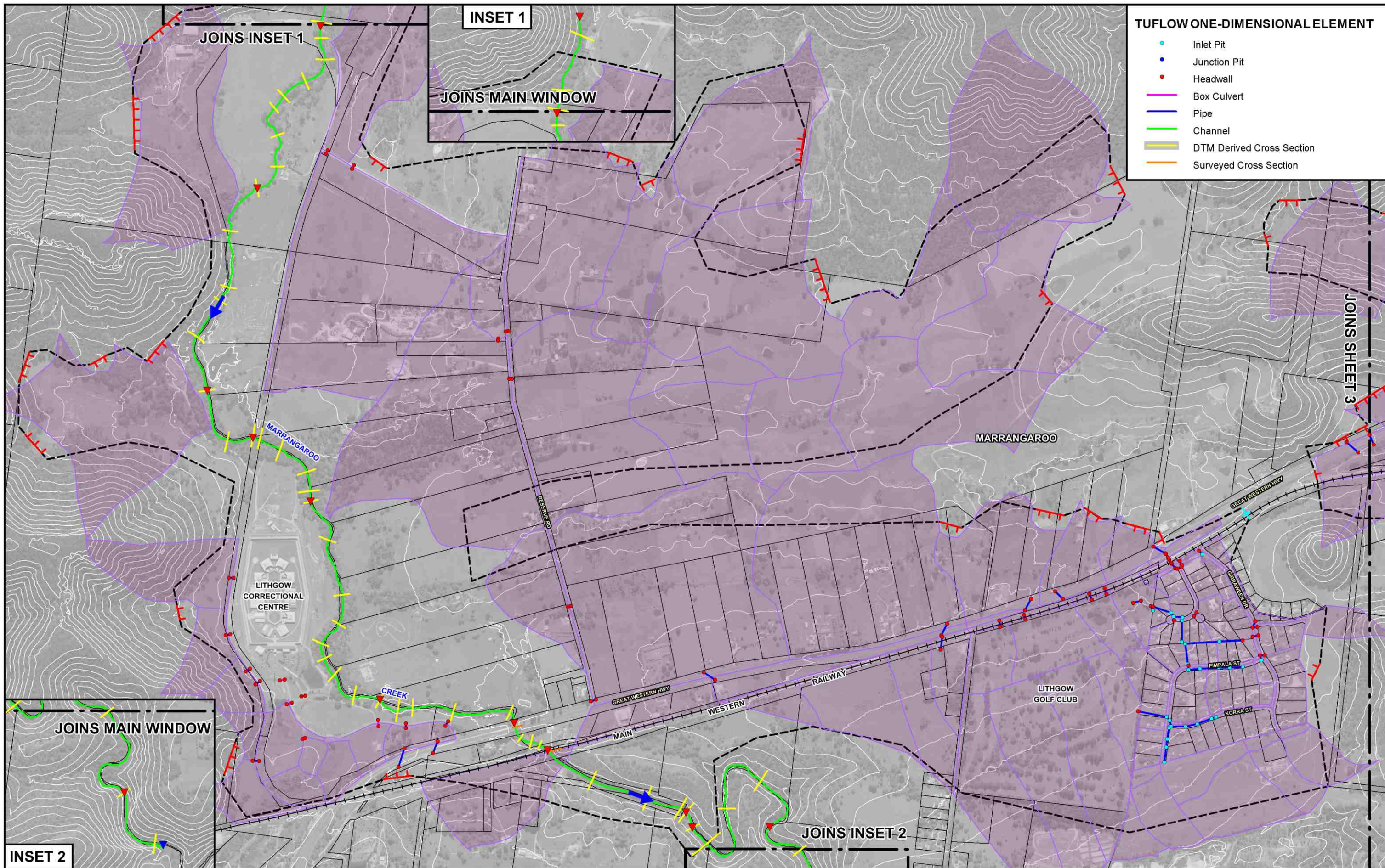
- Inlet Pit
- Junction Pit
- Headwall
- Box Culvert
- Pipe
- Channel
- DTM Derived Cross Section
- Surveyed Cross Section

**LEGEND**  
▼ DPIOW Stream Gauge

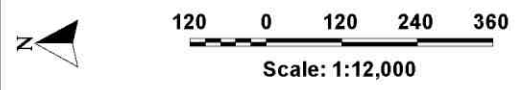
120 0 120 240 360  
 Scale: 1:12,000

**LITHGOW FLOOD STUDY REVIEW**

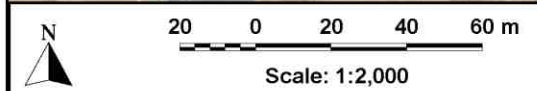
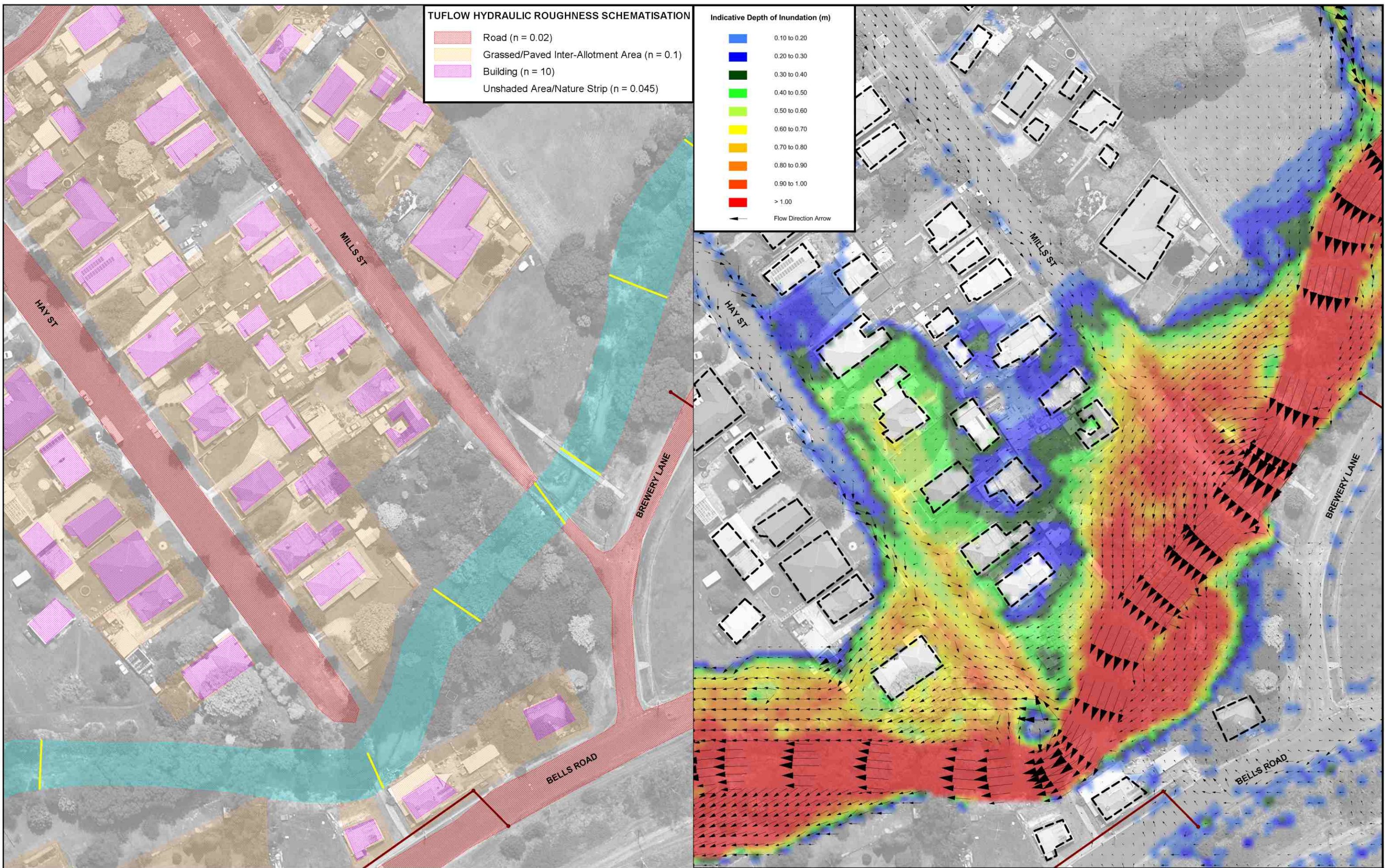
Figure 4.1  
 (Sheet 3 of 4)



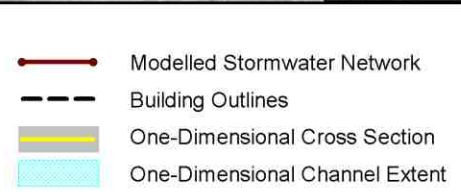
- TUFLOW ONE-DIMENSIONAL ELEMENT**
- Inlet Pit
  - Junction Pit
  - Headwall
  - Box Culvert
  - Pipe
  - Channel
  - DTM Derived Cross Section
  - Surveyed Cross Section



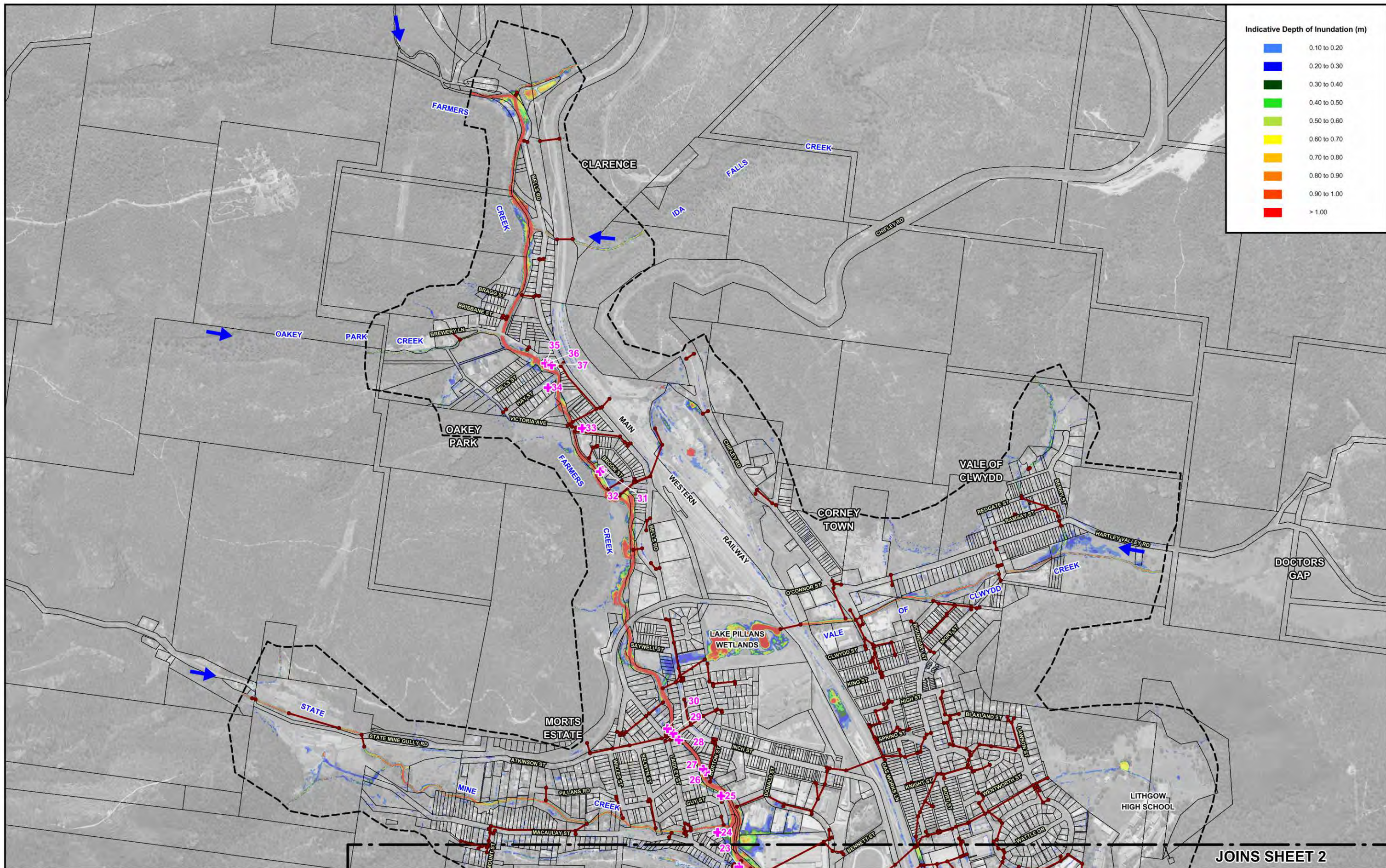
- TUFLOW BOUNDARY CONDITIONS**
- - - Inflow - Rain Boundary
  - ▼ Inflow - Point Source
  - ▼ Outlet (Free Discharge)
  - - - Inflow Boundary
  - - - Outflow (Stage - Discharge)
  - - - Two-Dimensional Model Boundary



**NOTE:**  
Depths of overland flow less than 0.1m not shown.

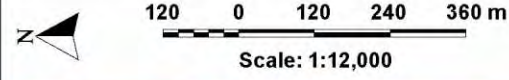






Indicative Depth of Inundation (m)

0.10 to 0.20
0.20 to 0.30
0.30 to 0.40
0.40 to 0.50
0.50 to 0.60
0.60 to 0.70
0.70 to 0.80
0.80 to 0.90
0.90 to 1.00
> 1.00

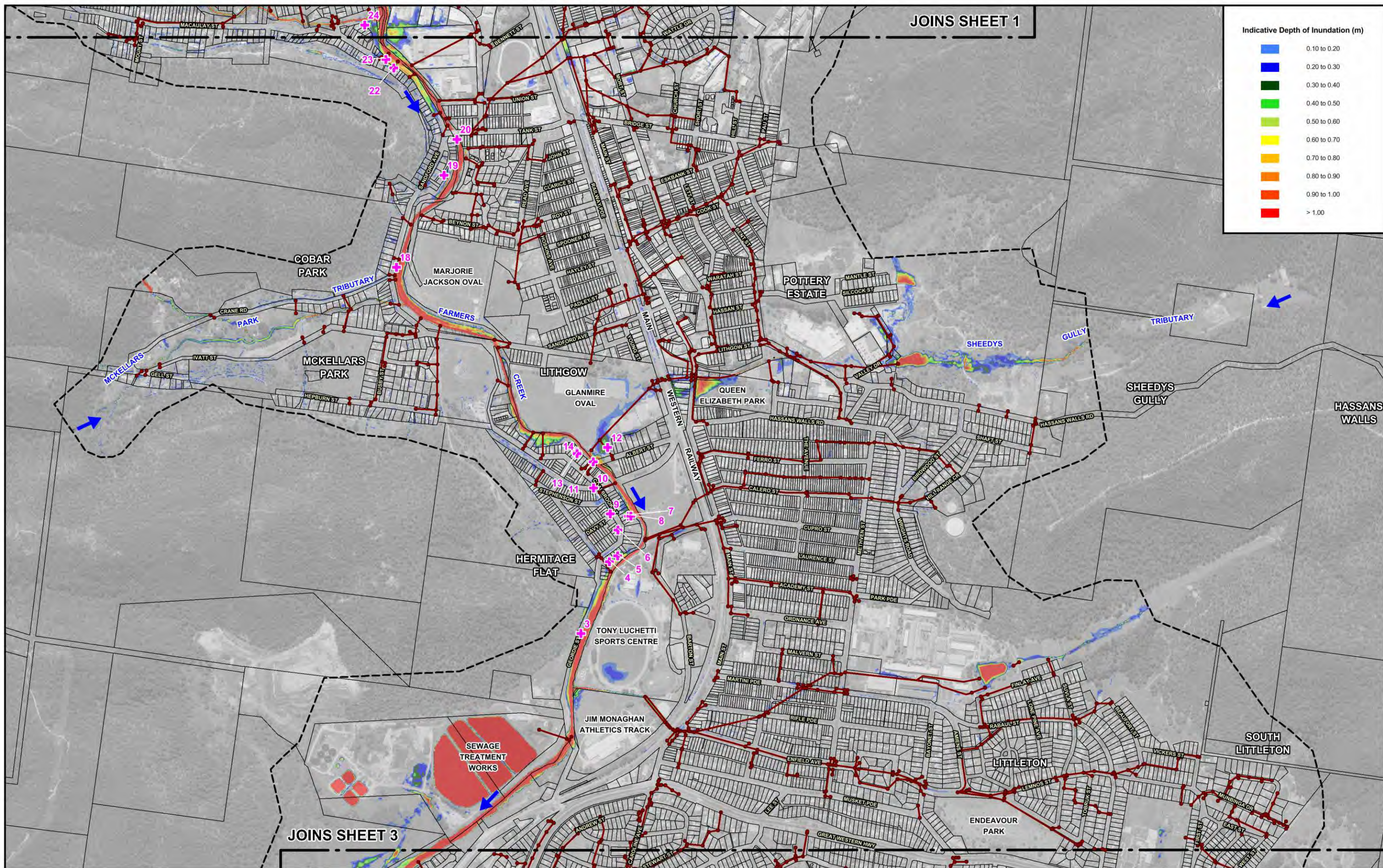


**NOTE:**  
 The ground surface model incorporated in TUFLOW is based on LIDAR survey which has been sampled on a 3 m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.  
 Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

- LEGEND**
- Two-Dimensional Model Boundary
  - Modelled Stormwater Network
  - 23 Flood Mark Identifier
  - + Flood Mark Location

**LITHGOW FLOOD STUDY REVIEW**

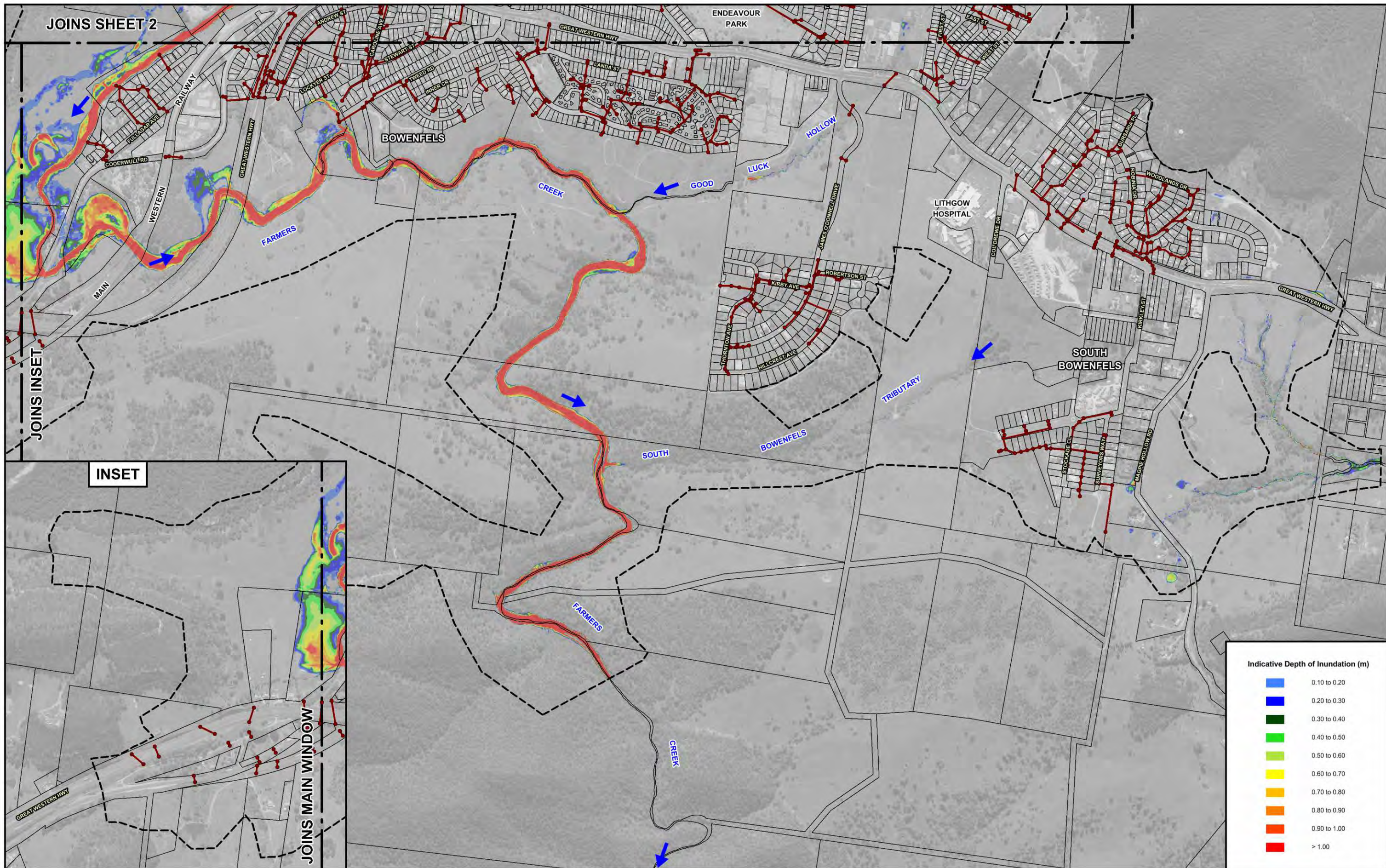
Figure 4.3  
 (Sheet 1 of 3)  
 TUFLOW MODEL RESULTS  
 FEBRUARY 1990 STORM EVENT



JOINS SHEET 1

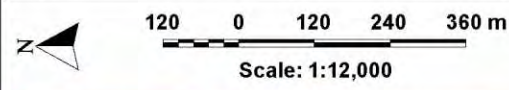
JOINS SHEET 3

LITHGOW FLOOD STUDY REVIEW



**Indicative Depth of Inundation (m)**

Light Blue	0.10 to 0.20
Blue	0.20 to 0.30
Dark Green	0.30 to 0.40
Light Green	0.40 to 0.50
Yellow-Green	0.50 to 0.60
Yellow	0.60 to 0.70
Orange	0.70 to 0.80
Red-Orange	0.80 to 0.90
Red	0.90 to 1.00
Dark Red	> 1.00



**NOTE:**  
 The ground surface model incorporated in TUFLOW is based on LIDAR survey which has been sampled on a 3 m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.

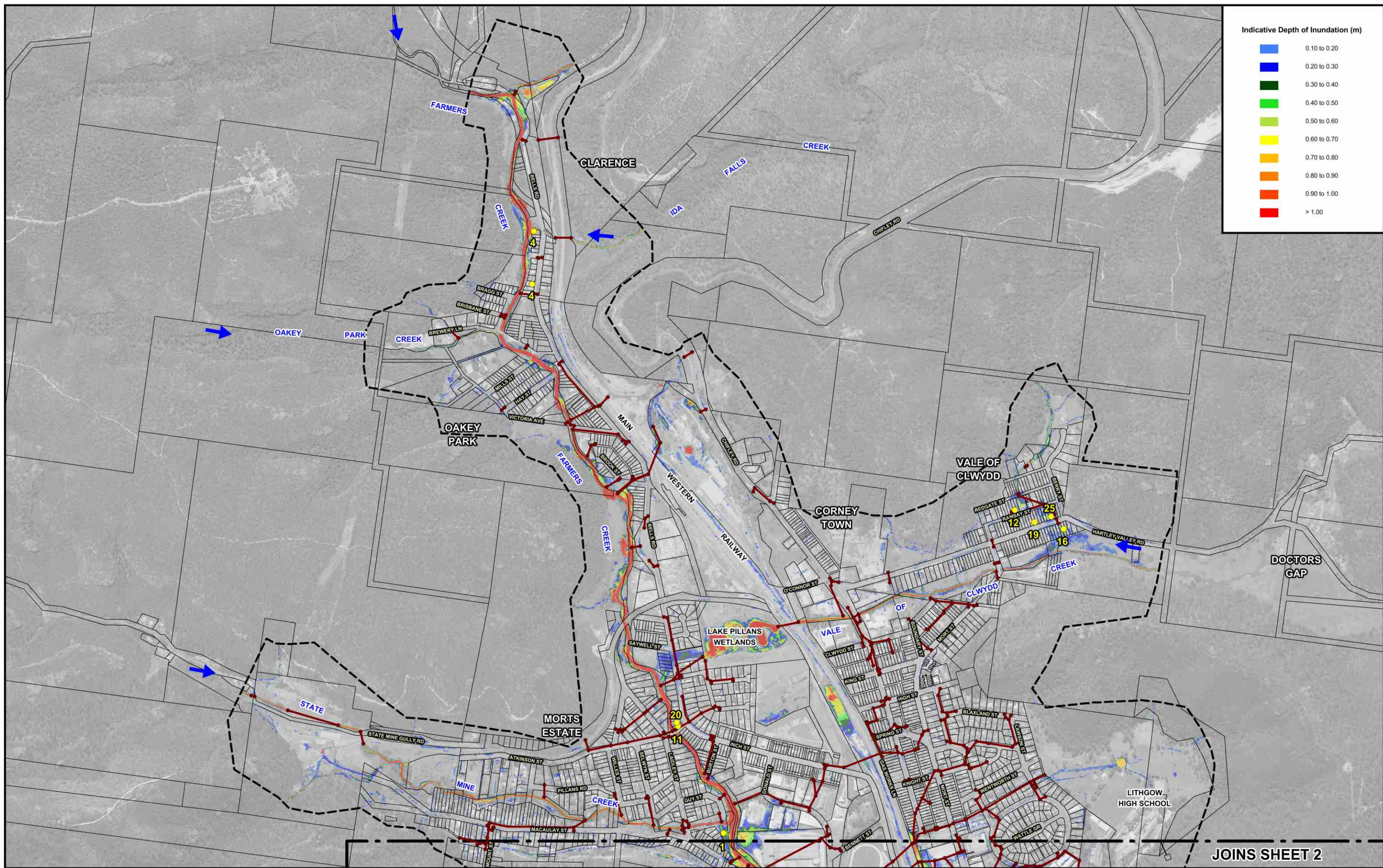
Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

- LEGEND**
- Two-Dimensional Model Boundary
  - Modelled Stormwater Network

**LITHGOW FLOOD STUDY REVIEW**

Figure 4.3  
 (Sheet 3 of 3)

TUFLOW MODEL RESULTS  
 FEBRUARY 1990 STORM EVENT



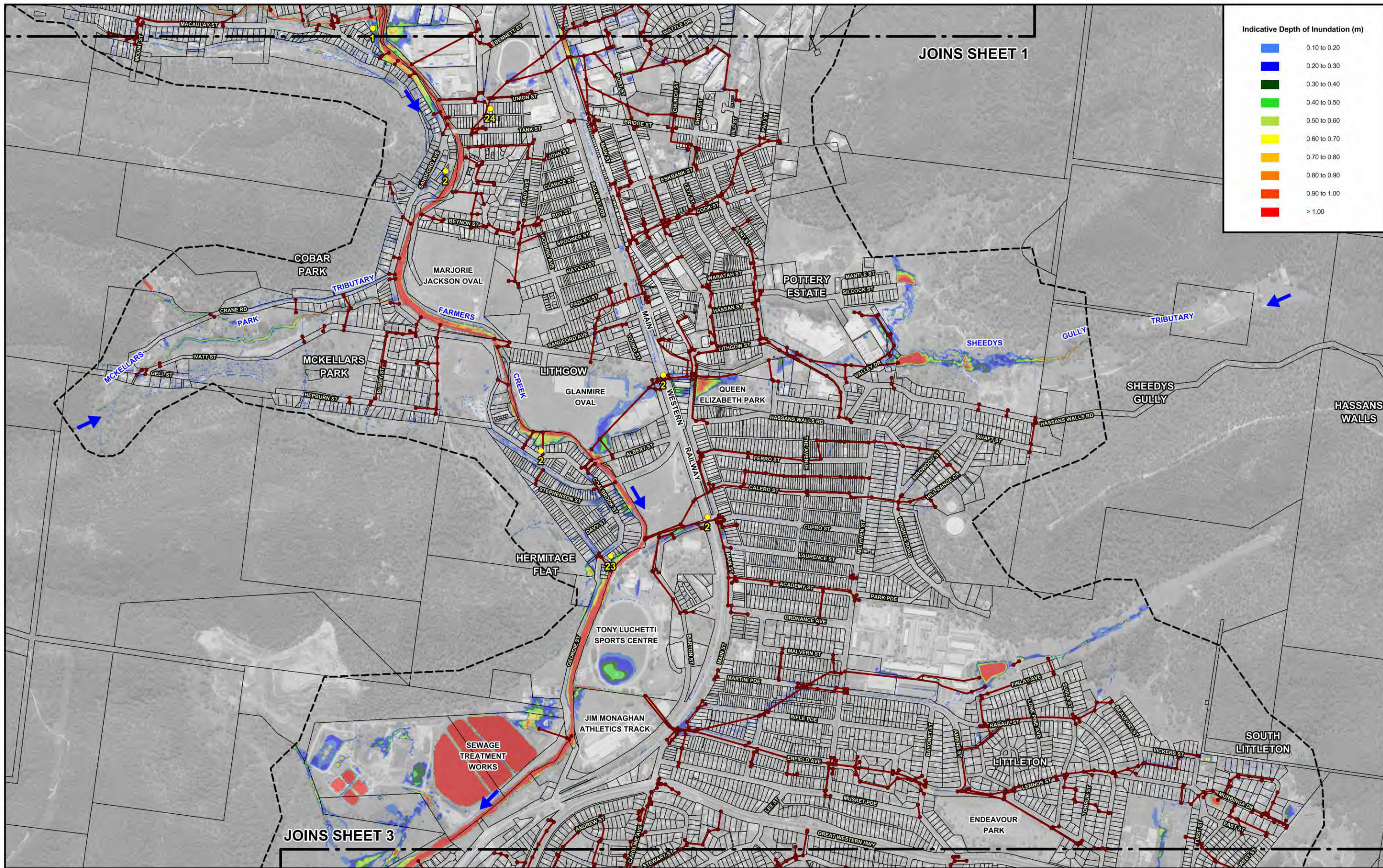
Indicative Depth of Inundation (m)

0.10 to 0.20
0.20 to 0.30
0.30 to 0.40
0.40 to 0.50
0.50 to 0.60
0.60 to 0.70
0.70 to 0.80
0.80 to 0.90
0.90 to 1.00
> 1.00

Scale: 1:12,000

**NOTE:**  
 The ground surface model incorporated in TUFLOW is based on LIDAR survey which has been sampled on a 3 m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.  
 Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

- LEGEND**
- Two-Dimensional Model Boundary
  - Modelled Stormwater Network
  - 25 Questionnaire Response Identifier
  - Questionnaire Response Location



Indicative Depth of Inundation (m)

Blue	0.10 to 0.20
Dark Blue	0.20 to 0.30
Green	0.30 to 0.40
Light Green	0.40 to 0.50
Yellow-Green	0.50 to 0.60
Yellow	0.60 to 0.70
Orange	0.70 to 0.80
Dark Orange	0.80 to 0.90
Red-Orange	0.90 to 1.00
Red	> 1.00

120 0 120 240 360 m  
 Scale: 1:12,000

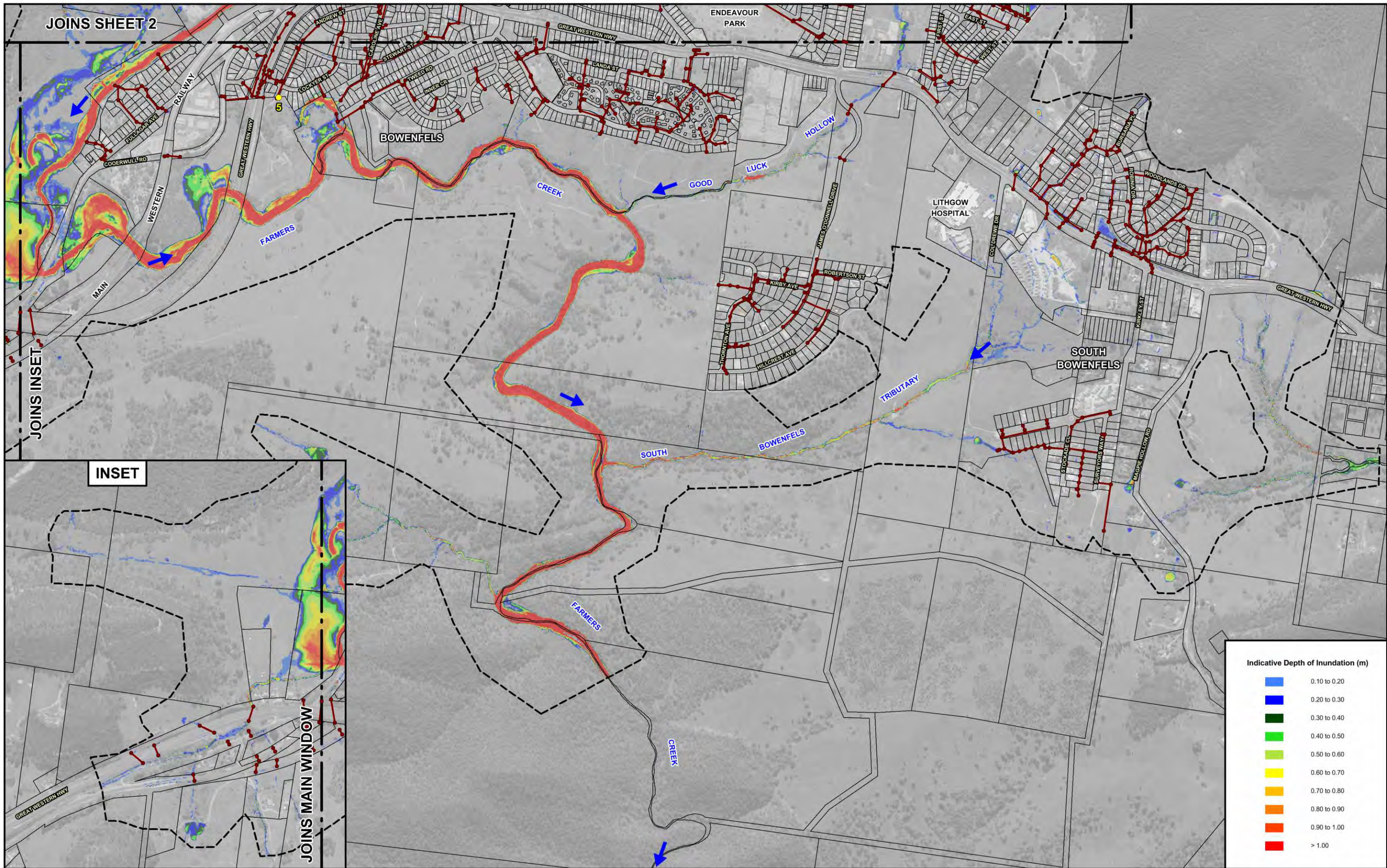
NOTE:  
 The ground surface model incorporated in TUFLOW is based on LiDAR survey which has been sampled on a 3 m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.  
 Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

- LEGEND
- Two-Dimensional Model Boundary
  - Modelled Stormwater Network
  - 23 Questionnaire Response Identifier
  - Questionnaire Response Location

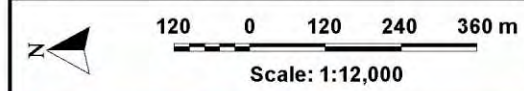
LITHGOW FLOOD STUDY REVIEW

Figure 4.4  
 (Sheet 2 of 3)

TUFLOW MODEL RESULTS  
 FEBRUARY 2013 STORM EVENT



Indicative Depth of Inundation (m)	
Light Blue	0.10 to 0.20
Blue	0.20 to 0.30
Dark Blue	0.30 to 0.40
Green	0.40 to 0.50
Light Green	0.50 to 0.60
Yellow	0.60 to 0.70
Orange	0.70 to 0.80
Red-Orange	0.80 to 0.90
Red	0.90 to 1.00
Dark Red	> 1.00

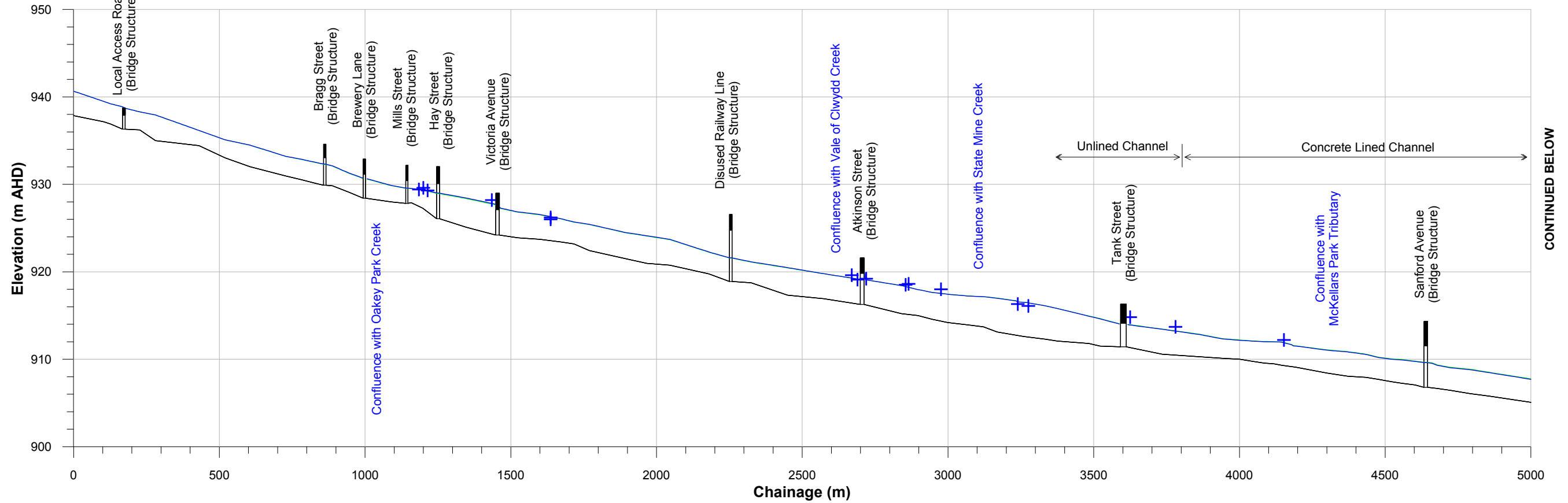


**NOTE:**  
 The ground surface model incorporated in TUFLOW is based on LIDAR survey which has been sampled on a 3 m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.

Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

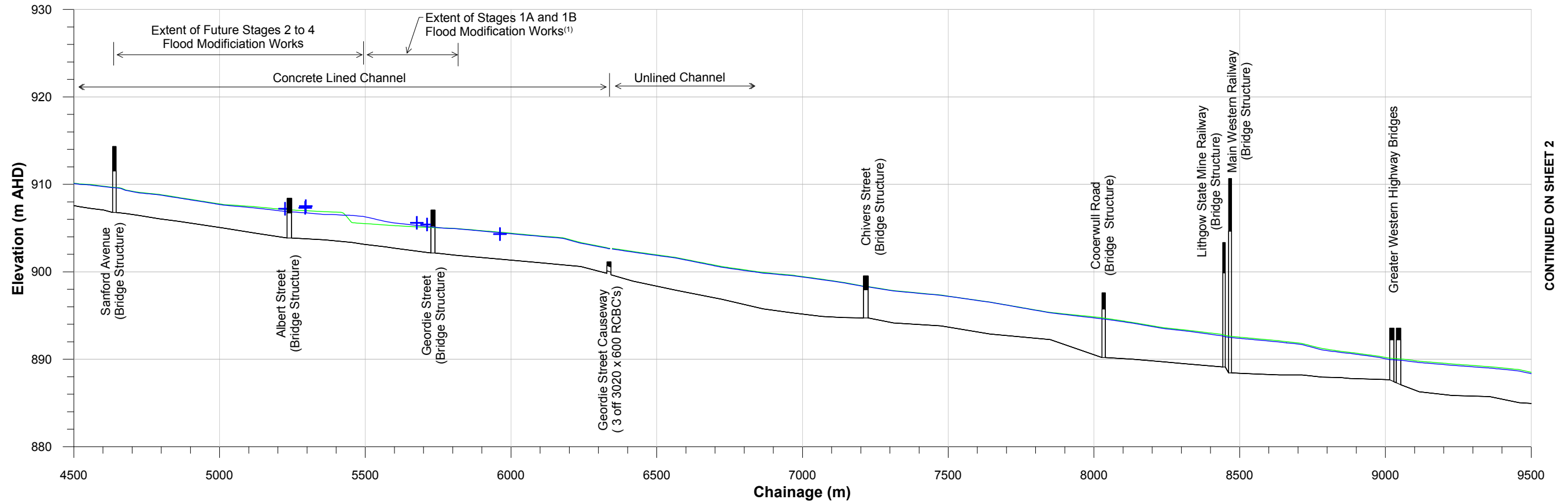
- LEGEND**
- Two-Dimensional Model Boundary
  - Modelled Stormwater Network
  - Questionnaire Response Identifier
  - Questionnaire Response Location

**FARMERS CREEK**



CONTINUED BELOW

**FARMERS CREEK CONTINUED**



CONTINUED ON SHEET 2

- LEGEND**
- + February 1990 Flood Mark
  - February 1990
  - February 2013

**NOTE:**  
1. Flood modification measure not built during February 1990 Flood.

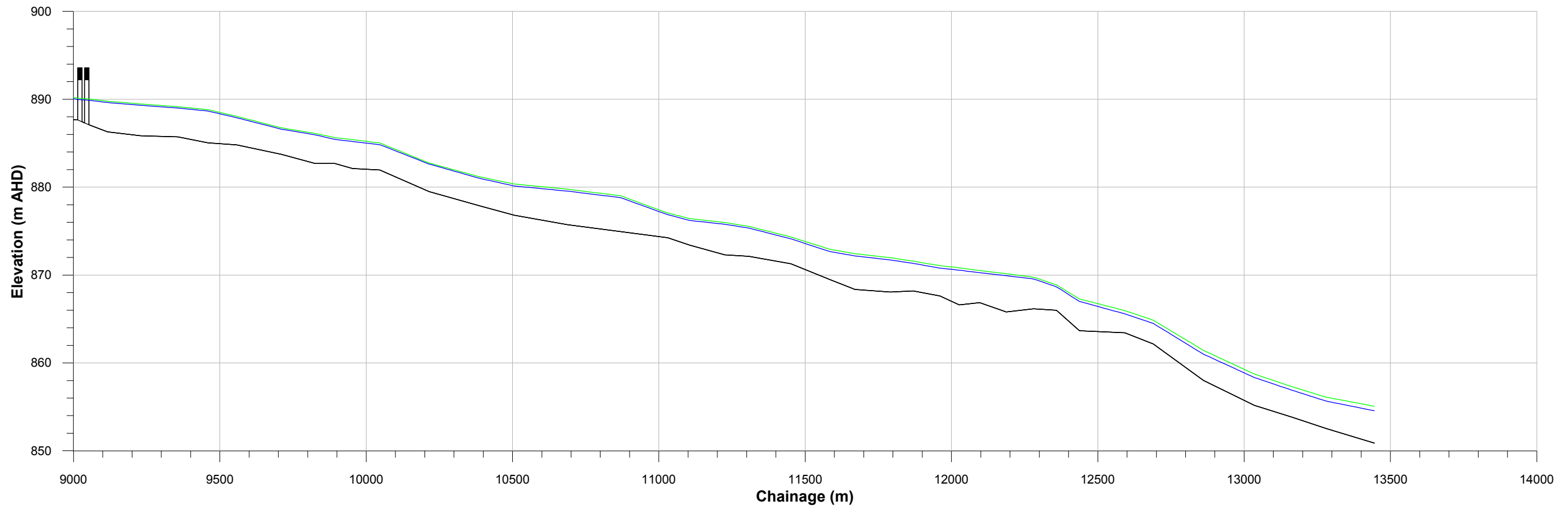


**LITHGOW FLOOD STUDY REVIEW**

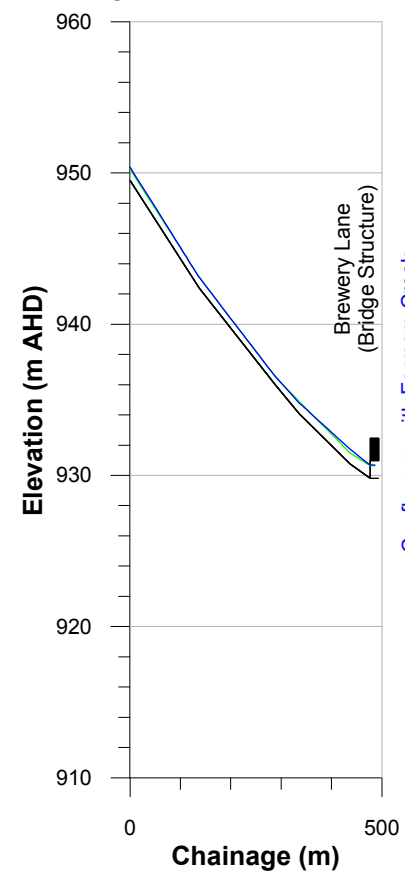
Figure 4.5  
(Sheet 1 of 3)

WATER SURFACE PROFILES  
HISTORIC STORM EVENTS

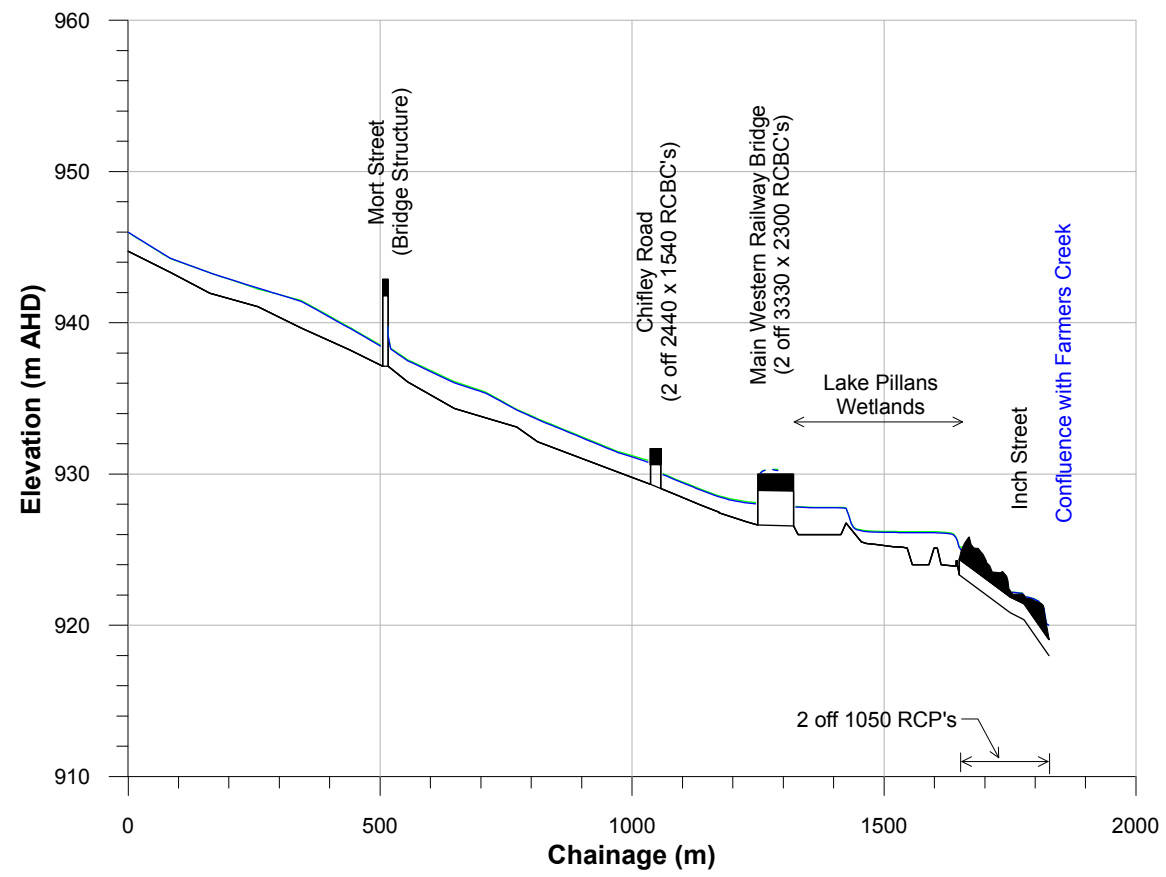
FARMERS CREEK CONTINUED



OAKLEY PARK CREEK



VALE OF CLWYDD CREEK



LEGEND

- February 1990
- February 2013

LITHGOW FLOOD STUDY REVIEW

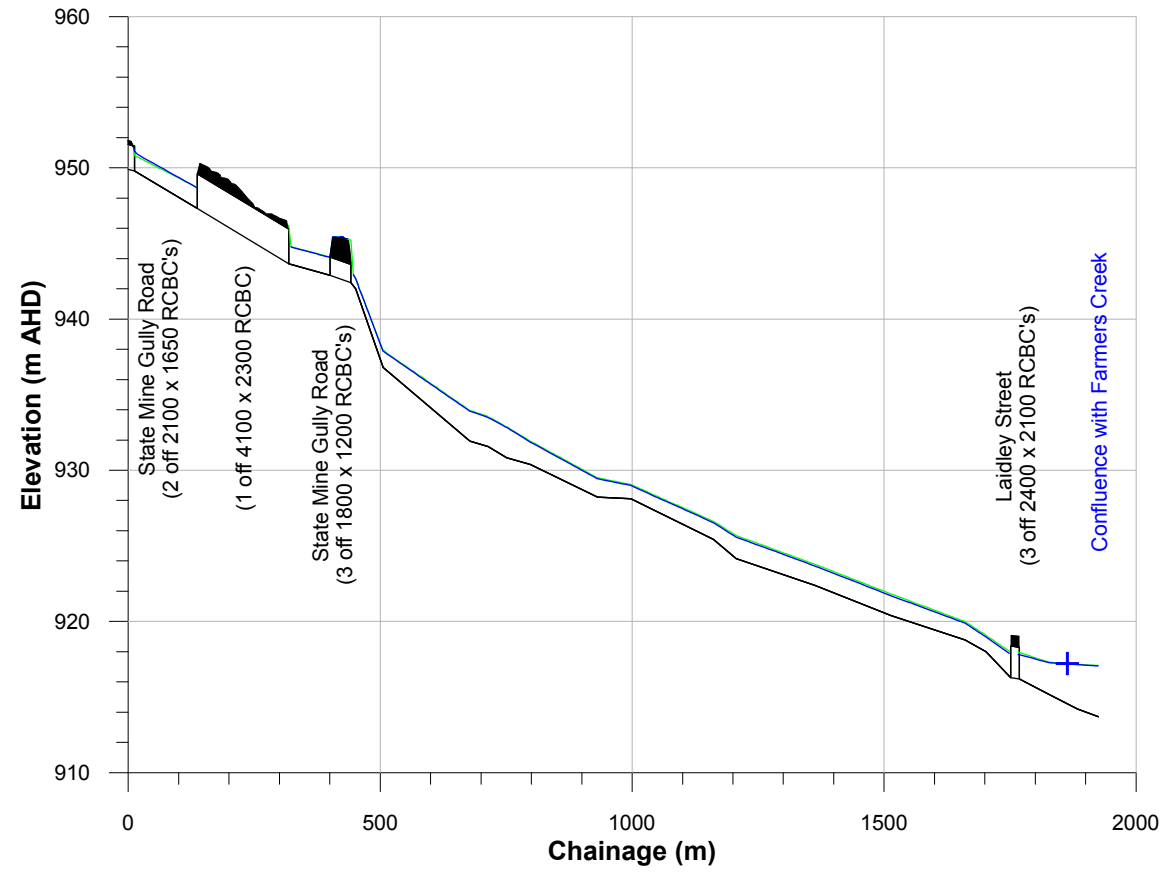
Figure 4.5  
(Sheet 2 of 3)

WATER SURFACE PROFILES  
HISTORIC STORM EVENTS

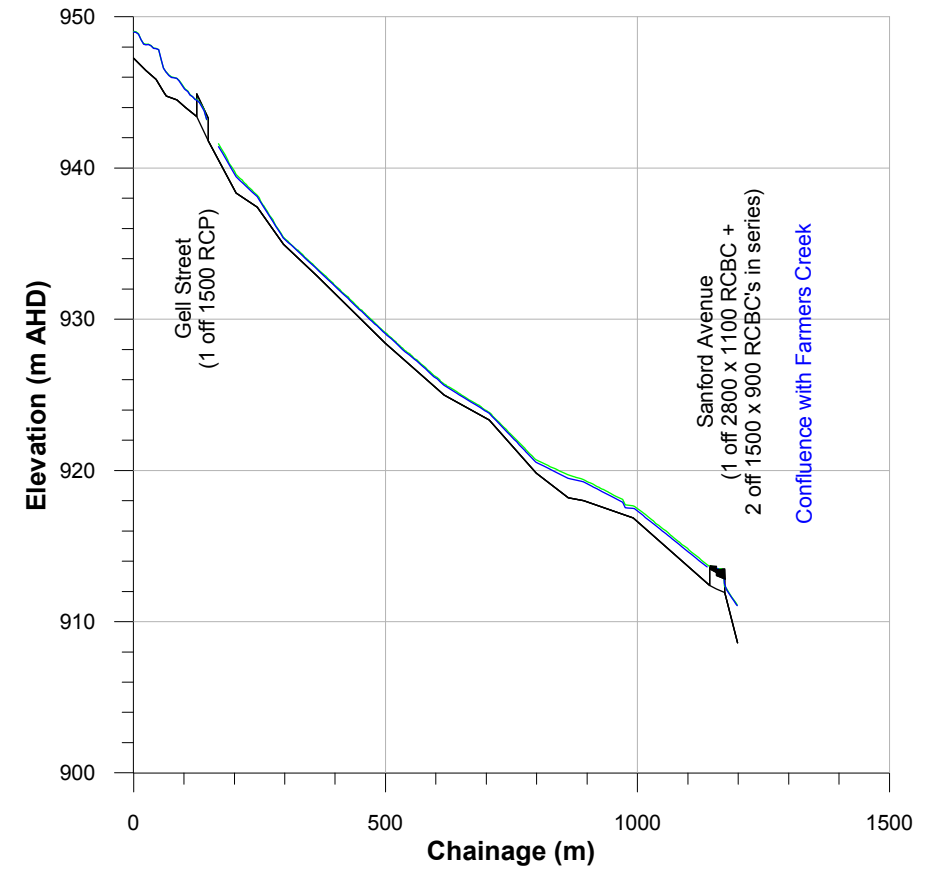




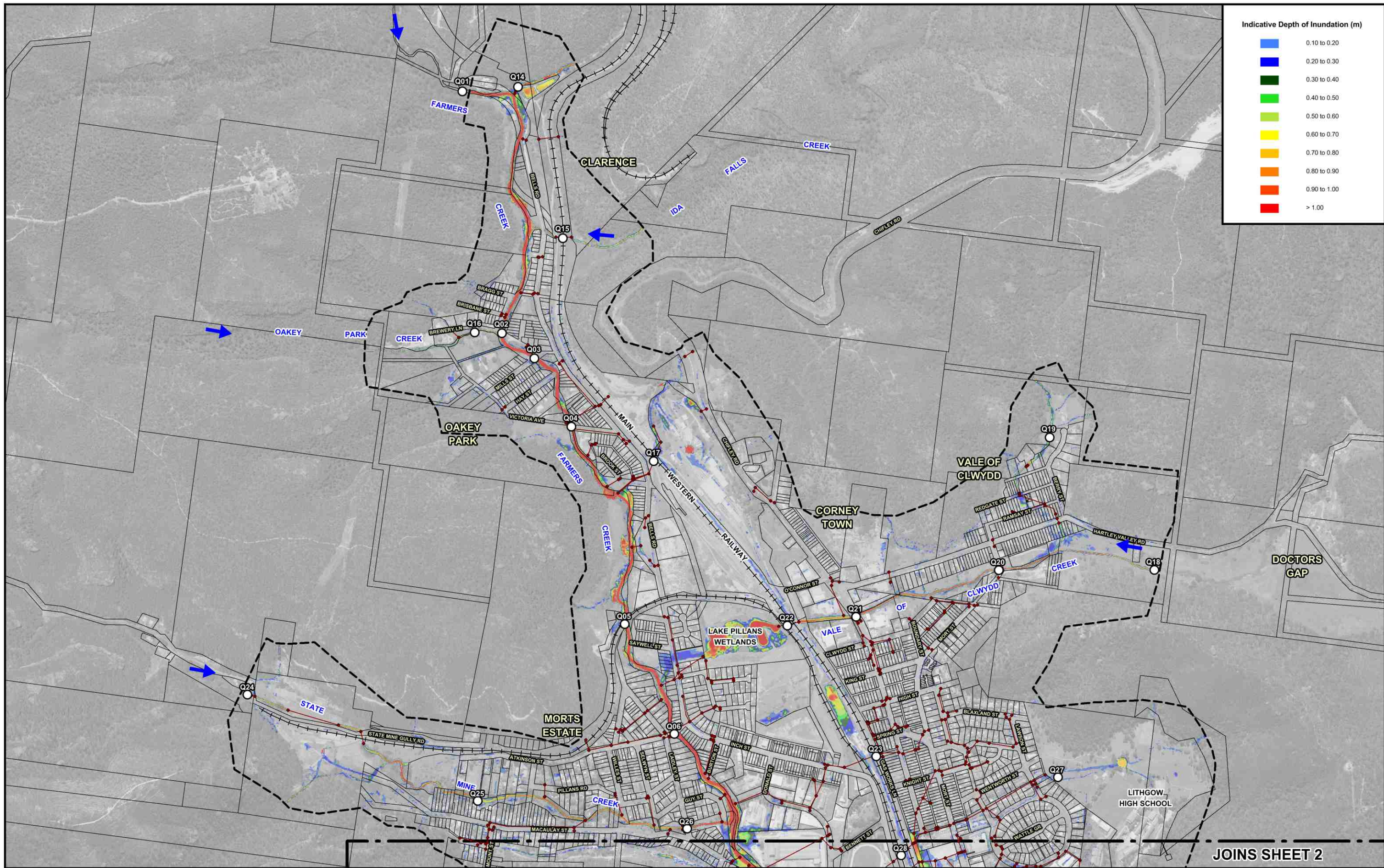
**STATE MINE CREEK**



**MCKELLARS PARK TRIBUTARY**

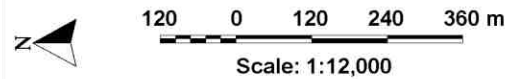


**LEGEND**  
 + + + February 1990 Flood Mark  
 — February 1990  
 — February 2013



Indicative Depth of Inundation (m)

Light Blue	0.10 to 0.20
Blue	0.20 to 0.30
Dark Green	0.30 to 0.40
Green	0.40 to 0.50
Light Green	0.50 to 0.60
Yellow	0.60 to 0.70
Orange	0.70 to 0.80
Dark Orange	0.80 to 0.90
Red-Orange	0.90 to 1.00
Red	> 1.00



**NOTE:**  
 The ground surface model incorporated in TUFLOW is based on LiDAR survey which has been sampled on a 3m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.  
 Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

- LEGEND**
- Two-Dimensional Model Boundary
  - Modelled Stormwater Network
  - Peak Flow Location and Identifier (Refer Appendix F)



LITHGOW FLOOD STUDY REVIEW

JOINS SHEET 2

Figure 6.1  
 (Sheet 1 of 4)  
 TUFLOW MODEL RESULTS  
 5 YEAR ARI



Indicative Depth of Inundation (m)

Light Blue	0.10 to 0.20
Blue	0.20 to 0.30
Dark Blue	0.30 to 0.40
Green	0.40 to 0.50
Light Green	0.50 to 0.60
Yellow	0.60 to 0.70
Orange	0.70 to 0.80
Red-Orange	0.80 to 0.90
Red	0.90 to 1.00
Dark Red	> 1.00

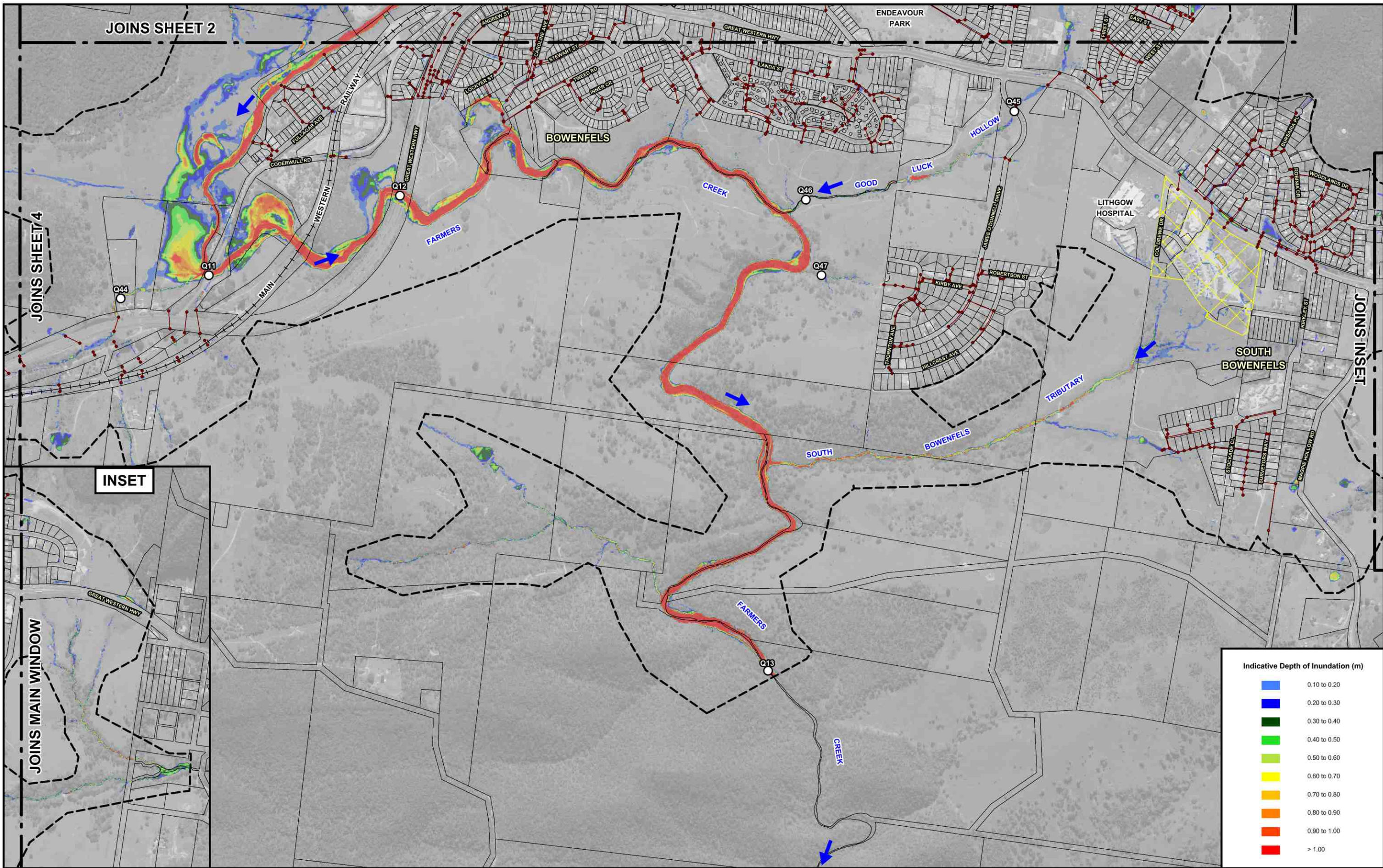
Scale: 1:12,000

120 0 120 240 360 m

**NOTE:**  
 The ground surface model incorporated in TUFLOW is based on LIDAR survey which has been sampled on a 3m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.  
 Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

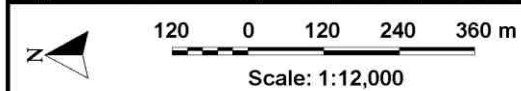
- LEGEND**
- Two-Dimensional Model Boundary
  - Modelled Stormwater Network
  - Peak Flow Location and Identifier (Refer Appendix F)

**LITHGOW FLOOD STUDY REVIEW**



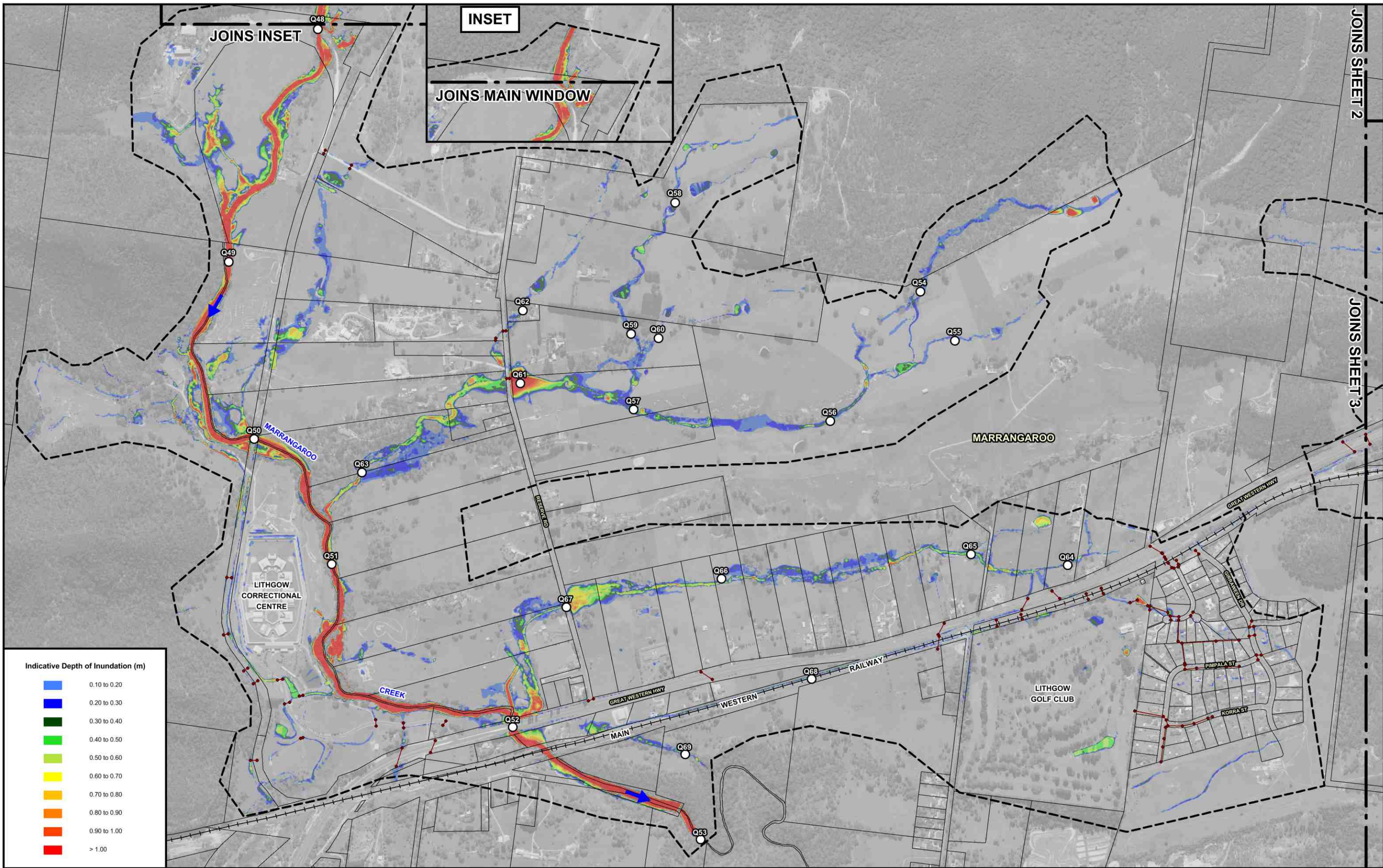
Indicative Depth of Inundation (m)

Light Blue	0.10 to 0.20
Blue	0.20 to 0.30
Dark Blue	0.30 to 0.40
Green	0.40 to 0.50
Light Green	0.50 to 0.60
Yellow	0.60 to 0.70
Orange	0.70 to 0.80
Red-Orange	0.80 to 0.90
Red	0.90 to 1.00
Dark Red	> 1.00



**NOTE:**  
 The ground surface model incorporated in TUFLOW is based on LiDAR survey which has been sampled on a 3m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.  
 Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

- LEGEND**
- Two-Dimensional Model Boundary
  - Modelled Stormwater Network
  - Peak Flow Location and Identifier (Refer Appendix F)
  - Extent of Recent Subdivision Development. Details of New Stormwater Drainage System have not been Incorporated in Farmers Creek TUFLOW Model.



**Indicative Depth of Inundation (m)**

Blue	0.10 to 0.20
Dark Blue	0.20 to 0.30
Green	0.30 to 0.40
Light Green	0.40 to 0.50
Yellow-Green	0.50 to 0.60
Yellow	0.60 to 0.70
Orange	0.70 to 0.80
Red-Orange	0.80 to 0.90
Red	0.90 to 1.00
Dark Red	> 1.00

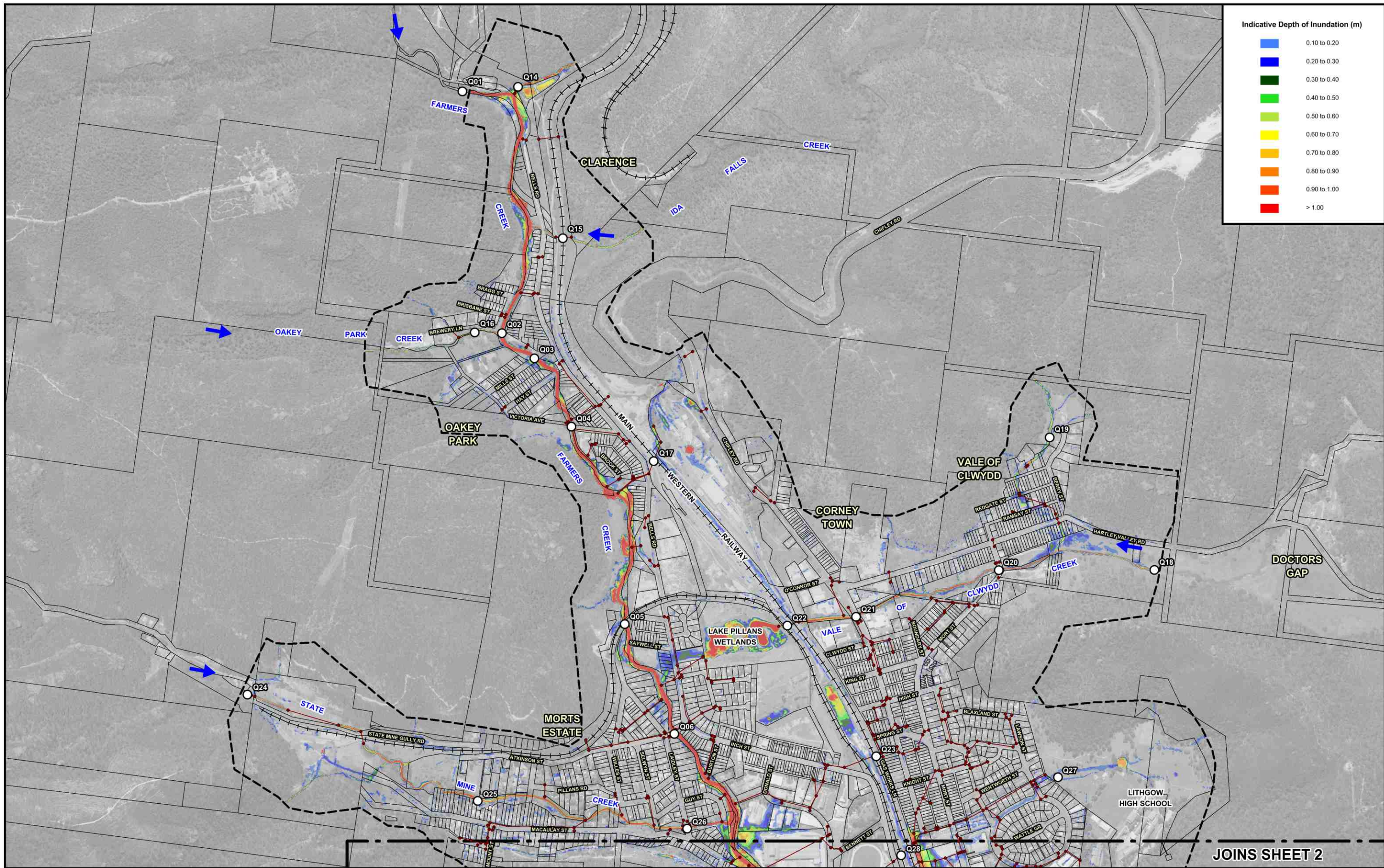
120 0 120 240 360 m  
 Scale: 1:12,000

**NOTE:**  
 The ground surface model incorporated in TUFLOW is based on LiDAR survey which has been sampled on a 3m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.  
 Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

- LEGEND**
- Two-Dimensional Model Boundary
  - Modelled Stormwater Network
  - Peak Flow Location and Identifier (Refer Appendix F)

**LITHGOW FLOOD STUDY REVIEW**

Figure 6.1  
 (Sheet 4 of 4)  
 TUFLOW MODEL RESULTS  
 5 YEAR ARI



Indicative Depth of Inundation (m)

0.10 to 0.20
0.20 to 0.30
0.30 to 0.40
0.40 to 0.50
0.50 to 0.60
0.60 to 0.70
0.70 to 0.80
0.80 to 0.90
0.90 to 1.00
> 1.00

120 0 120 240 360 m  
Scale: 1:12,000

**NOTE:**  
The ground surface model incorporated in TUFLOW is based on LiDAR survey which has been sampled on a 3m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.  
Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

- LEGEND**
- Two-Dimensional Model Boundary
  - Modelled Stormwater Network
  - Peak Flow Location and Identifier (Refer Appendix F)

LITHGOW FLOOD STUDY REVIEW

JOINS SHEET 2



Figure 6.2  
(Sheet 1 of 4)  
TUFLOW MODEL RESULTS  
10 YEAR ARI



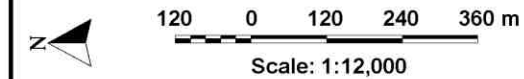
Indicative Depth of Inundation (m)

Light Blue	0.10 to 0.20
Blue	0.20 to 0.30
Dark Blue	0.30 to 0.40
Green	0.40 to 0.50
Light Green	0.50 to 0.60
Yellow	0.60 to 0.70
Orange	0.70 to 0.80
Red-Orange	0.80 to 0.90
Red	0.90 to 1.00
Dark Red	> 1.00

JOINS SHEET 4

JOINS SHEET 3

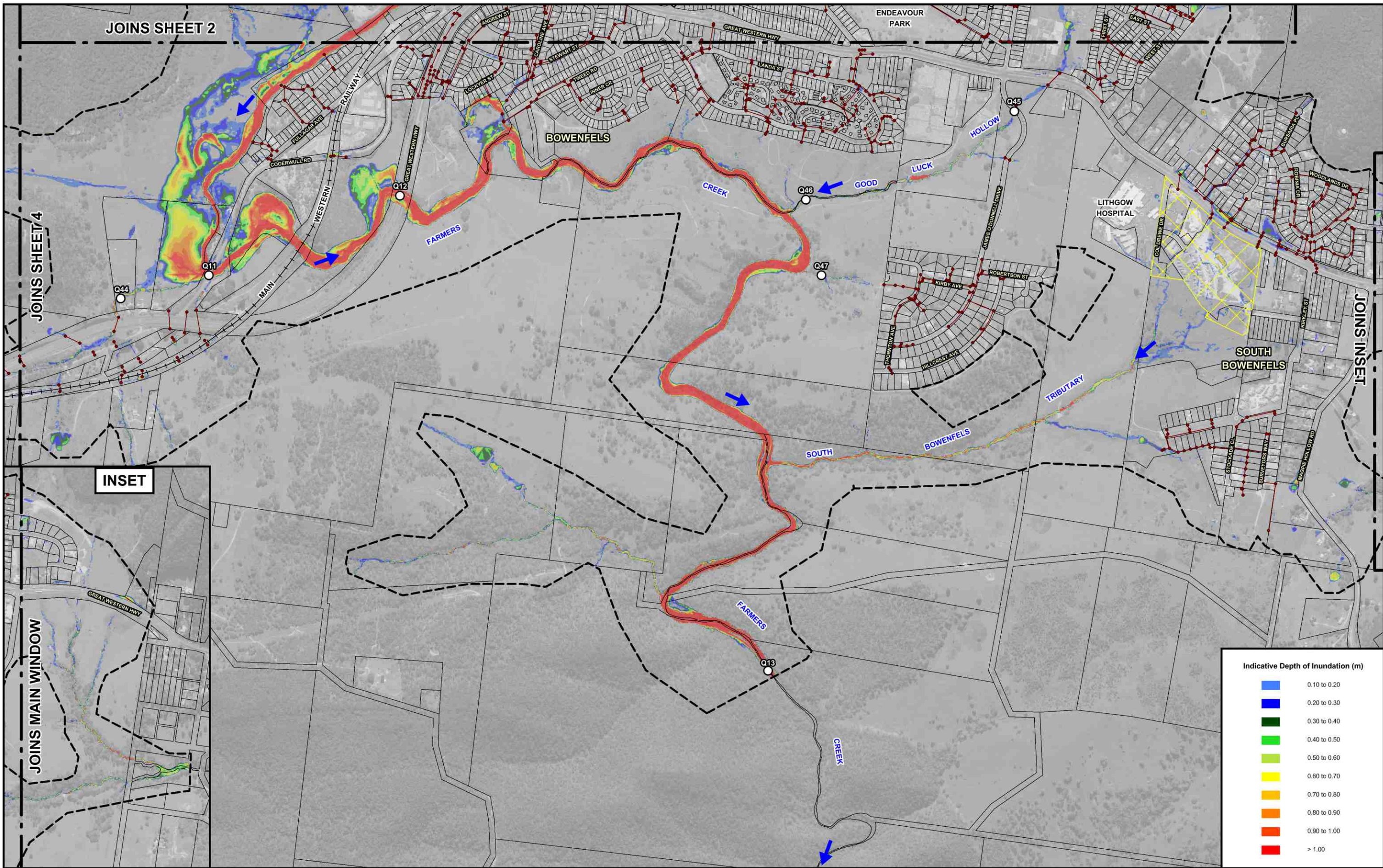
JOINS SHEET 1



**NOTE:**  
 The ground surface model incorporated in TUFLOW is based on LIDAR survey which has been sampled on a 3m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.  
 Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

- LEGEND**
- Two-Dimensional Model Boundary
  - Modelled Stormwater Network
  - Peak Flow Location and Identifier (Refer Appendix F)

**LITHGOW FLOOD STUDY REVIEW**



Indicative Depth of Inundation (m)	
Light Blue	0.10 to 0.20
Blue	0.20 to 0.30
Dark Blue	0.30 to 0.40
Green	0.40 to 0.50
Light Green	0.50 to 0.60
Yellow	0.60 to 0.70
Orange	0.70 to 0.80
Red-Orange	0.80 to 0.90
Red	0.90 to 1.00
Dark Red	> 1.00

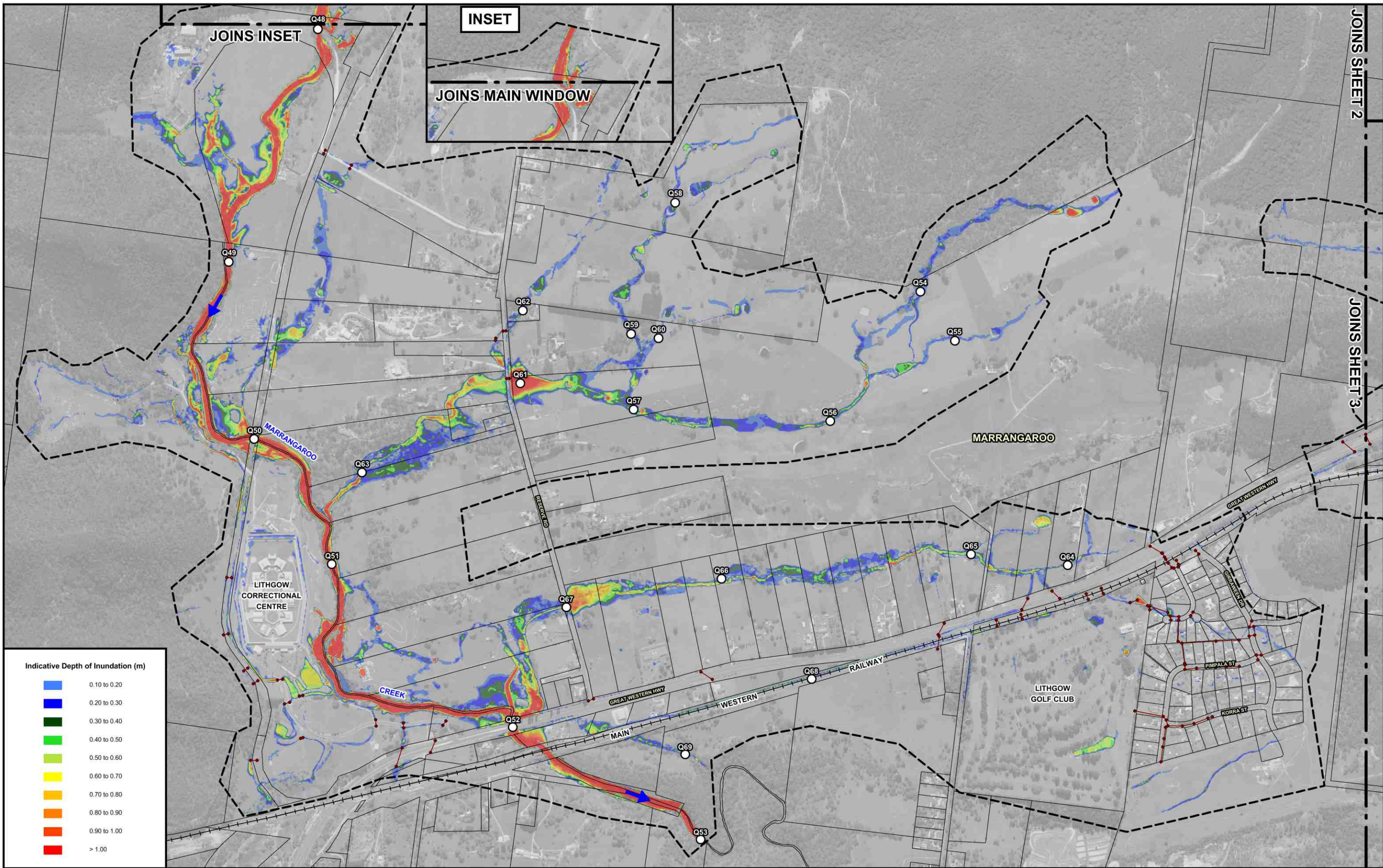
120 0 120 240 360 m  
Scale: 1:12,000

**NOTE:**  
The ground surface model incorporated in TUFLOW is based on LiDAR survey which has been sampled on a 3m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.  
Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

- LEGEND**
- Two-Dimensional Model Boundary
  - Modelled Stormwater Network
  - Peak Flow Location and Identifier (Refer Appendix F)
  - ▭ Extent of Recent Subdivision Development. Details of New Stormwater Drainage System have not been Incorporated in Farmers Creek TUFLOW Model.

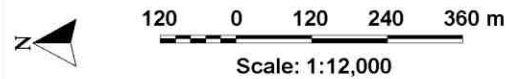
**LITHGOW FLOOD STUDY REVIEW**





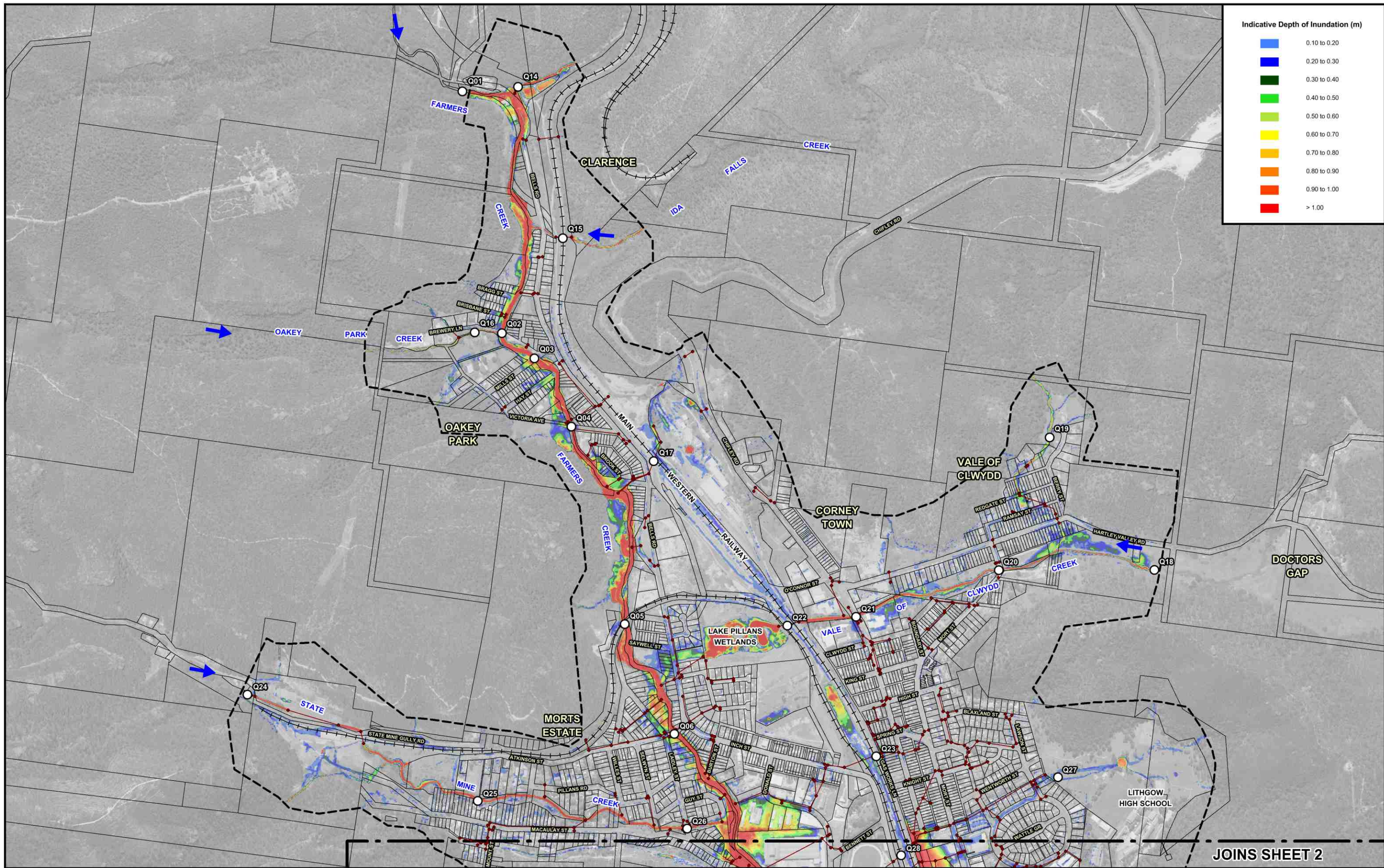
**Indicative Depth of Inundation (m)**

Blue	0.10 to 0.20
Dark Blue	0.20 to 0.30
Green	0.30 to 0.40
Light Green	0.40 to 0.50
Yellow	0.50 to 0.60
Orange	0.60 to 0.70
Red-Orange	0.70 to 0.80
Red	0.80 to 0.90
Dark Red	0.90 to 1.00
Red	> 1.00



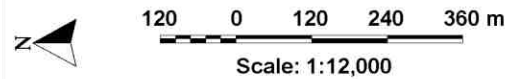
**NOTE:**  
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 Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

- LEGEND**
- Two-Dimensional Model Boundary
  - Modelled Stormwater Network
  - Peak Flow Location and Identifier (Refer Appendix F)



Indicative Depth of Inundation (m)

Light Blue	0.10 to 0.20
Blue	0.20 to 0.30
Dark Green	0.30 to 0.40
Light Green	0.40 to 0.50
Yellow-Green	0.50 to 0.60
Yellow	0.60 to 0.70
Orange	0.70 to 0.80
Red-Orange	0.80 to 0.90
Red	0.90 to 1.00
Dark Red	> 1.00



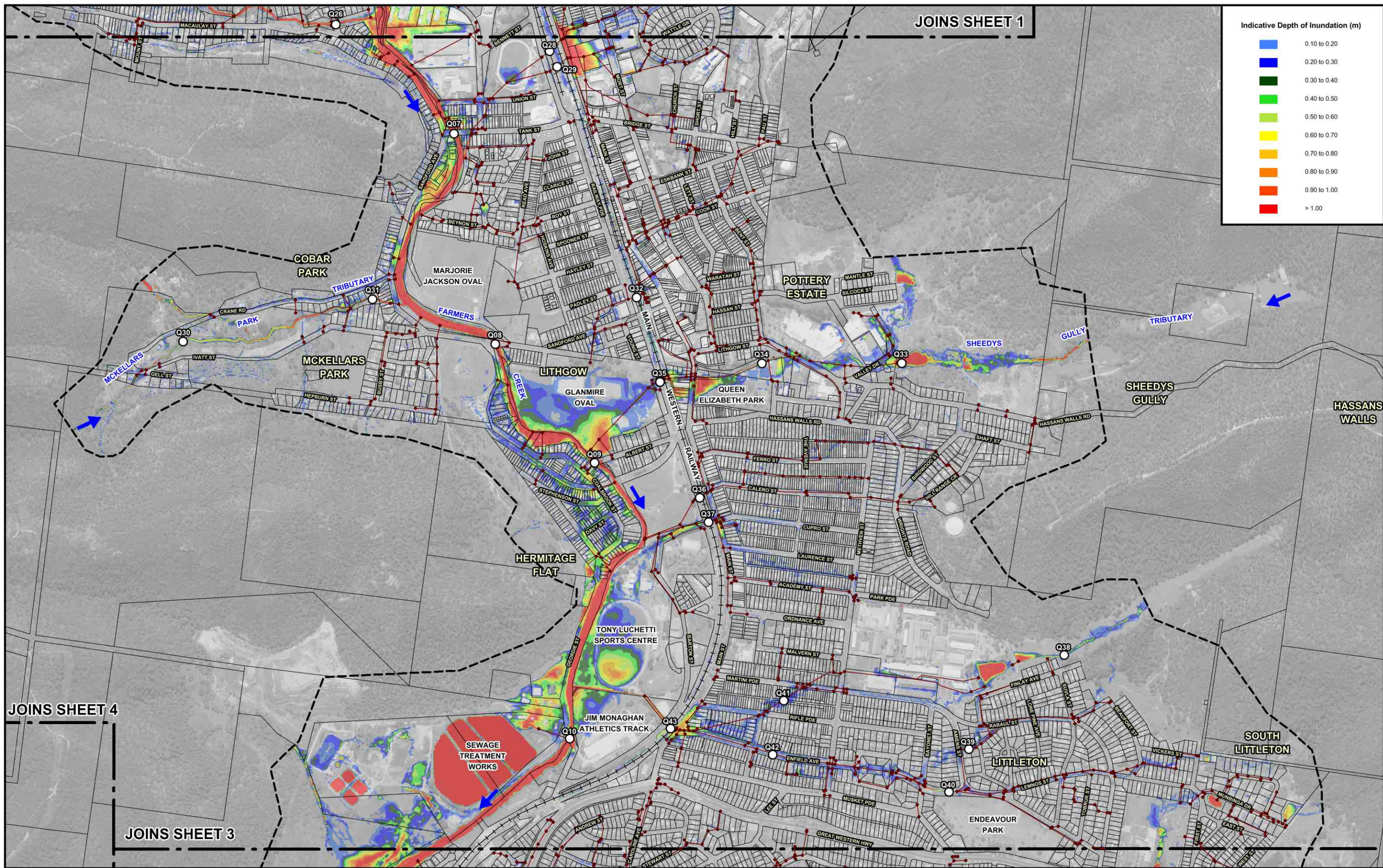
**NOTE:**  
 The ground surface model incorporated in TUFLOW is based on LiDAR survey which has been sampled on a 3m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.  
 Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

- LEGEND**
- Two-Dimensional Model Boundary
  - Modelled Stormwater Network
  - Peak Flow Location and Identifier (Refer Appendix F)



LITHGOW FLOOD STUDY REVIEW

Figure 6.3  
 (Sheet 1 of 4)  
 TUFLOW MODEL RESULTS  
 50 YEAR ARI



Scale: 1:12,000  
 120 0 120 240 360 m

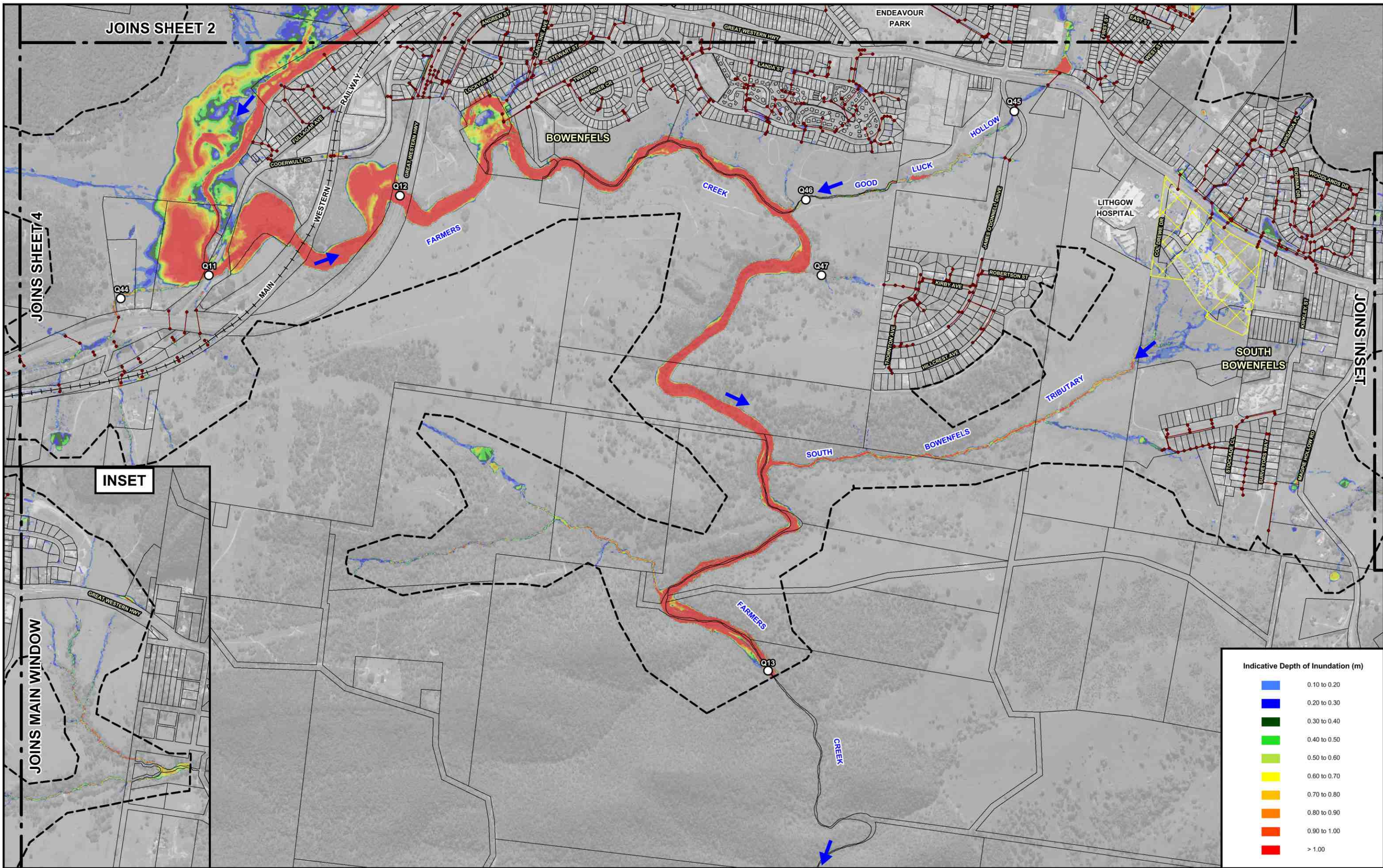
**NOTE:**  
 The ground surface model incorporated in TUFLOW is based on LIDAR survey which has been sampled on a 3m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.  
 Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

**LEGEND**  
 - - - Two-Dimensional Model Boundary  
 ● Modelled Stormwater Network  
 ○ Peak Flow Location and Identifier (Refer Appendix F)

**LITHGOW FLOOD STUDY REVIEW**

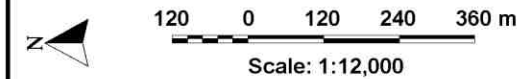


Figure 6.3  
 (Sheet 2 of 4)  
 TUFLOW MODEL RESULTS  
 50 YEAR ARI



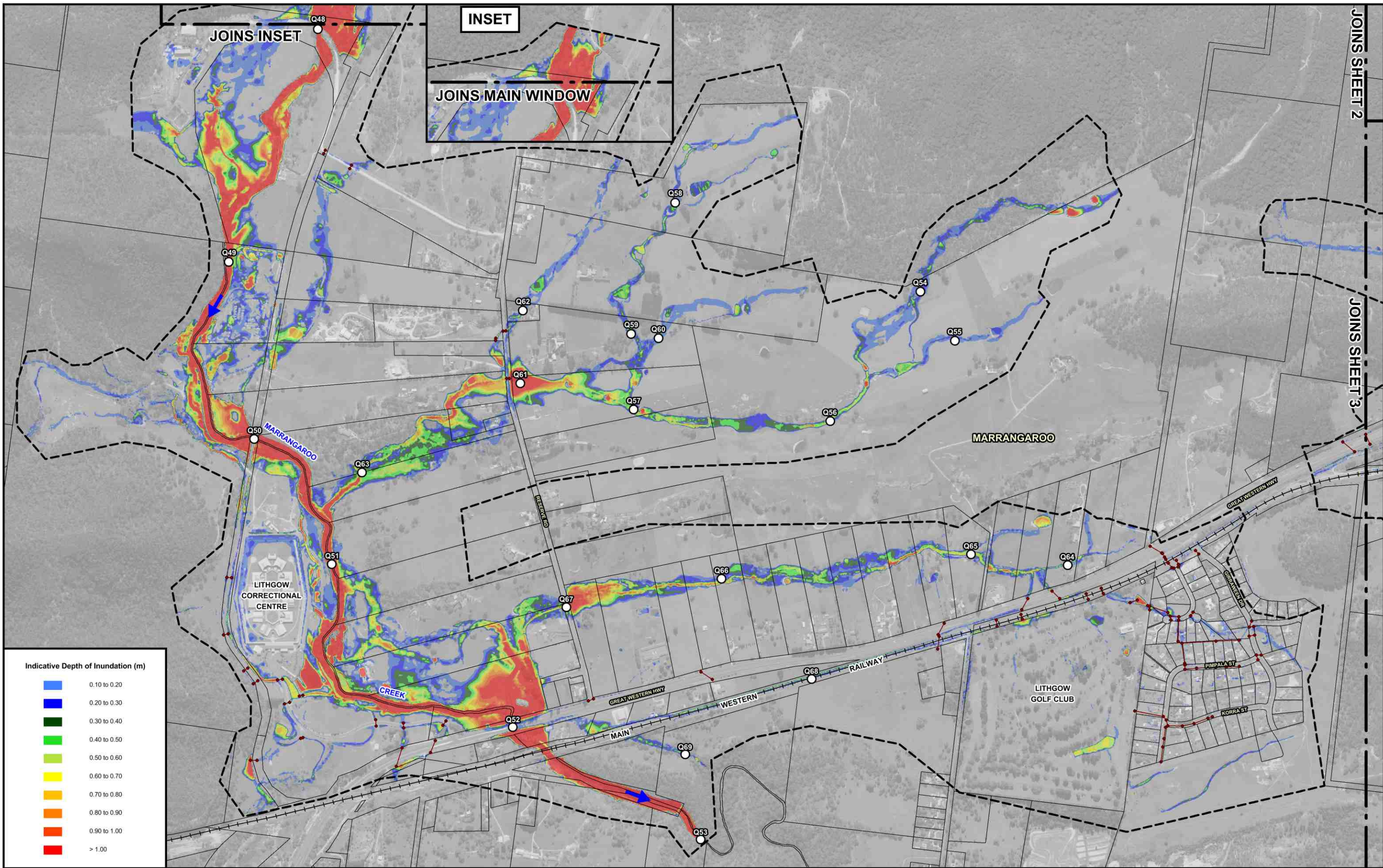
Indicative Depth of Inundation (m)

Light Blue	0.10 to 0.20
Blue	0.20 to 0.30
Dark Green	0.30 to 0.40
Light Green	0.40 to 0.50
Yellow-Green	0.50 to 0.60
Yellow	0.60 to 0.70
Orange	0.70 to 0.80
Dark Orange	0.80 to 0.90
Red-Orange	0.90 to 1.00
Red	> 1.00



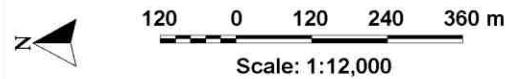
**NOTE:**  
 The ground surface model incorporated in TUFLOW is based on LiDAR survey which has been sampled on a 3m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.  
 Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

- LEGEND**
- Two-Dimensional Model Boundary
  - Modelled Stormwater Network
  - Peak Flow Location and Identifier (Refer Appendix F)
  - ▭ Extent of Recent Subdivision Development. Details of New Stormwater Drainage System have not been Incorporated in Farmers Creek TUFLOW Model.



Indicative Depth of Inundation (m)

Blue	0.10 to 0.20
Dark Blue	0.20 to 0.30
Green	0.30 to 0.40
Light Green	0.40 to 0.50
Yellow-Green	0.50 to 0.60
Yellow	0.60 to 0.70
Orange	0.70 to 0.80
Red-Orange	0.80 to 0.90
Red	0.90 to 1.00
Dark Red	> 1.00

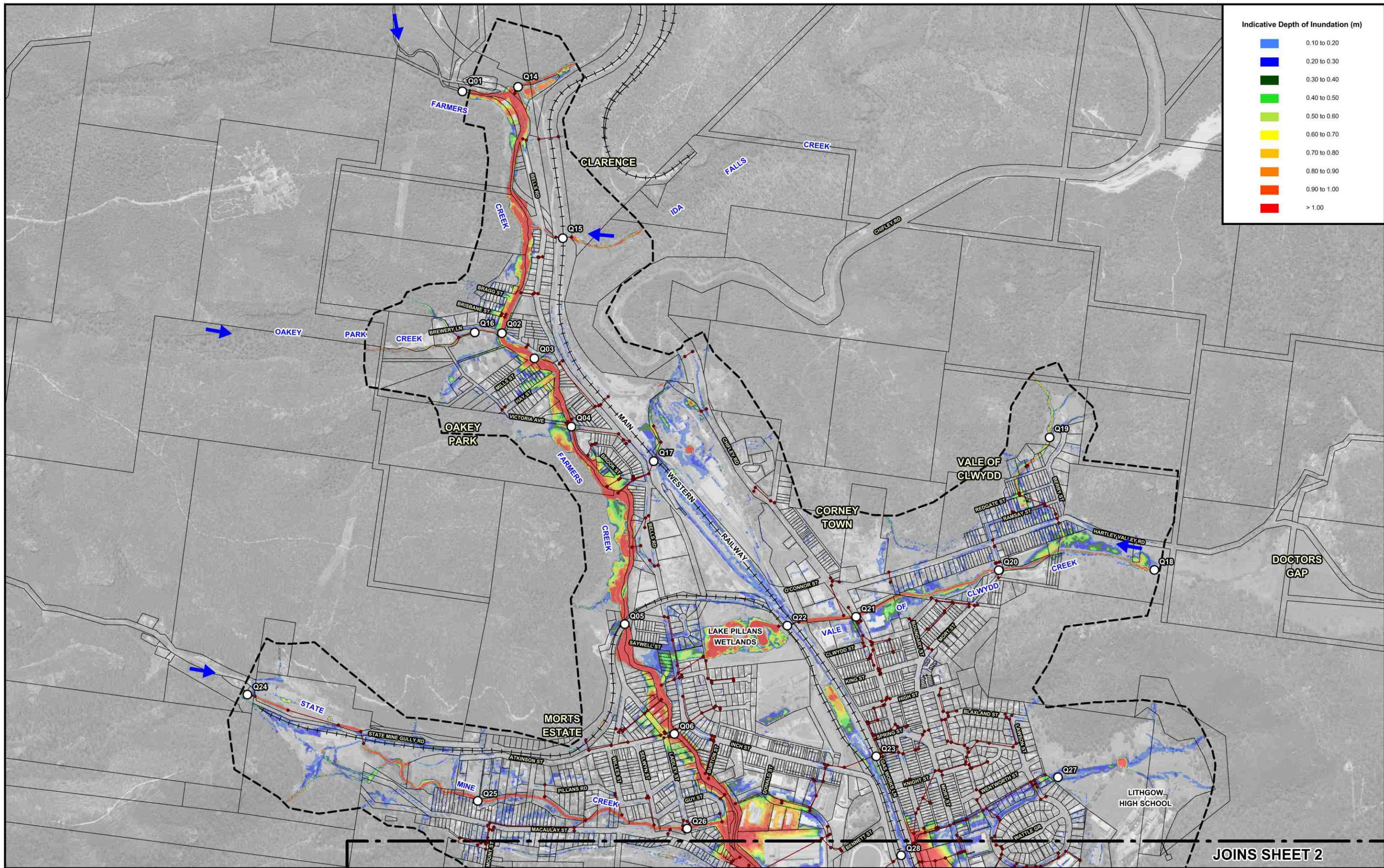


**NOTE:**  
 The ground surface model incorporated in TUFLOW is based on LiDAR survey which has been sampled on a 3m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.  
 Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

- LEGEND**
- Two-Dimensional Model Boundary
  - Modelled Stormwater Network
  - Peak Flow Location and Identifier (Refer Appendix F)

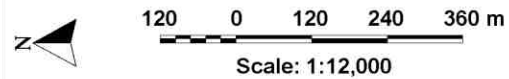
**LITHGOW FLOOD STUDY REVIEW**

JOINS SHEET 2  
 JOINS SHEET 3



Indicative Depth of Inundation (m)

Light Blue	0.10 to 0.20
Blue	0.20 to 0.30
Dark Green	0.30 to 0.40
Light Green	0.40 to 0.50
Yellow	0.50 to 0.60
Orange	0.60 to 0.70
Red-Orange	0.70 to 0.80
Red	0.80 to 0.90
Dark Red	0.90 to 1.00
Red	> 1.00



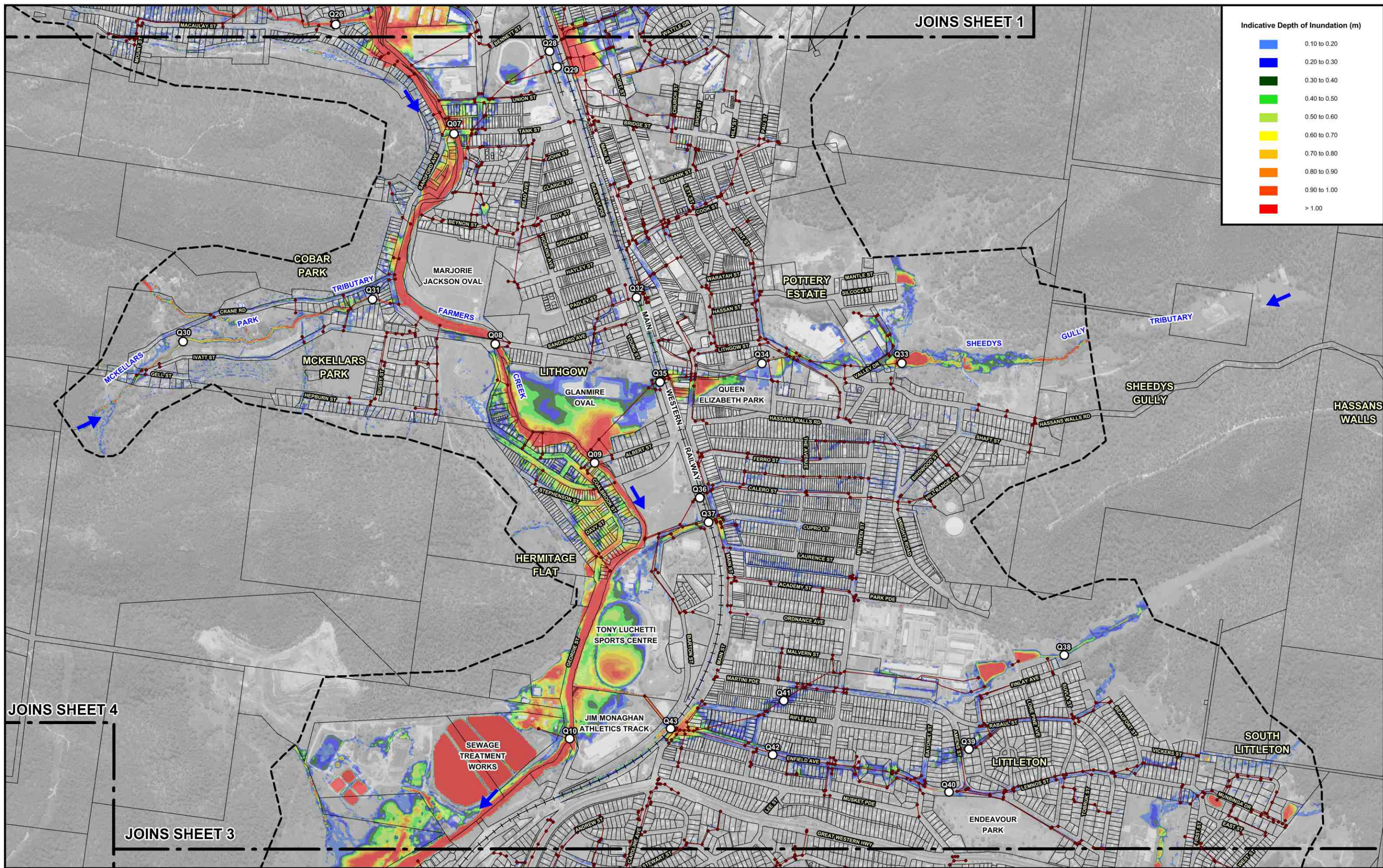
**NOTE:**  
 The ground surface model incorporated in TUFLOW is based on LiDAR survey which has been sampled on a 3m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.  
 Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

- LEGEND**
- Two-Dimensional Model Boundary
  - Modelled Stormwater Network
  - Peak Flow Location and Identifier (Refer Appendix F)



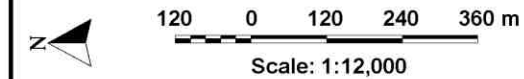
LITHGOW FLOOD STUDY REVIEW

Figure 6.4  
 (Sheet 1 of 4)  
 TUFLOW MODEL RESULTS  
 100 YEAR ARI



Indicative Depth of Inundation (m)

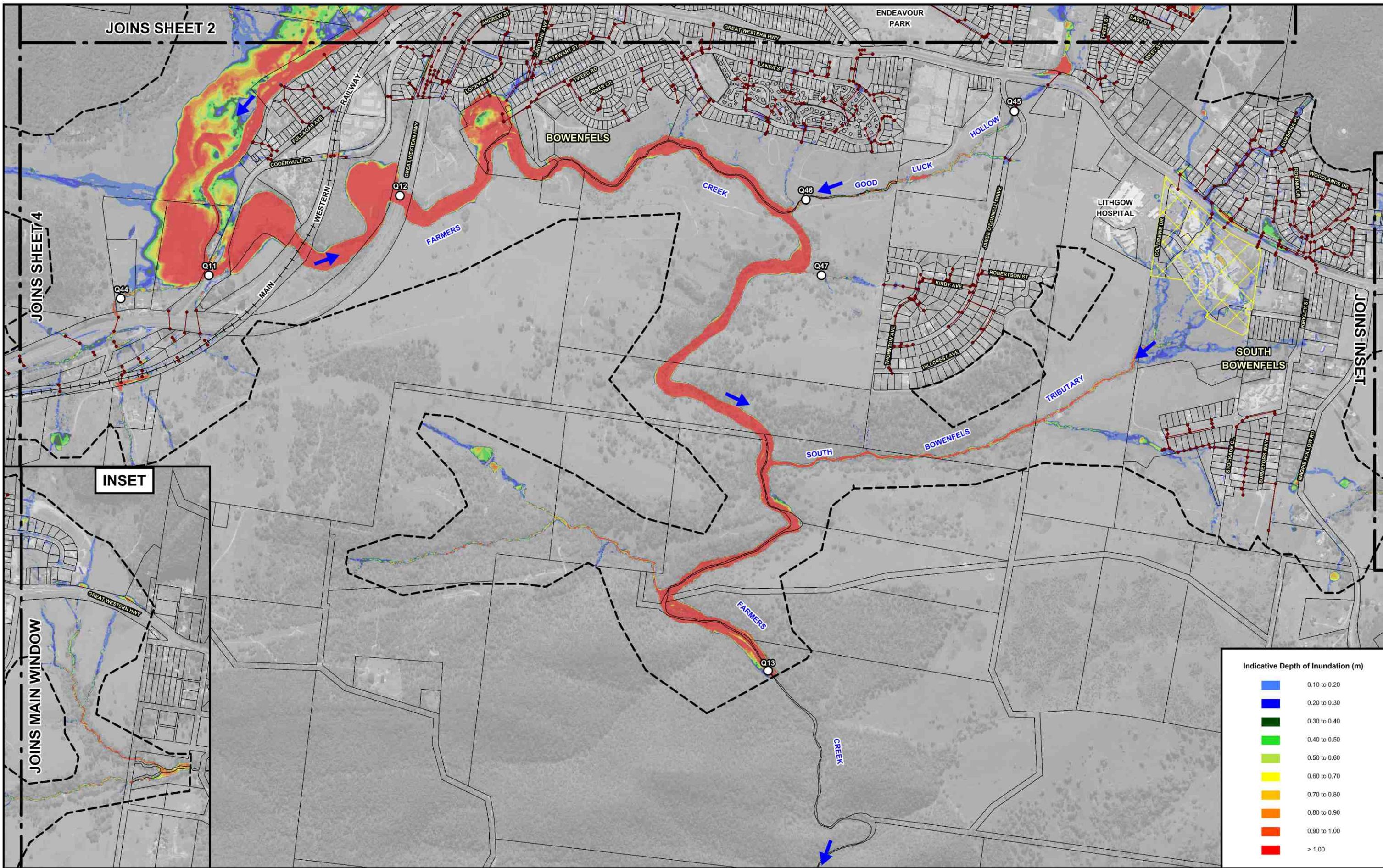
Light Blue	0.10 to 0.20
Blue	0.20 to 0.30
Dark Blue	0.30 to 0.40
Green	0.40 to 0.50
Light Green	0.50 to 0.60
Yellow	0.60 to 0.70
Orange	0.70 to 0.80
Red-Orange	0.80 to 0.90
Red	0.90 to 1.00
Dark Red	> 1.00



**NOTE:**  
 The ground surface model incorporated in TUFLOW is based on LIDAR survey which has been sampled on a 3m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.  
 Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

- LEGEND**
- Two-Dimensional Model Boundary
  - Modelled Stormwater Network
  - Peak Flow Location and Identifier (Refer Appendix F)

**LITHGOW FLOOD STUDY REVIEW**



Indicative Depth of Inundation (m)	
Blue	0.10 to 0.20
Dark Blue	0.20 to 0.30
Green	0.30 to 0.40
Light Green	0.40 to 0.50
Yellow-Green	0.50 to 0.60
Yellow	0.60 to 0.70
Orange	0.70 to 0.80
Red-Orange	0.80 to 0.90
Red	0.90 to 1.00
Dark Red	> 1.00

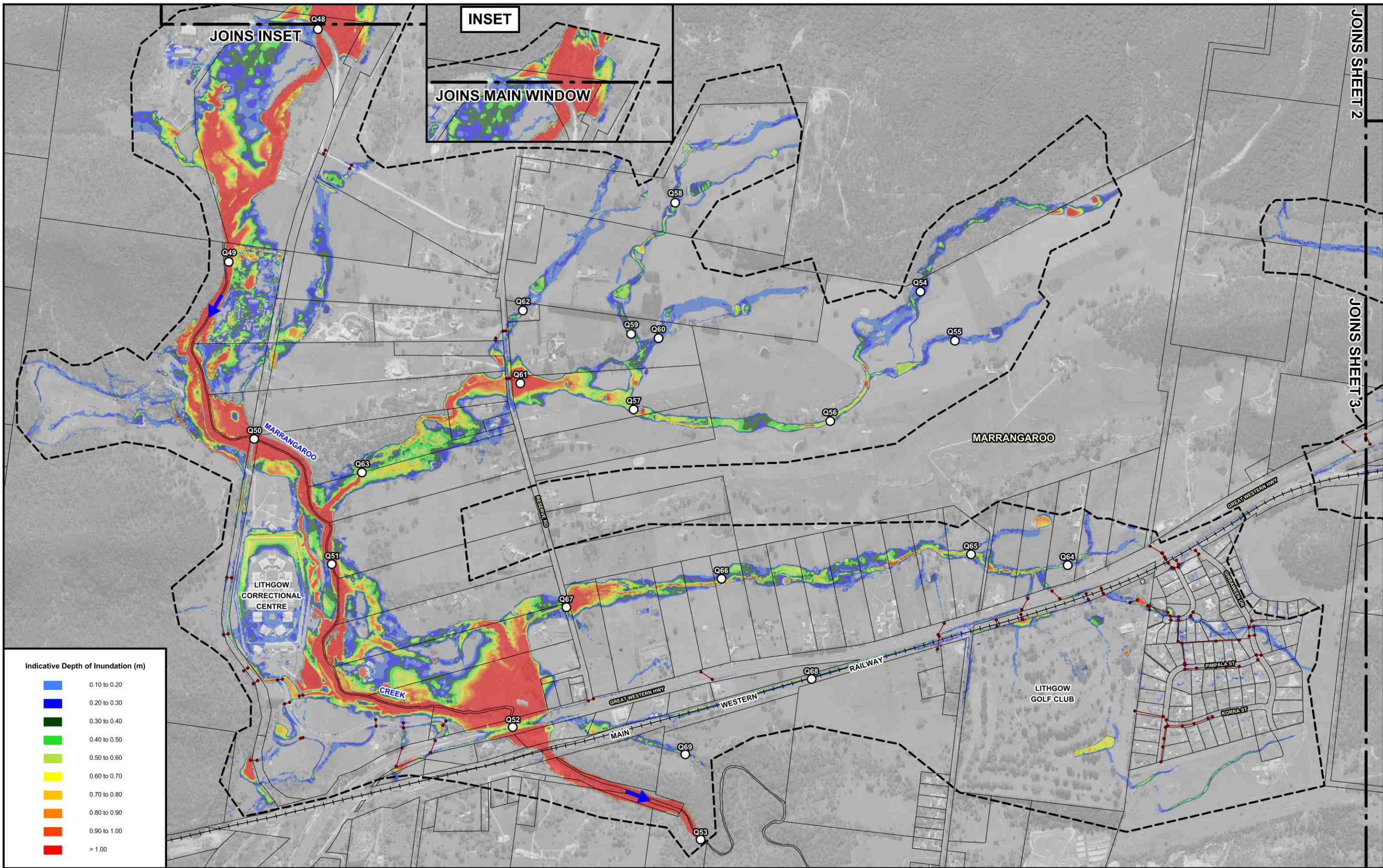
120 0 120 240 360 m  
Scale: 1:12,000

**NOTE:**  
The ground surface model incorporated in TUFLOW is based on LiDAR survey which has been sampled on a 3m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.  
Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

- LEGEND**
- Two-Dimensional Model Boundary
  - Modelled Stormwater Network
  - Peak Flow Location and Identifier (Refer Appendix F)
  - ▭ Extent of Recent Subdivision Development. Details of New Stormwater Drainage System have not been Incorporated in Farmers Creek TUFLOW Model.

**LITHGOW FLOOD STUDY REVIEW**





Indicative Depth of Inundation (m)

Blue	0.10 to 0.20
Dark Blue	0.20 to 0.30
Green	0.30 to 0.40
Light Green	0.40 to 0.50
Yellow-Green	0.50 to 0.60
Yellow	0.60 to 0.70
Orange	0.70 to 0.80
Red-Orange	0.80 to 0.90
Red	0.90 to 1.00
Dark Red	> 1.00

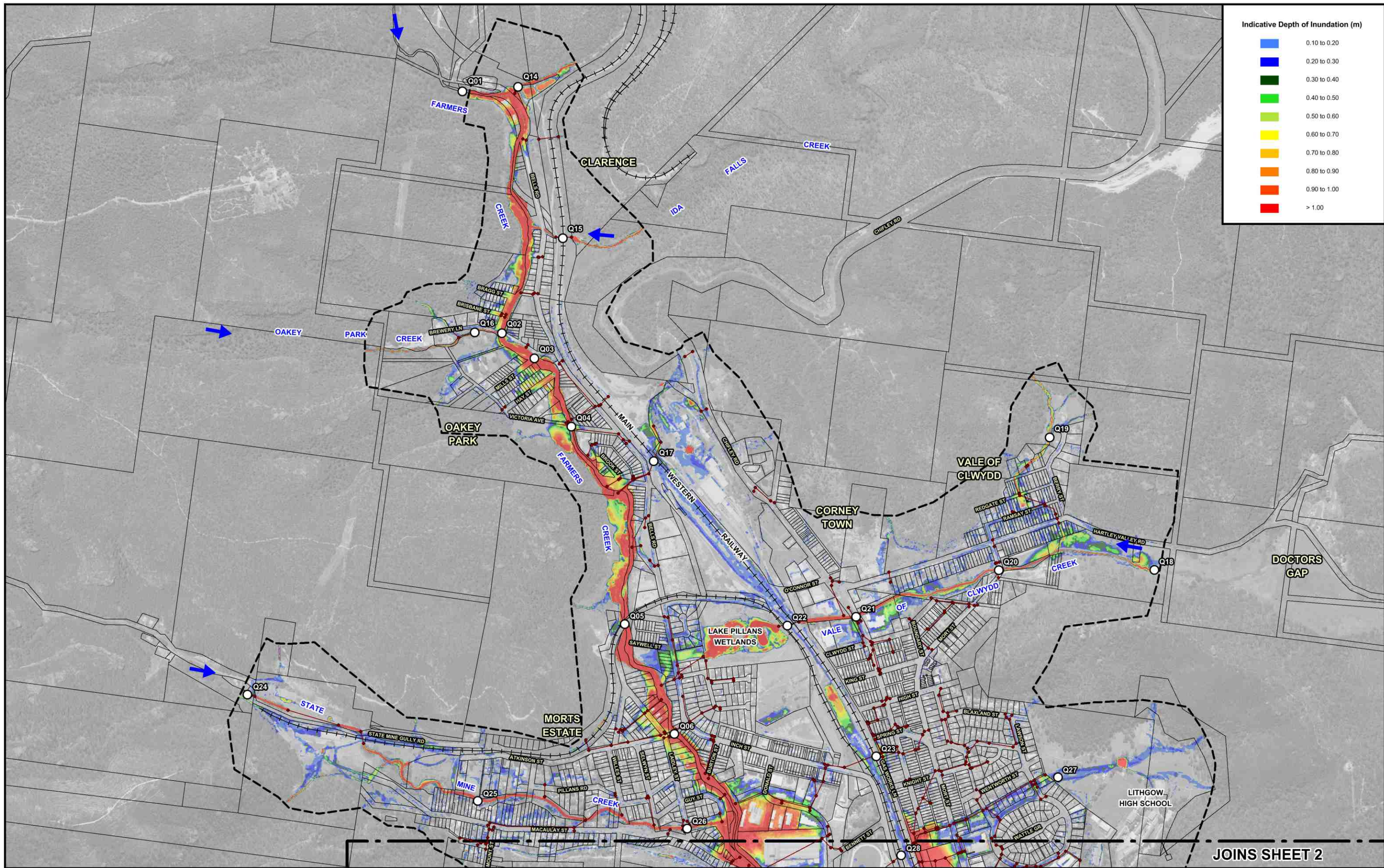
120 0 120 240 360 m  
 Scale: 1:12,000

**NOTE:**  
 The ground surface model incorporated in TUFLOW is based on LiDAR survey which has been sampled on a 3m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.  
 Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

- LEGEND**
- Two-Dimensional Model Boundary
  - Modelled Stormwater Network
  - Peak Flow Location and Identifier (Refer Appendix F)

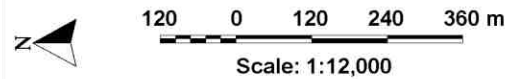
**LITHGOW FLOOD STUDY REVIEW**

Figure 6.4  
 (Sheet 4 of 4)  
 TUFLOW MODEL RESULTS  
 100 YEAR ARI



Indicative Depth of Inundation (m)

0.10 to 0.20
0.20 to 0.30
0.30 to 0.40
0.40 to 0.50
0.50 to 0.60
0.60 to 0.70
0.70 to 0.80
0.80 to 0.90
0.90 to 1.00
> 1.00



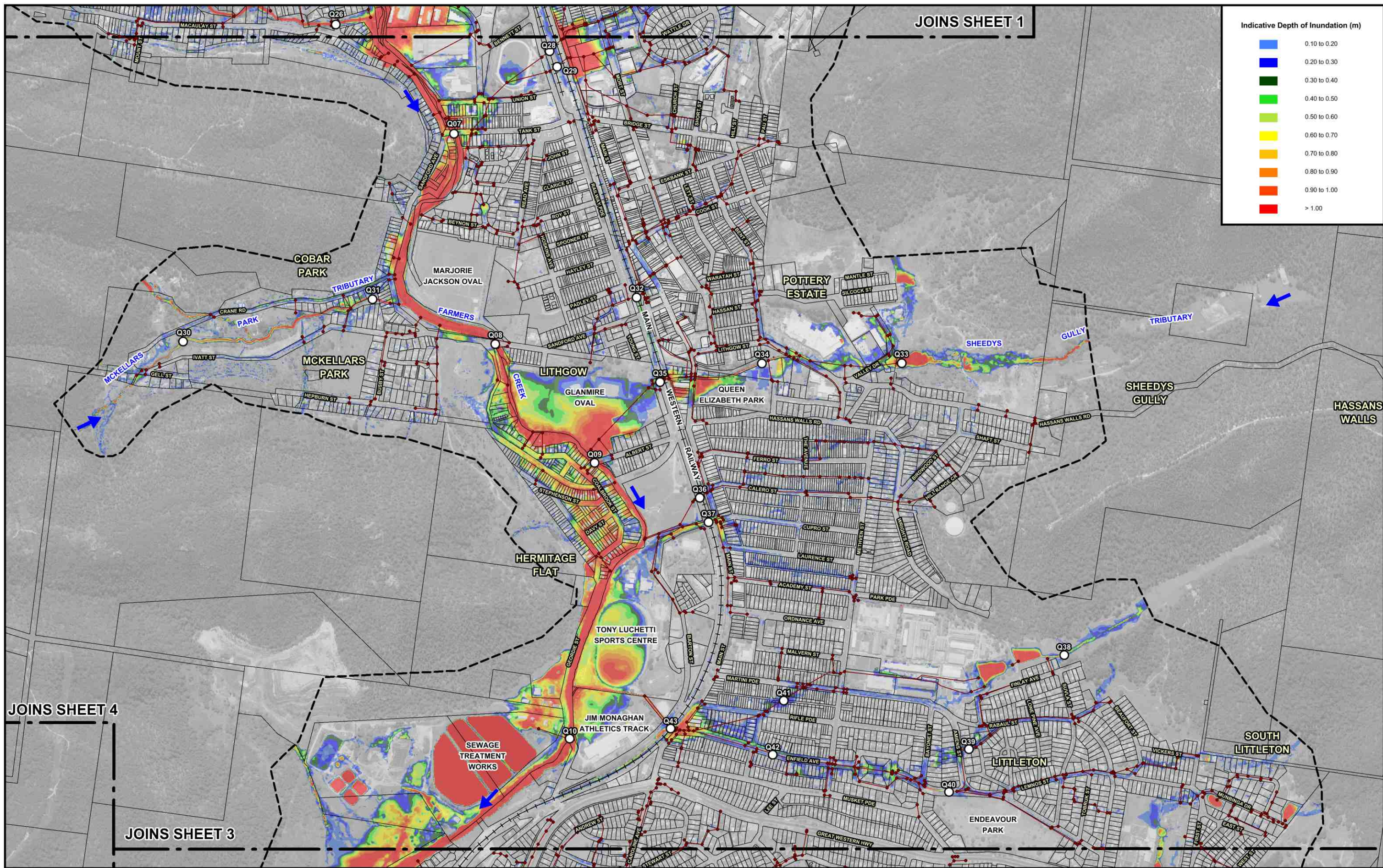
**NOTE:**  
 The ground surface model incorporated in TUFLOW is based on LiDAR survey which has been sampled on a 3m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.  
 Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

- LEGEND**
- Two-Dimensional Model Boundary
  - Modelled Stormwater Network
  - Peak Flow Location and Identifier (Refer Appendix F)



**LITHGOW FLOOD STUDY REVIEW**

Figure 6.5  
 (Sheet 1 of 4)  
 TUFLOW MODEL RESULTS  
 200 YEAR ARI



JOINS SHEET 1

Indicative Depth of Inundation (m)

0.10 to 0.20
0.20 to 0.30
0.30 to 0.40
0.40 to 0.50
0.50 to 0.60
0.60 to 0.70
0.70 to 0.80
0.80 to 0.90
0.90 to 1.00
> 1.00

JOINS SHEET 4

JOINS SHEET 3



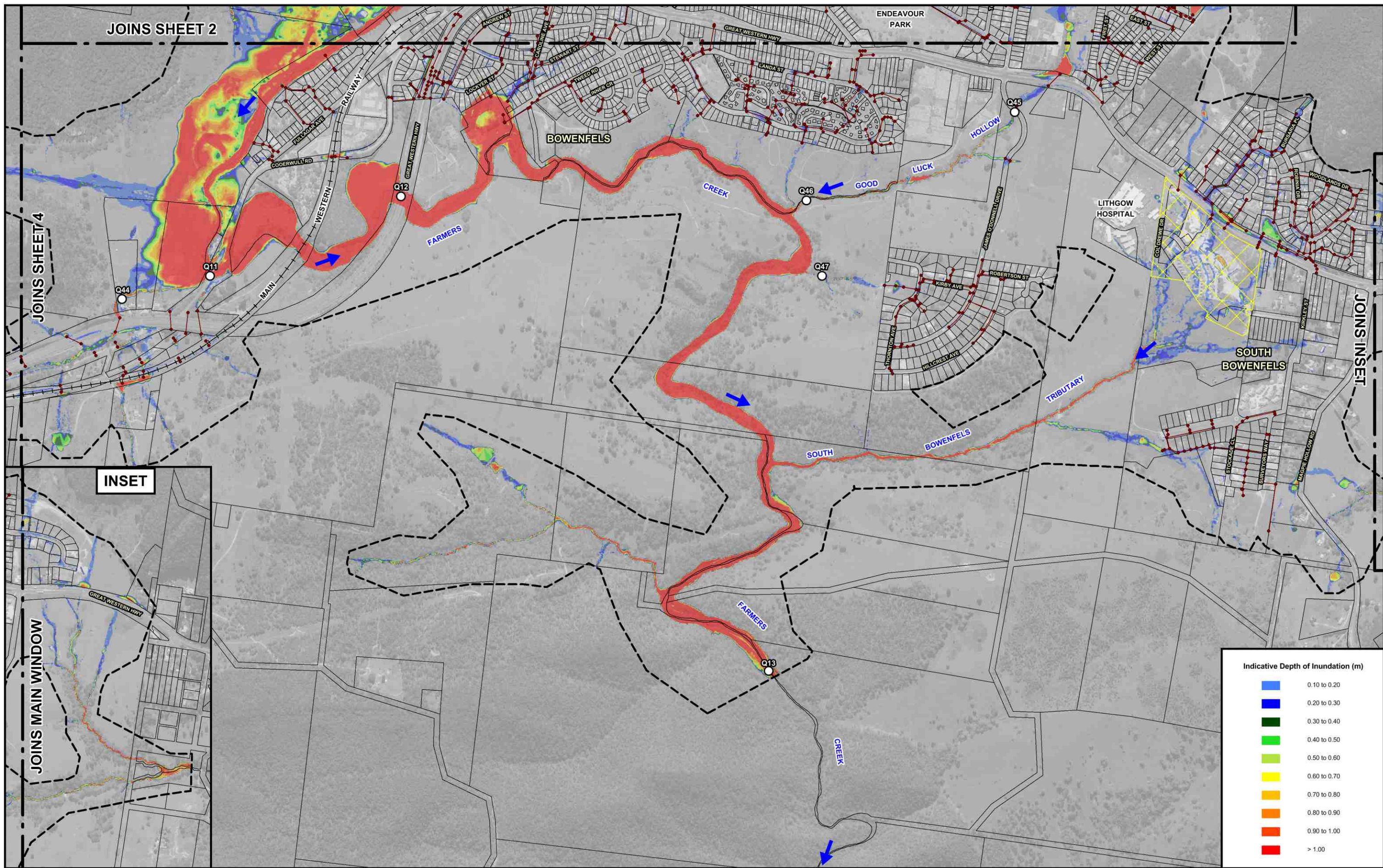
**Lyll & Associates**

**NOTE:**  
 The ground surface model incorporated in TUFLOW is based on LIDAR survey which has been sampled on a 3m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.  
 Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

- LEGEND**
- Two-Dimensional Model Boundary
  - Modelled Stormwater Network
  - Peak Flow Location and Identifier (Refer Appendix F)

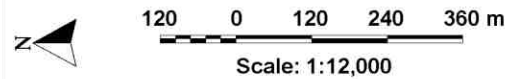
LITHGOW FLOOD STUDY REVIEW

Figure 6.5  
 (Sheet 2 of 4)  
 TUFLOW MODEL RESULTS  
 200 YEAR ARI



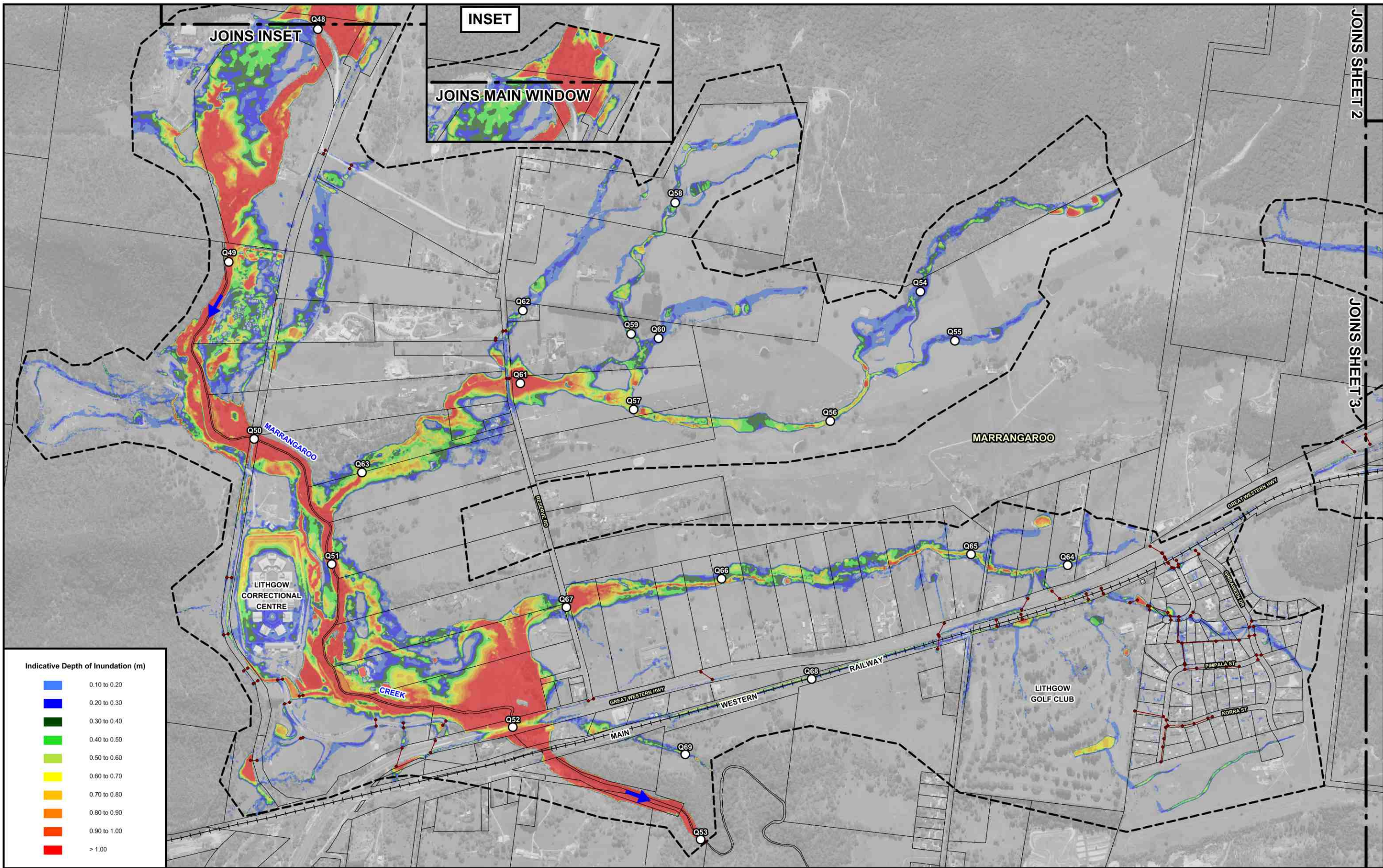
Indicative Depth of Inundation (m)

Blue	0.10 to 0.20
Dark Blue	0.20 to 0.30
Green	0.30 to 0.40
Light Green	0.40 to 0.50
Yellow-Green	0.50 to 0.60
Yellow	0.60 to 0.70
Orange	0.70 to 0.80
Red-Orange	0.80 to 0.90
Red	0.90 to 1.00
Dark Red	> 1.00



**NOTE:**  
 The ground surface model incorporated in TUFLOW is based on LiDAR survey which has been sampled on a 3m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.  
 Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

- LEGEND**
- Two-Dimensional Model Boundary
  - Modelled Stormwater Network
  - Peak Flow Location and Identifier (Refer Appendix F)
  - Extent of Recent Subdivision Development. Details of New Stormwater Drainage System have not been Incorporated in Farmers Creek TUFLOW Model.



**Indicative Depth of Inundation (m)**

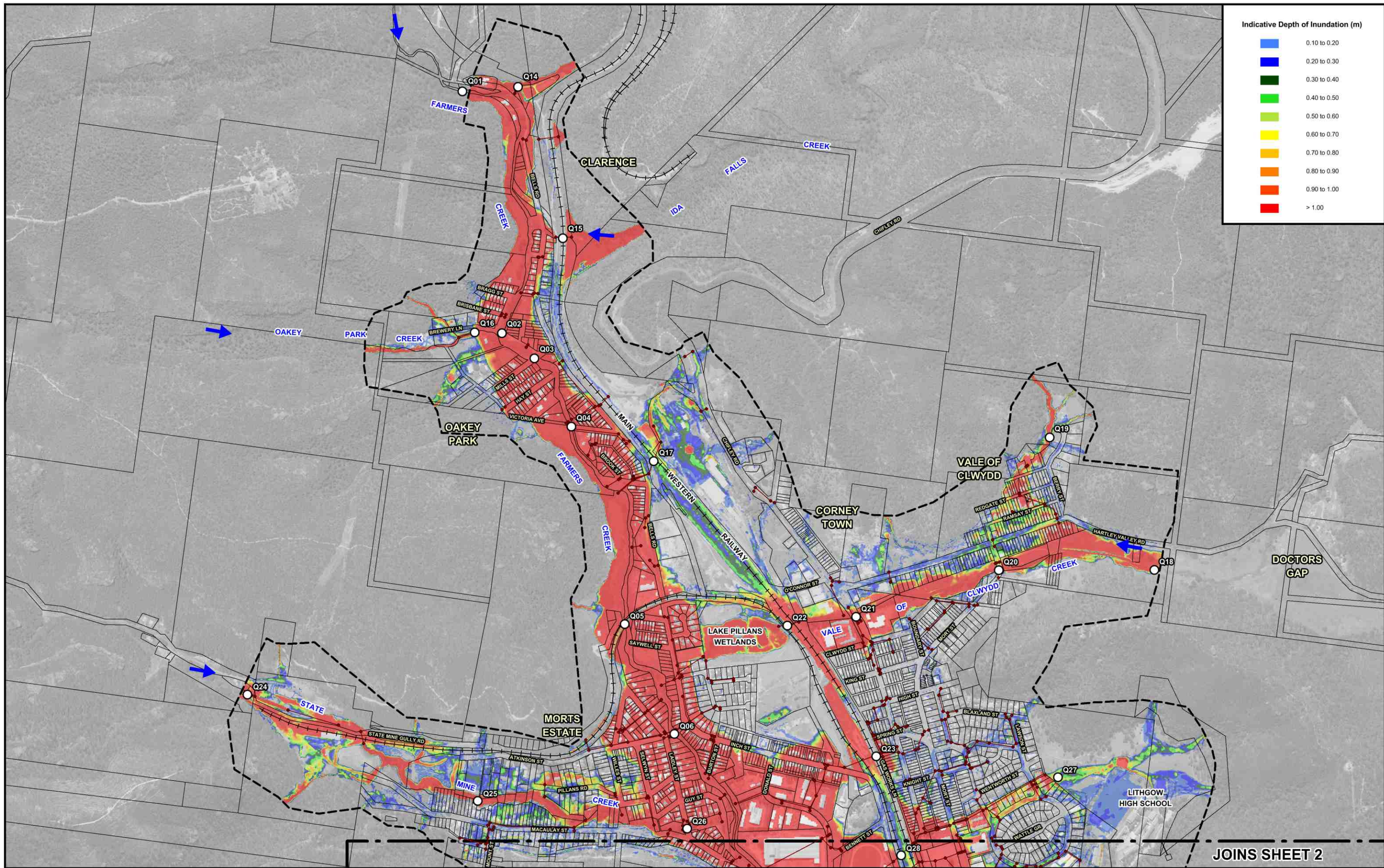
Blue	0.10 to 0.20
Dark Blue	0.20 to 0.30
Green	0.30 to 0.40
Light Green	0.40 to 0.50
Yellow-Green	0.50 to 0.60
Yellow	0.60 to 0.70
Orange	0.70 to 0.80
Red-Orange	0.80 to 0.90
Red	0.90 to 1.00
Dark Red	> 1.00

Scale: 1:12,000

**NOTE:**  
 The ground surface model incorporated in TUFLOW is based on LiDAR survey which has been sampled on a 3m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.  
 Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

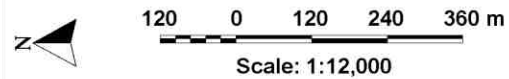
- LEGEND**
- Two-Dimensional Model Boundary
  - Modelled Stormwater Network
  - Peak Flow Location and Identifier (Refer Appendix F)

**LITHGOW FLOOD STUDY REVIEW**



Indicative Depth of Inundation (m)

Light Blue	0.10 to 0.20
Blue	0.20 to 0.30
Dark Green	0.30 to 0.40
Light Green	0.40 to 0.50
Yellow	0.50 to 0.60
Orange	0.60 to 0.70
Red-Orange	0.70 to 0.80
Red	0.80 to 0.90
Dark Red	0.90 to 1.00
Red	> 1.00



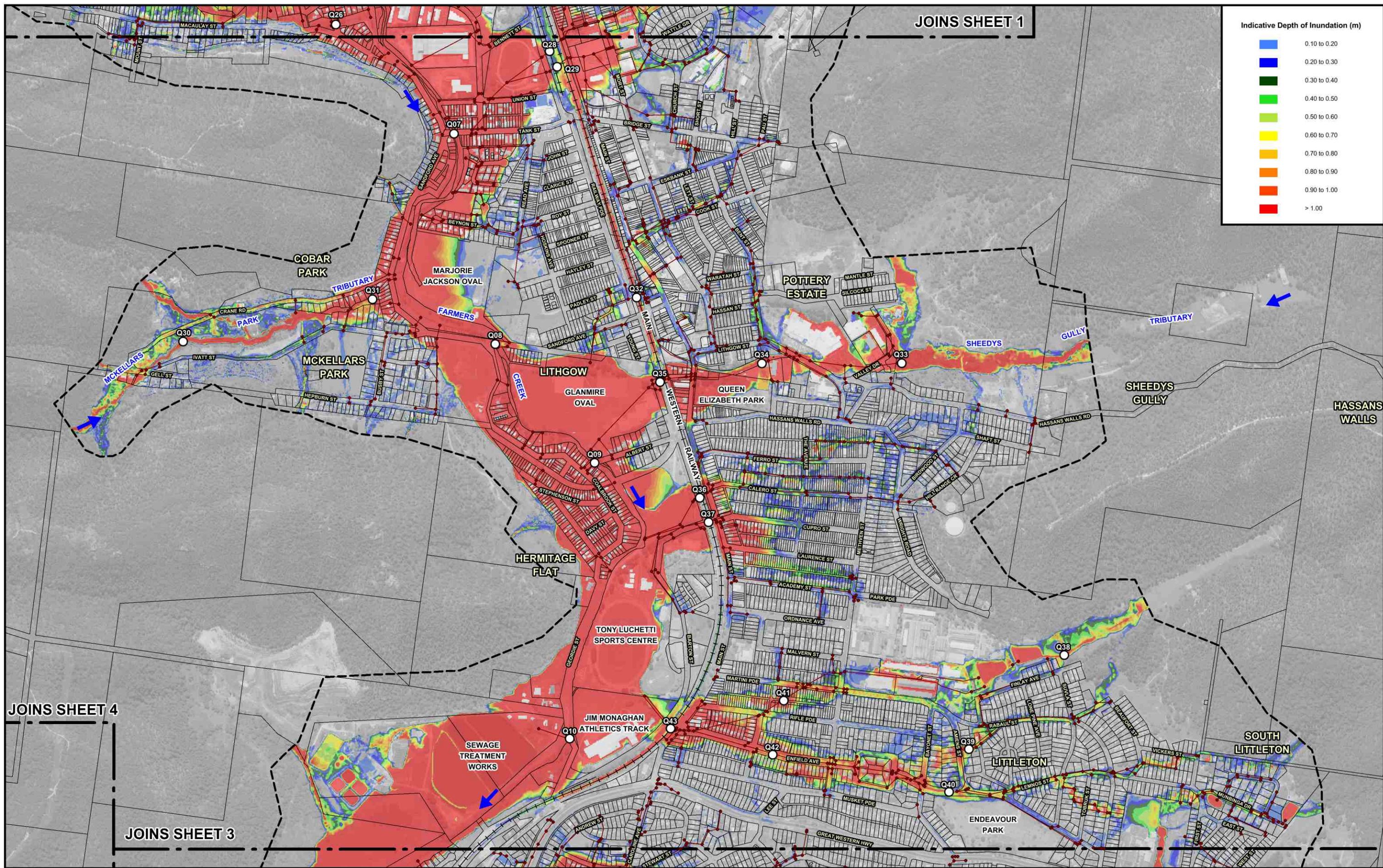
**NOTE:**  
 The ground surface model incorporated in TUFLOW is based on LiDAR survey which has been sampled on a 3m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.  
 Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

- LEGEND**
- Two-Dimensional Model Boundary
  - Modelled Stormwater Network
  - Peak Flow Location and Identifier (Refer Appendix F)



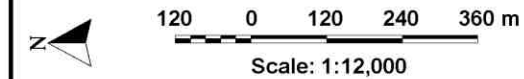
LITHGOW FLOOD STUDY REVIEW

Figure 6.6  
 (Sheet 1 of 4)  
 TUFLOW MODEL RESULTS  
 PMF



Indicative Depth of Inundation (m)

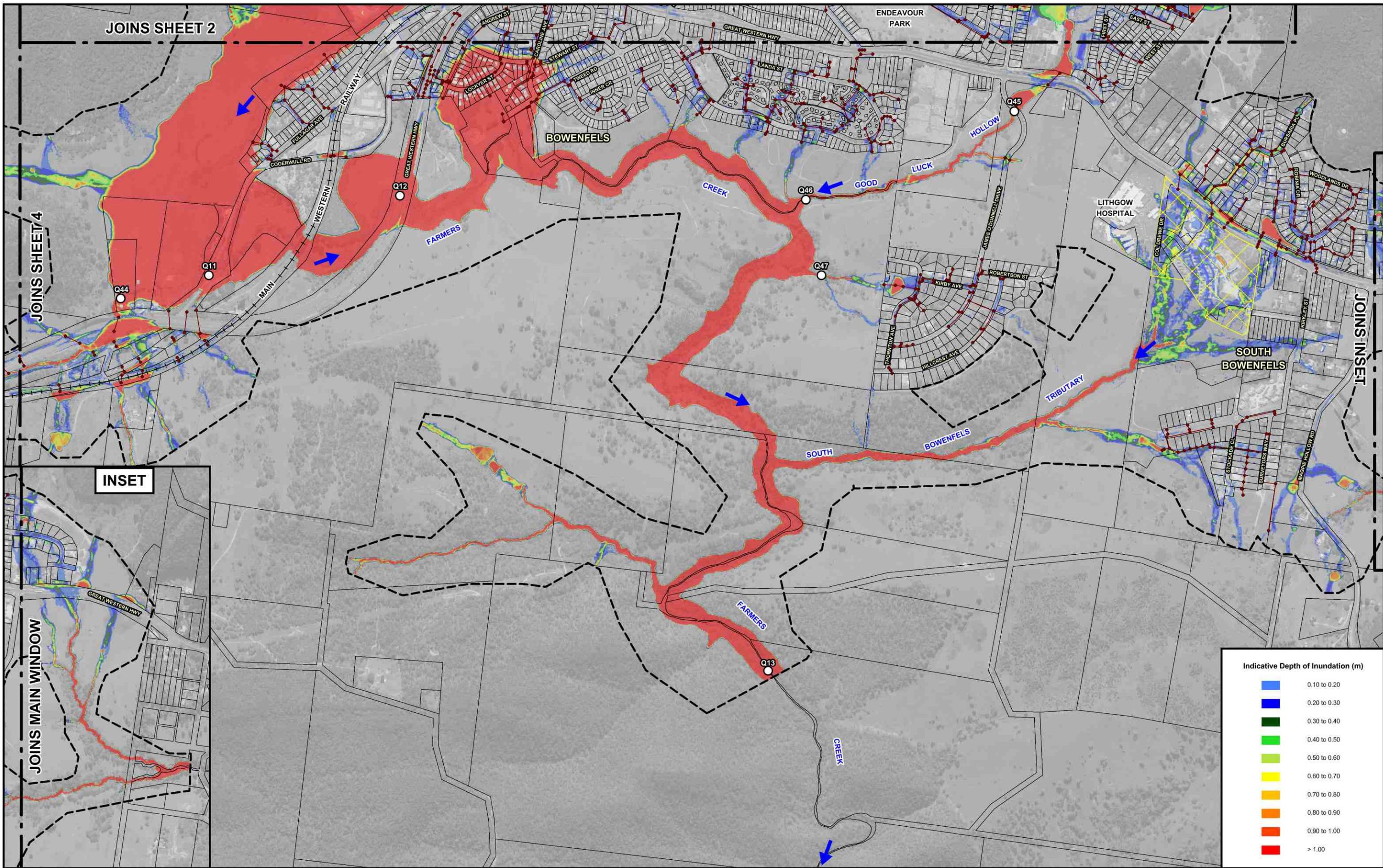
Blue	0.10 to 0.20
Dark Blue	0.20 to 0.30
Green	0.30 to 0.40
Light Green	0.40 to 0.50
Yellow-Green	0.50 to 0.60
Yellow	0.60 to 0.70
Orange	0.70 to 0.80
Red-Orange	0.80 to 0.90
Red	0.90 to 1.00
Dark Red	> 1.00



**NOTE:**  
 The ground surface model incorporated in TUFLOW is based on LIDAR survey which has been sampled on a 3m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.  
 Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

- LEGEND**
- Two-Dimensional Model Boundary
  - Modelled Stormwater Network
  - Peak Flow Location and Identifier (Refer Appendix F)

**LITHGOW FLOOD STUDY REVIEW**



Indicative Depth of Inundation (m)	
Light Blue	0.10 to 0.20
Blue	0.20 to 0.30
Dark Blue	0.30 to 0.40
Green	0.40 to 0.50
Light Green	0.50 to 0.60
Yellow	0.60 to 0.70
Orange	0.70 to 0.80
Red-Orange	0.80 to 0.90
Red	0.90 to 1.00
Dark Red	> 1.00

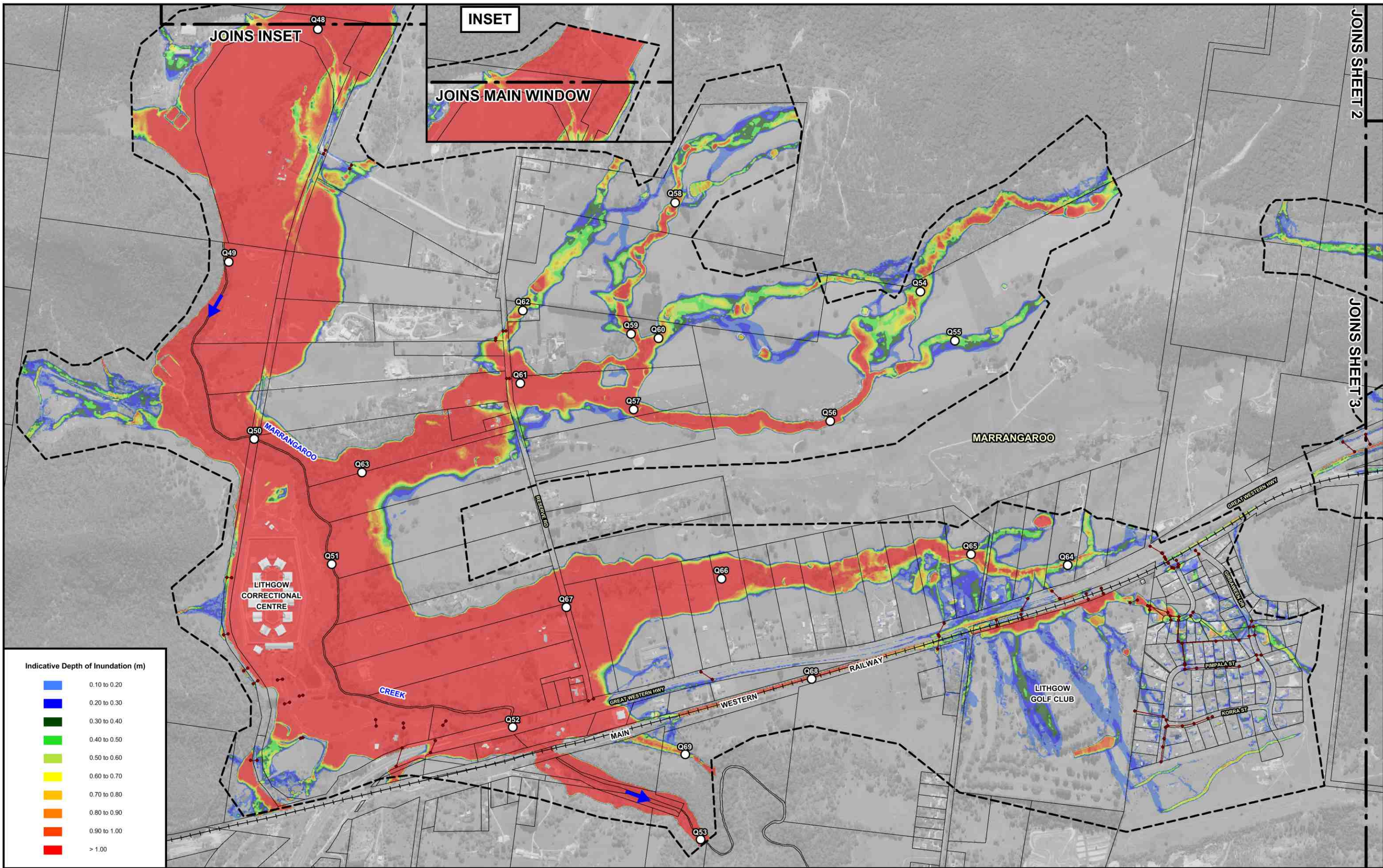
120 0 120 240 360 m  
Scale: 1:12,000

**NOTE:**  
The ground surface model incorporated in TUFLOW is based on LiDAR survey which has been sampled on a 3m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.  
Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

- LEGEND**
- Two-Dimensional Model Boundary
  - Modelled Stormwater Network
  - Peak Flow Location and Identifier (Refer Appendix F)
  - ▨ Extent of Recent Subdivision Development. Details of New Stormwater Drainage System have not been Incorporated in Farmers Creek TUFLOW Model.

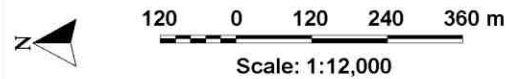
**LITHGOW FLOOD STUDY REVIEW**





Indicative Depth of Inundation (m)

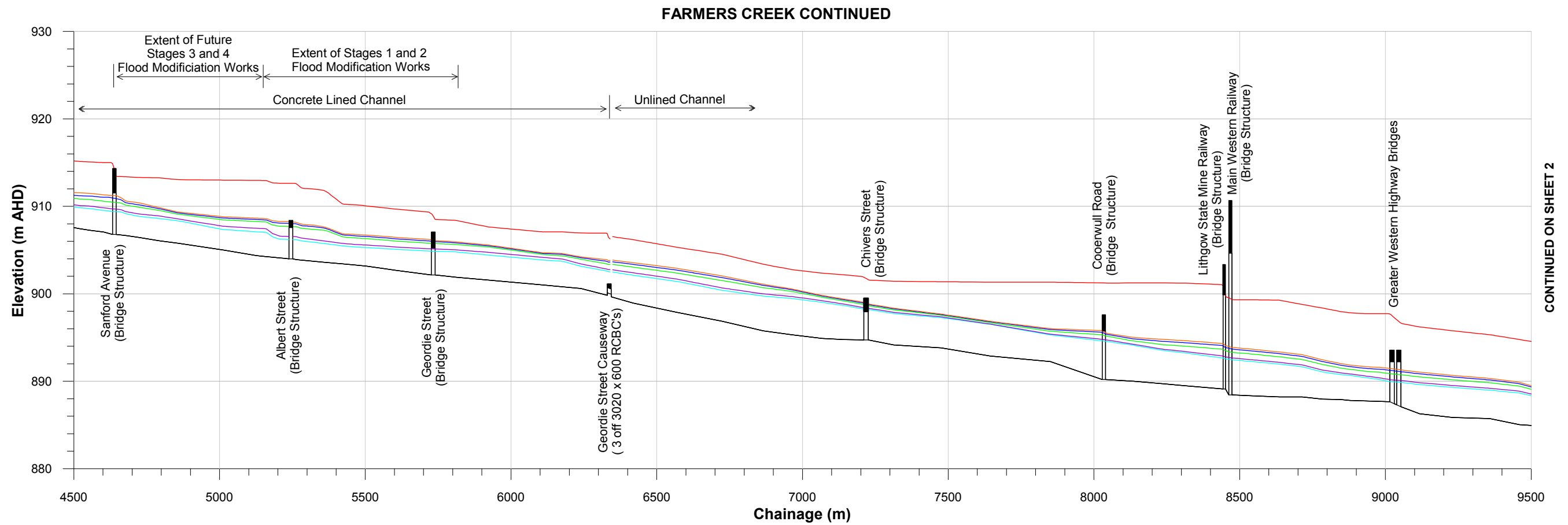
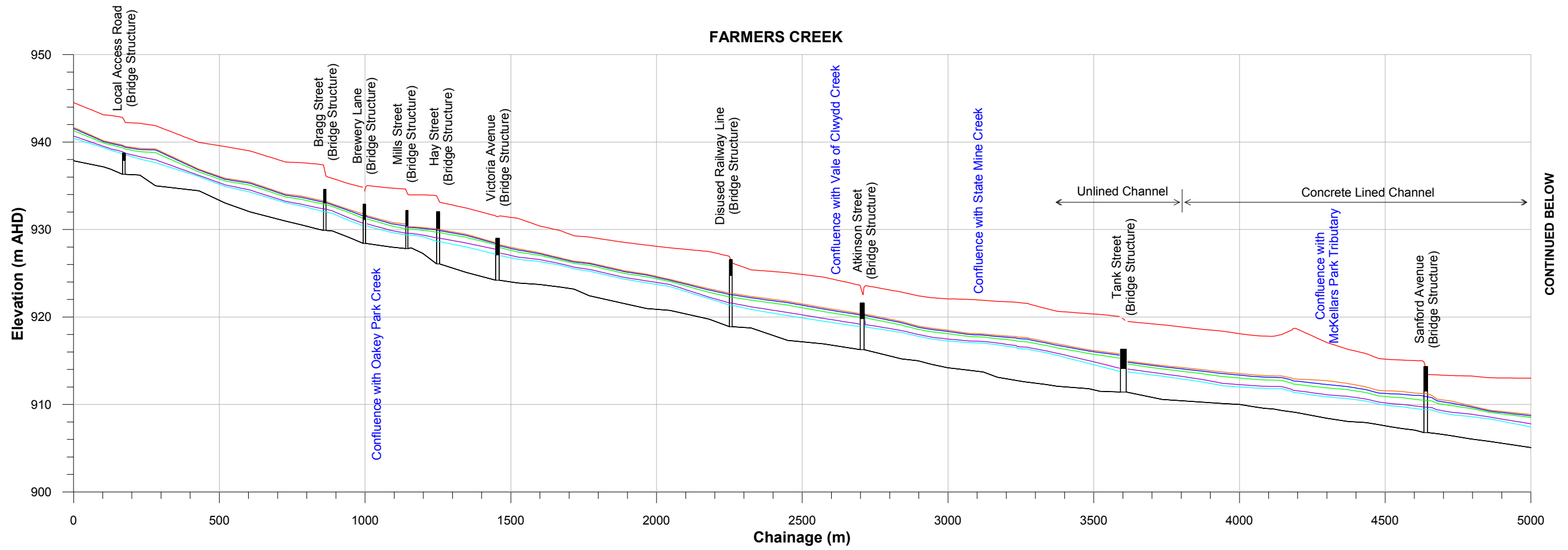
Blue	0.10 to 0.20
Dark Blue	0.20 to 0.30
Green	0.30 to 0.40
Light Green	0.40 to 0.50
Yellow-Green	0.50 to 0.60
Yellow	0.60 to 0.70
Orange	0.70 to 0.80
Dark Orange	0.80 to 0.90
Red-Orange	0.90 to 1.00
Red	> 1.00



**NOTE:**  
 The ground surface model incorporated in TUFLOW is based on LiDAR survey which has been sampled on a 3m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.  
 Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

- LEGEND**
- Two-Dimensional Model Boundary
  - Modelled Stormwater Network
  - Peak Flow Location and Identifier (Refer Appendix F)

JOINS SHEET 2  
 JOINS SHEET 3



**LEGEND**

- PMF
- 200 year ARI
- 100 year ARI
- 50 year ARI
- 10 year ARI
- 5 year ARI

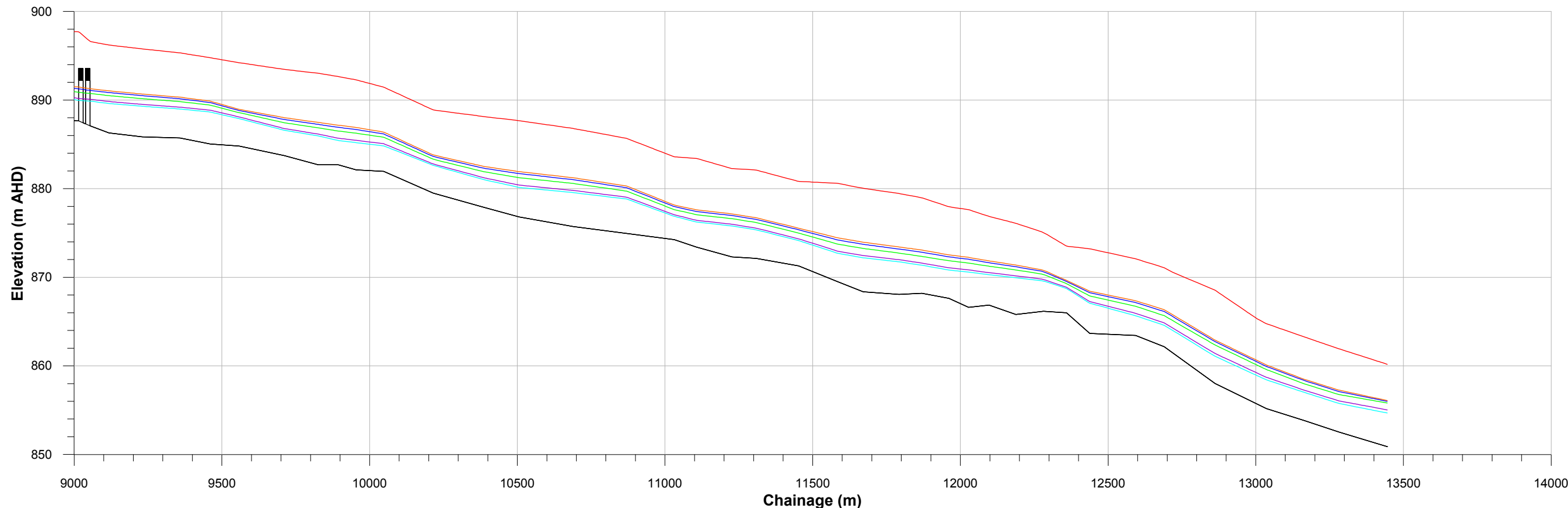
**LITHGOW FLOOD STUDY REVIEW**

Figure 6.7  
(Sheet 1 of 3)

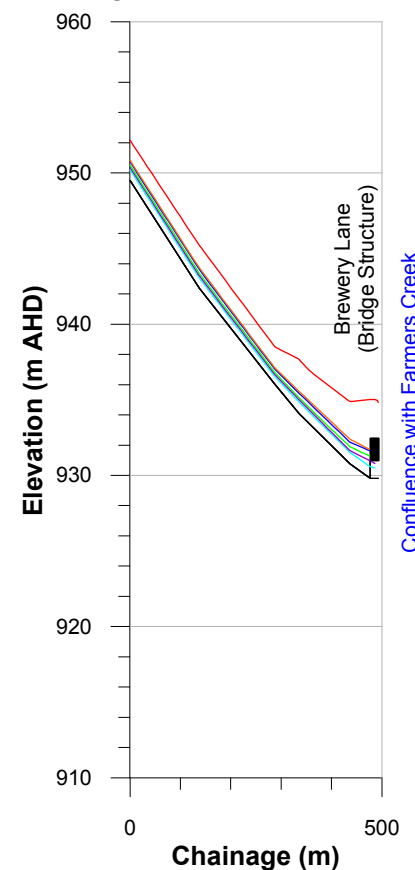
WATER SURFACE PROFILES  
DESIGN STORM EVENTS



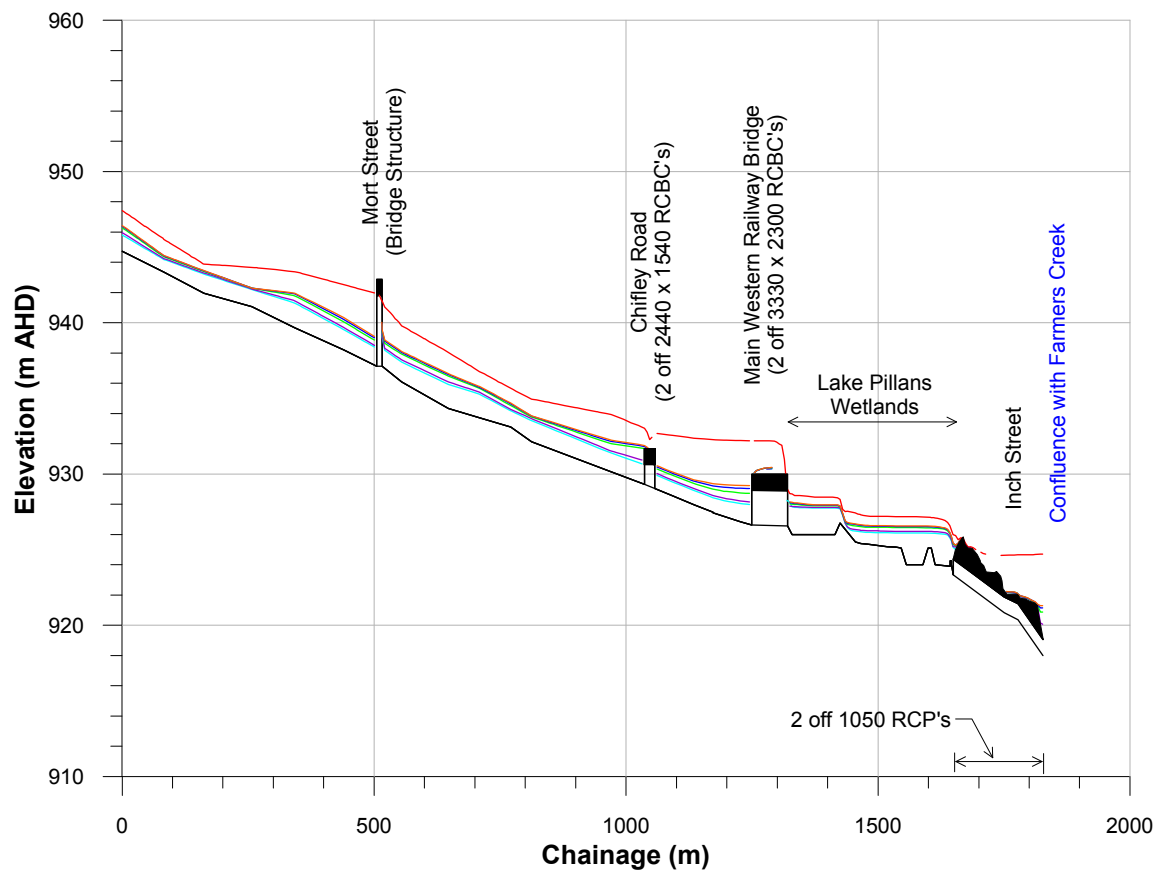
FARMERS CREEK CONTINUED



OAKLEY PARK CREEK



VALE OF CLWYDD CREEK



LEGEND

- PMF
- 200 year ARI
- 100 year ARI
- 50 year ARI
- 10 year ARI
- 5 year ARI

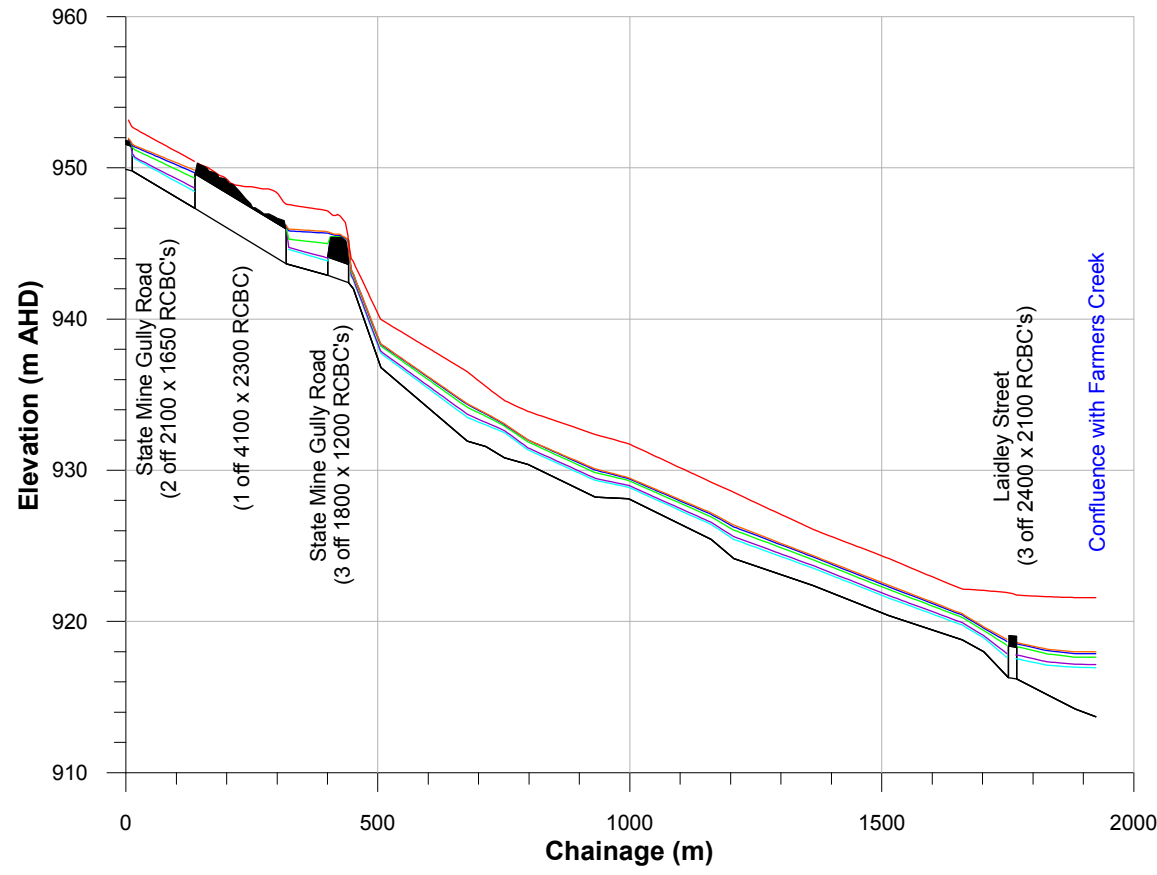
LITHGOW FLOOD STUDY REVIEW

Figure 6.7  
(Sheet 2 of 3)

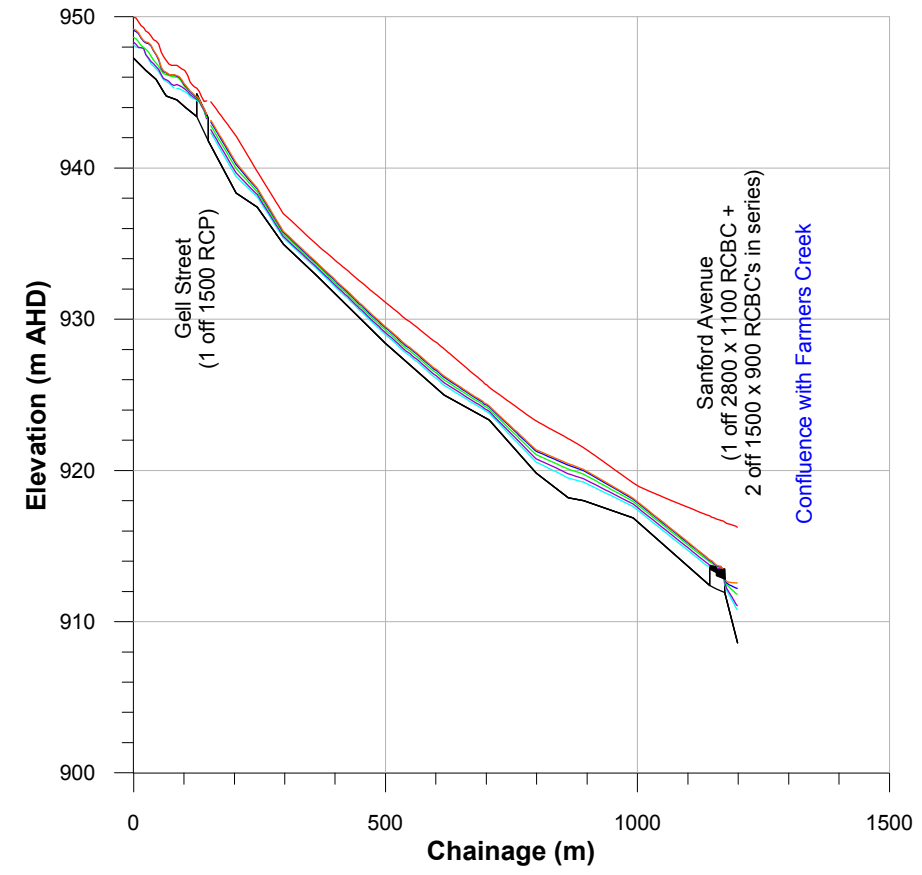
WATER SURFACE PROFILES  
DESIGN STORM EVENTS



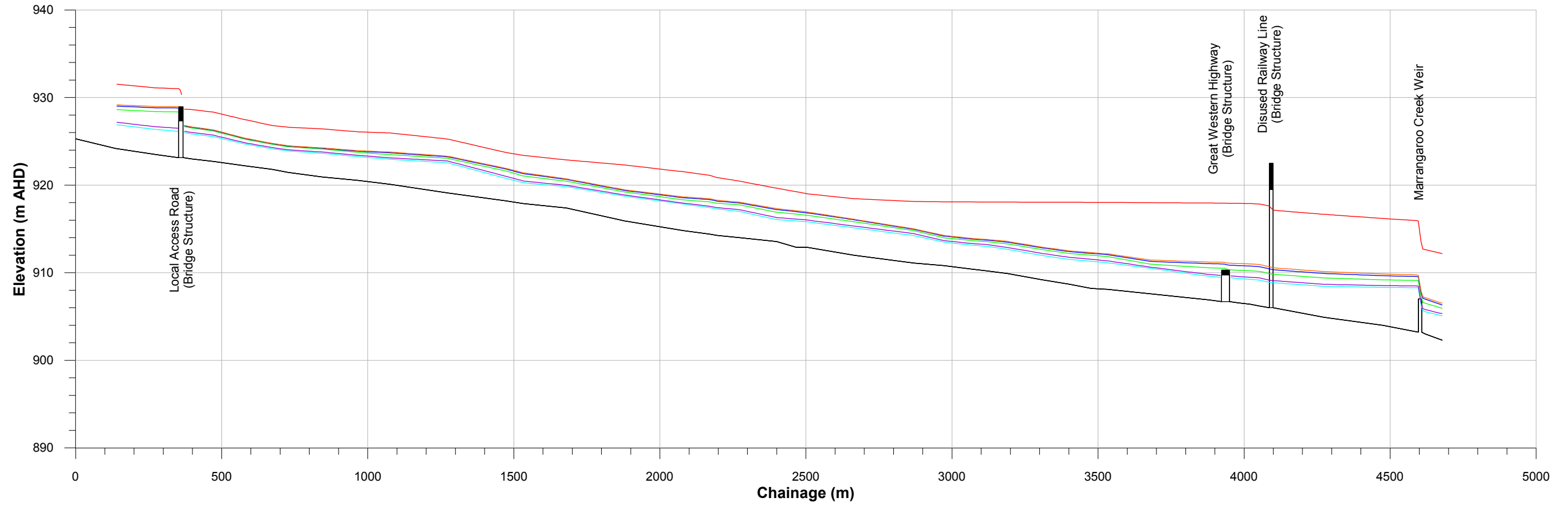
**STATE MINE CREEK**



**MCKELLARS PARK TRIBUTARY**



**MARRANGAROO CREEK**



**LEGEND**

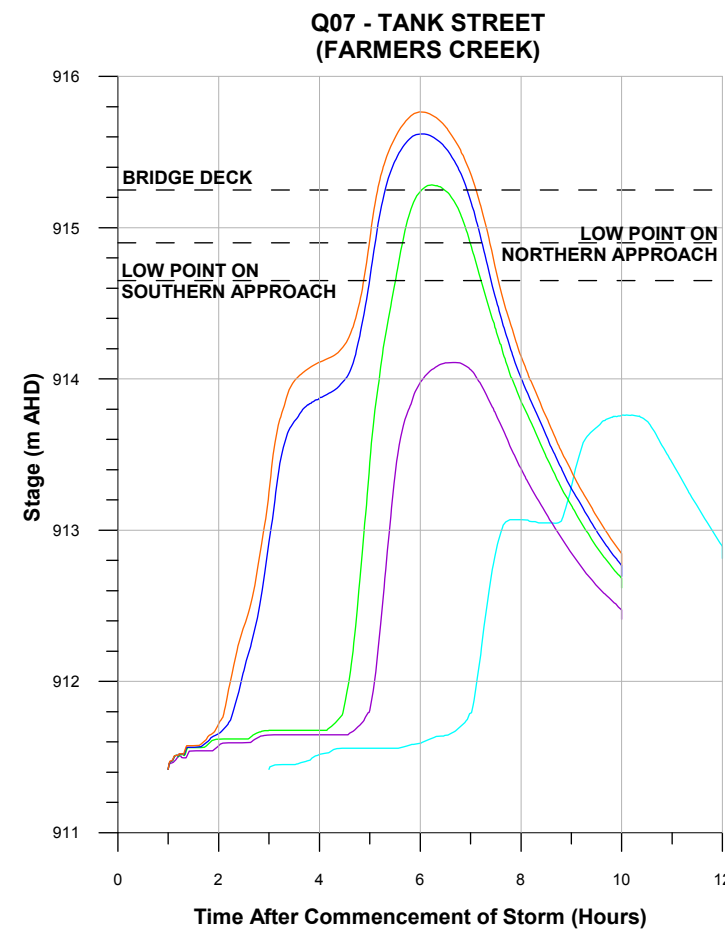
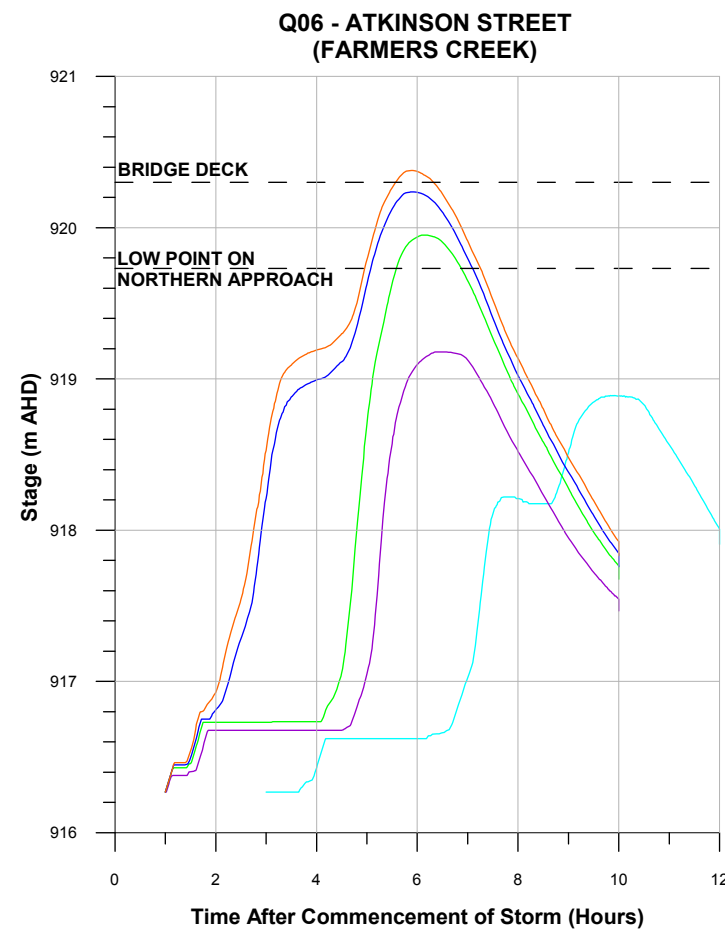
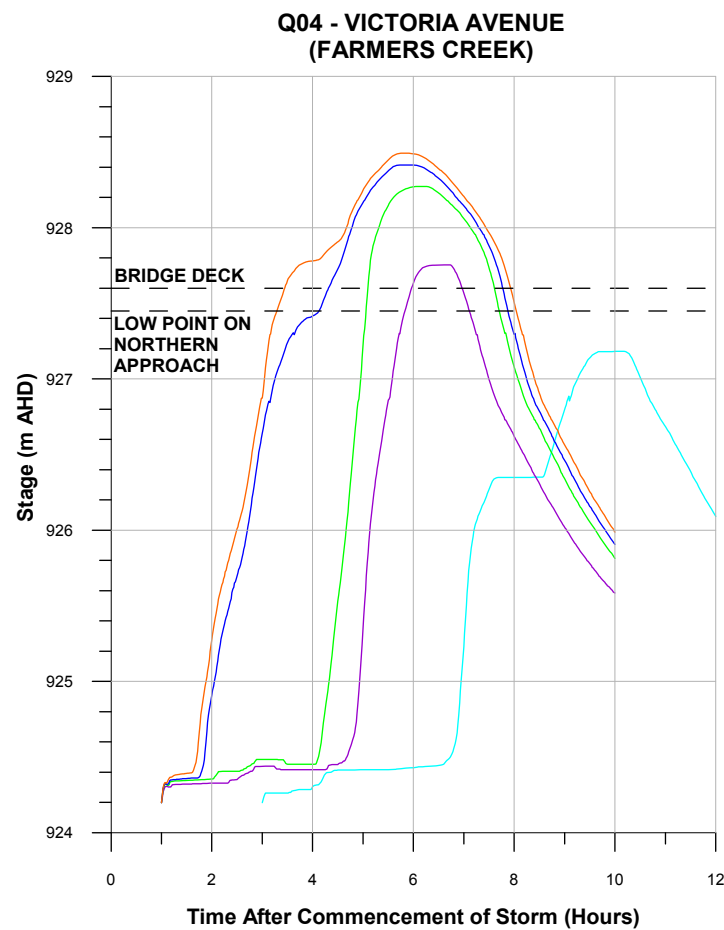
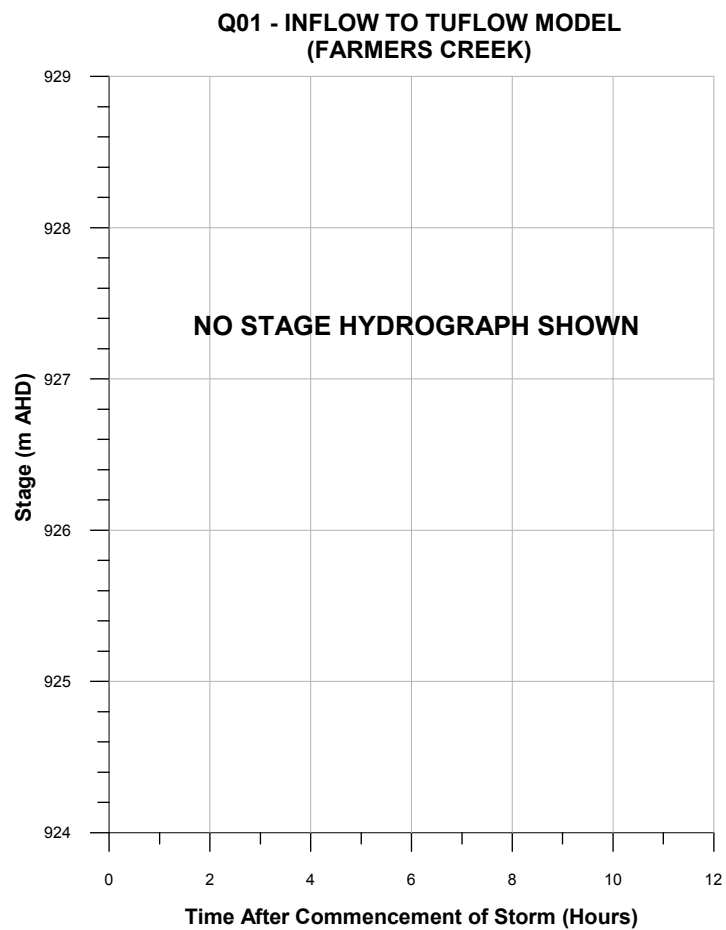
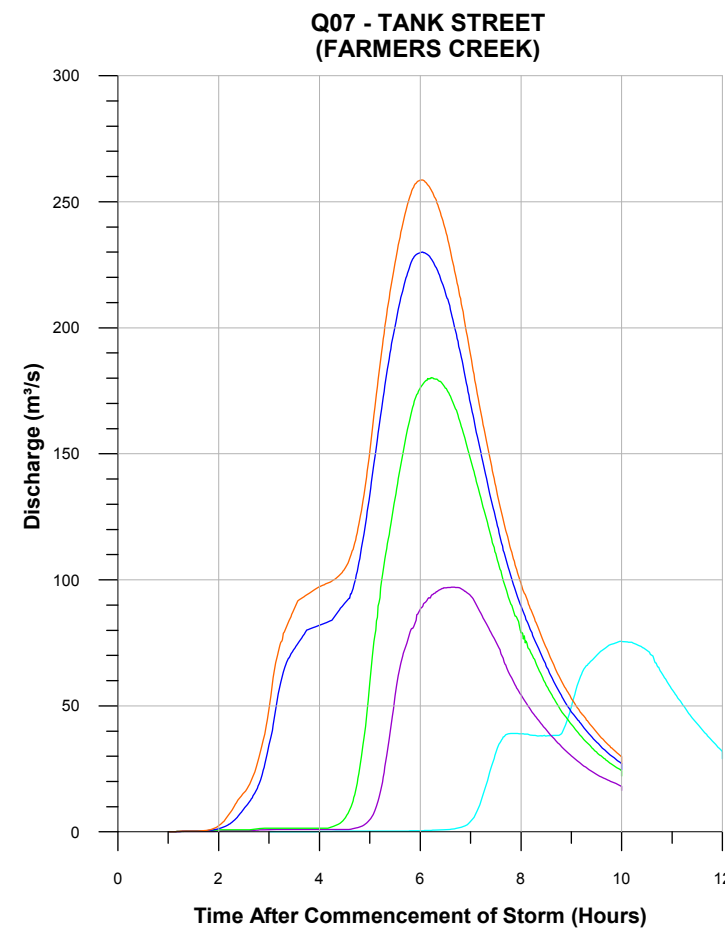
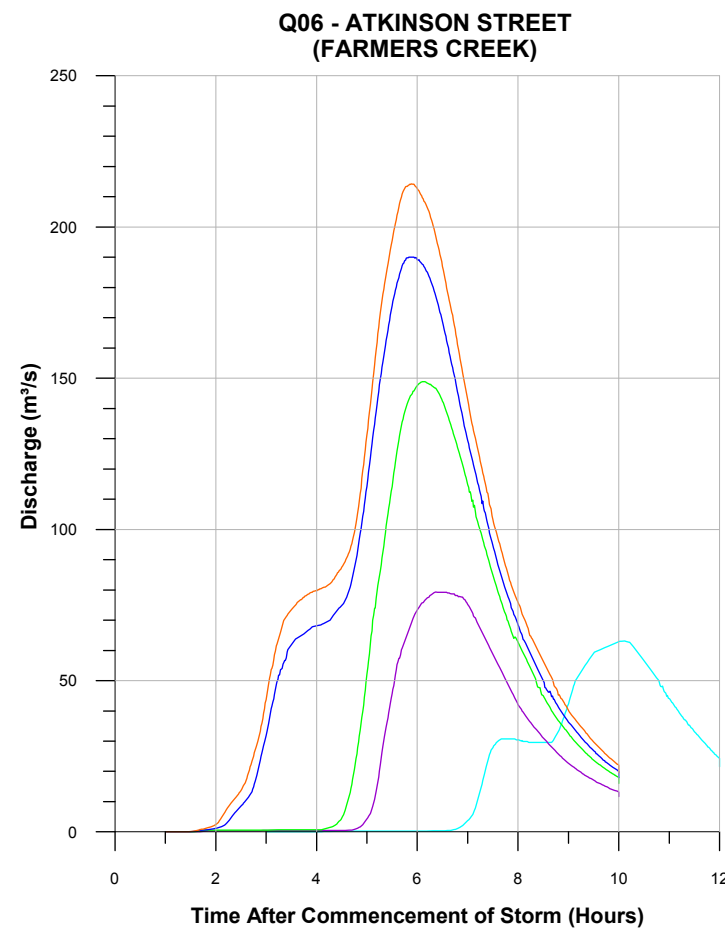
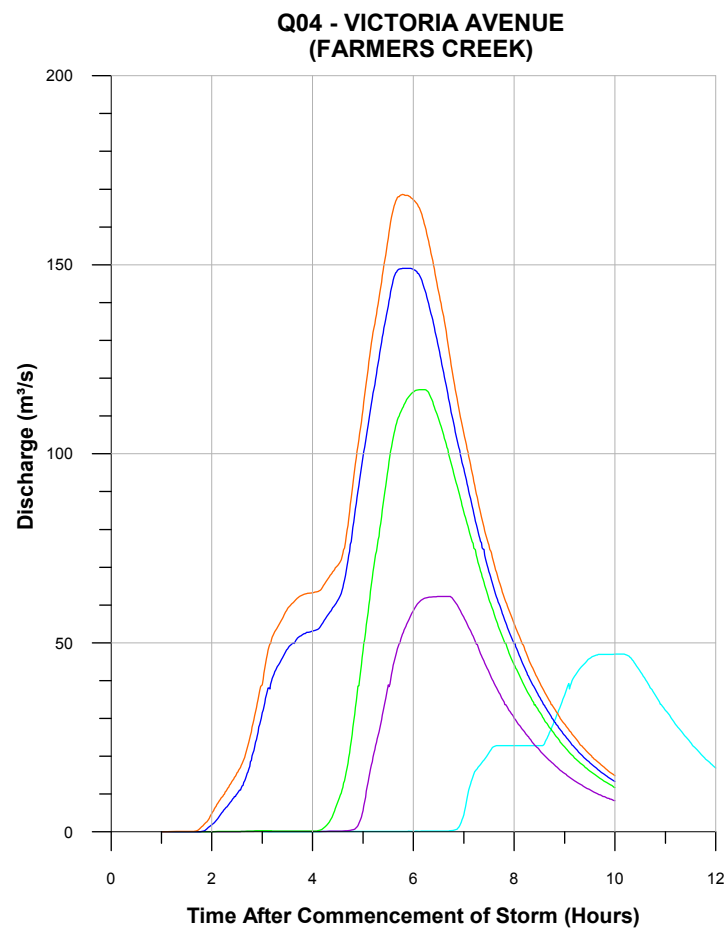
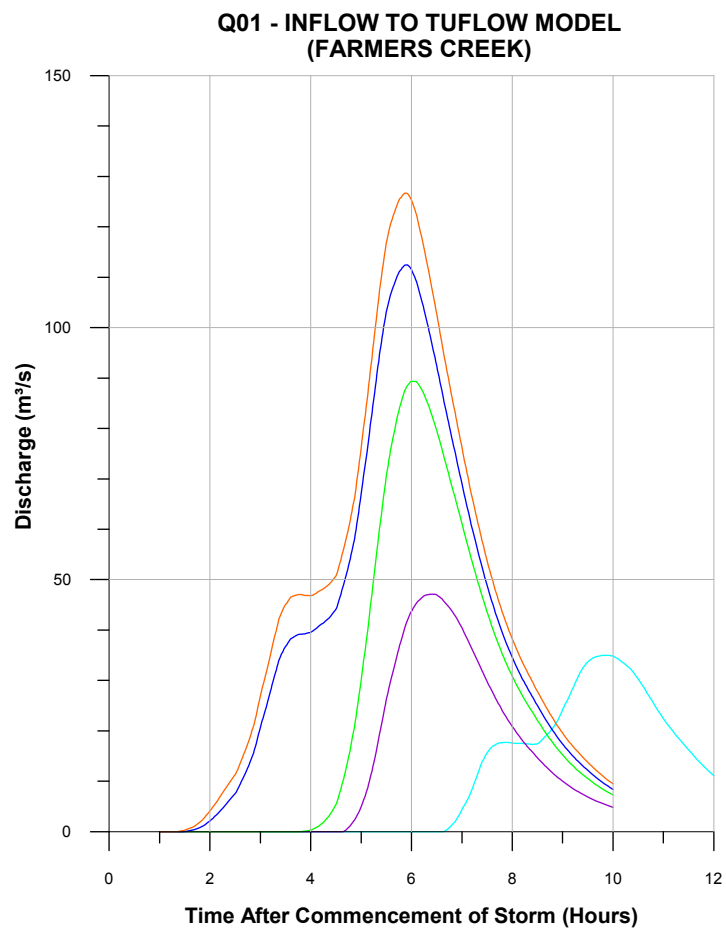
- PMF
- 200 year ARI
- 100 year ARI
- 50 year ARI
- 10 year ARI
- 5 year ARI

**LITHGOW FLOOD STUDY REVIEW**

Figure 6.7  
(Sheet 3 of 3)

WATER SURFACE PROFILES  
DESIGN STORM EVENTS



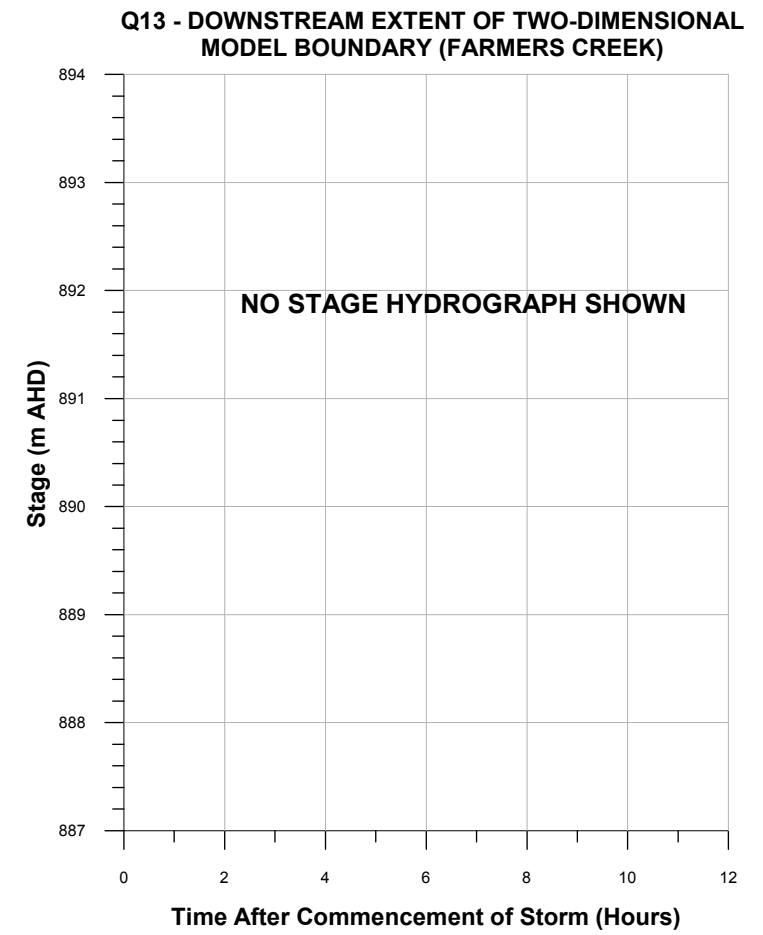
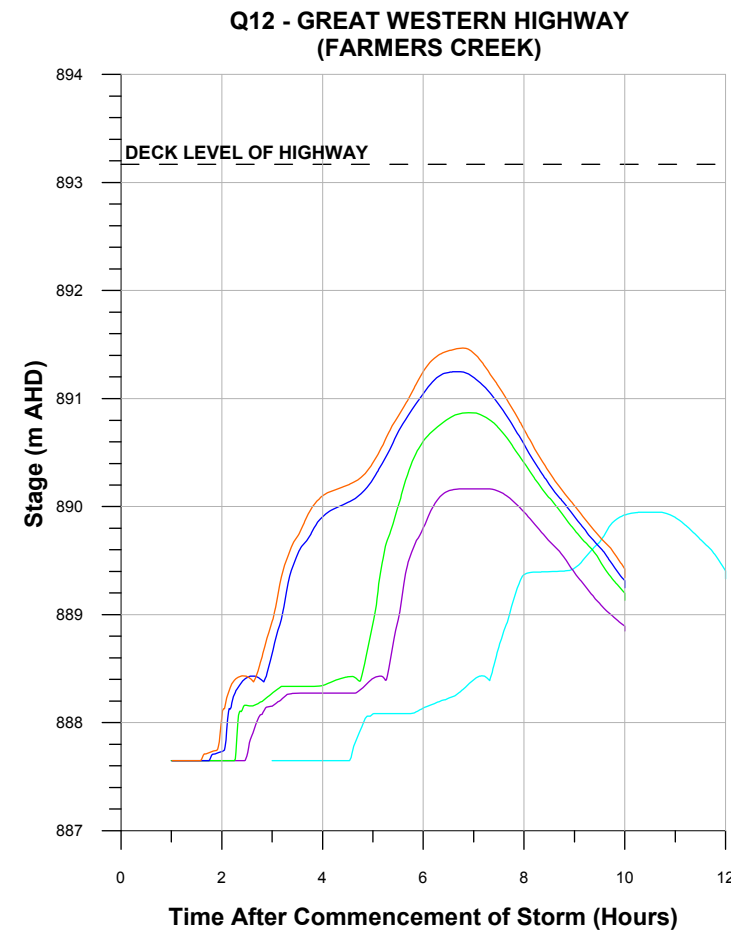
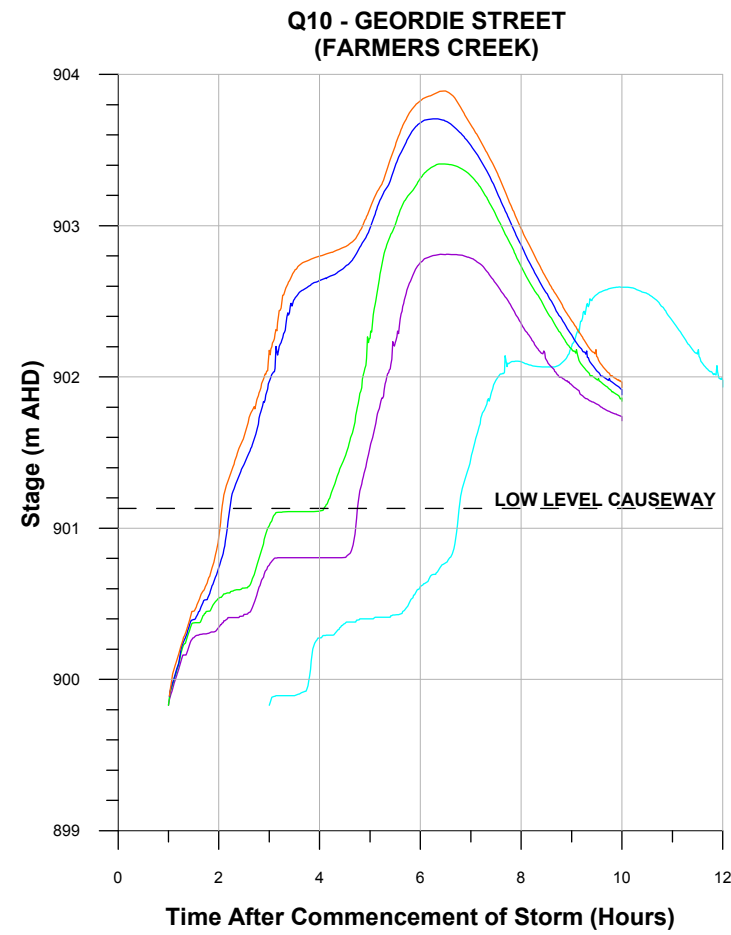
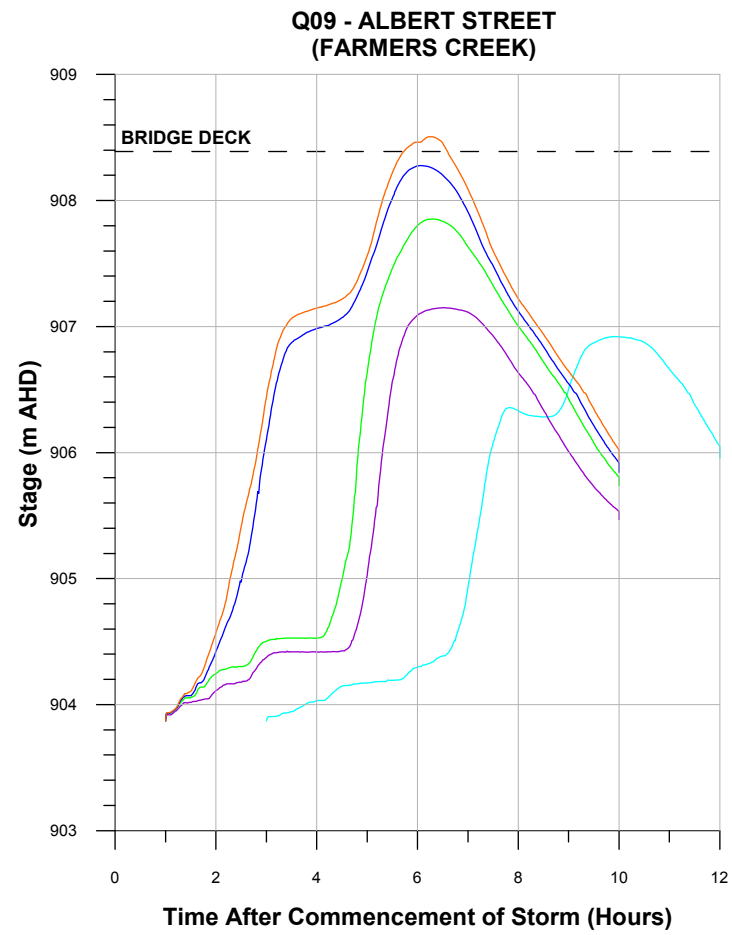
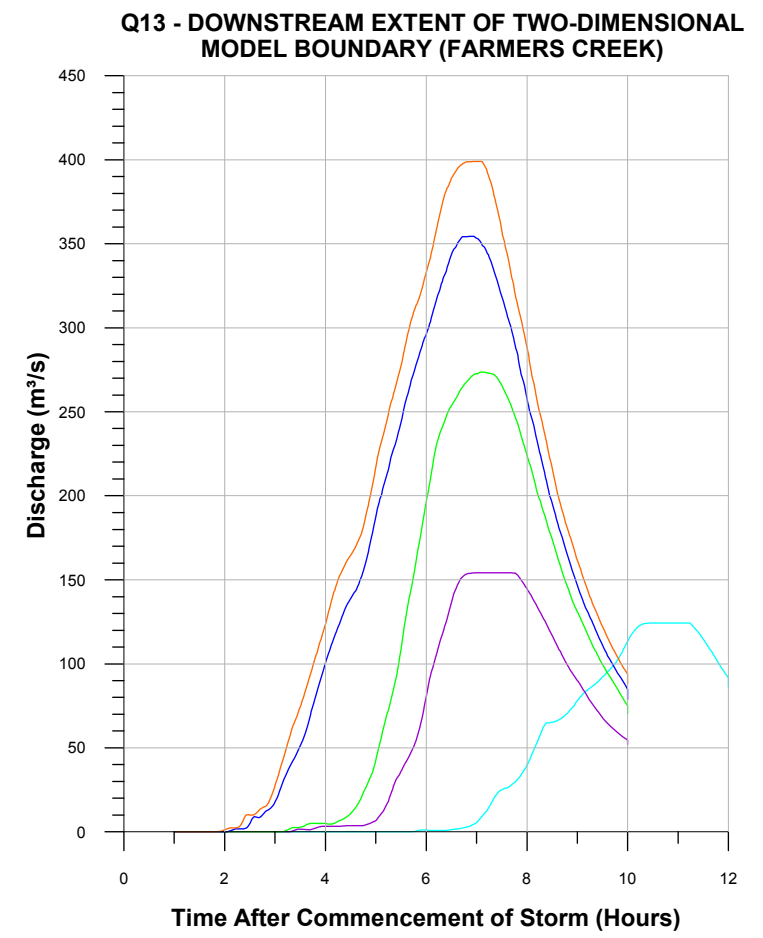
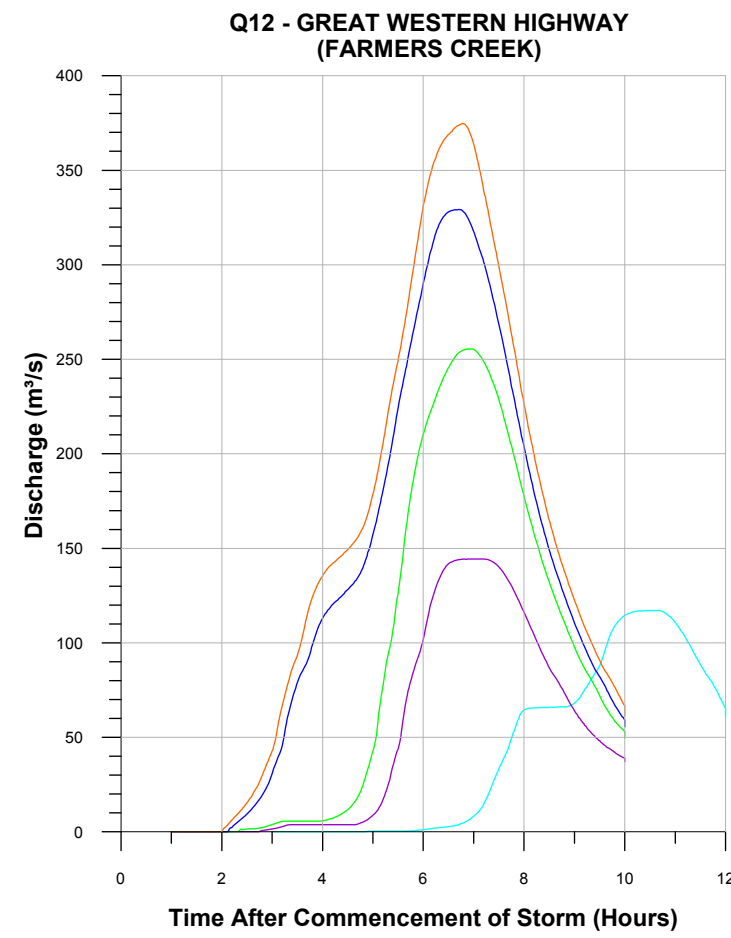
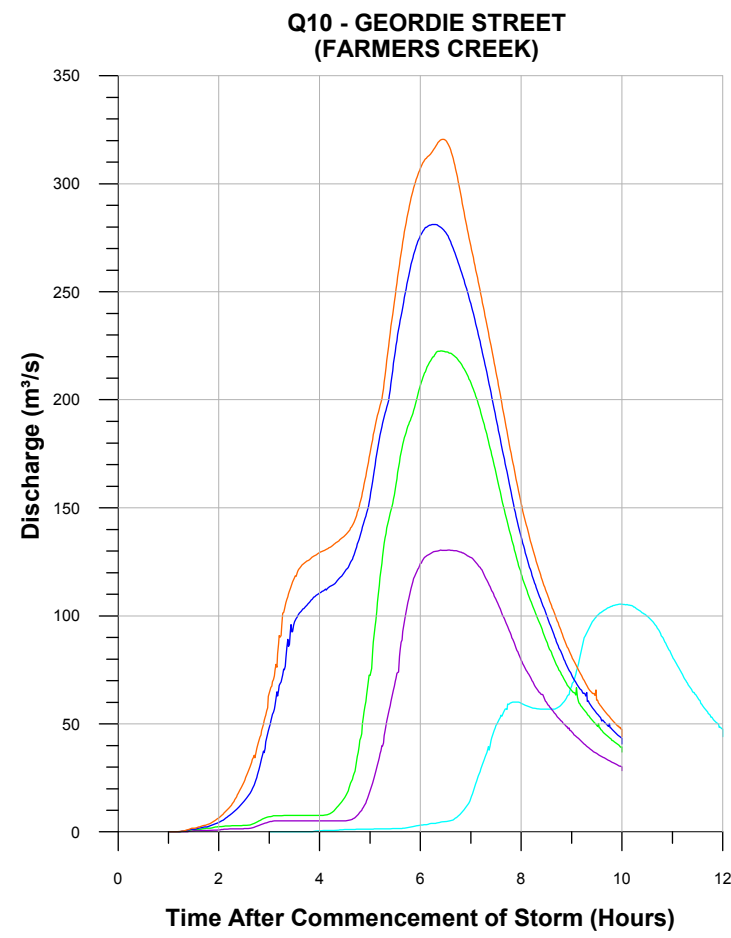
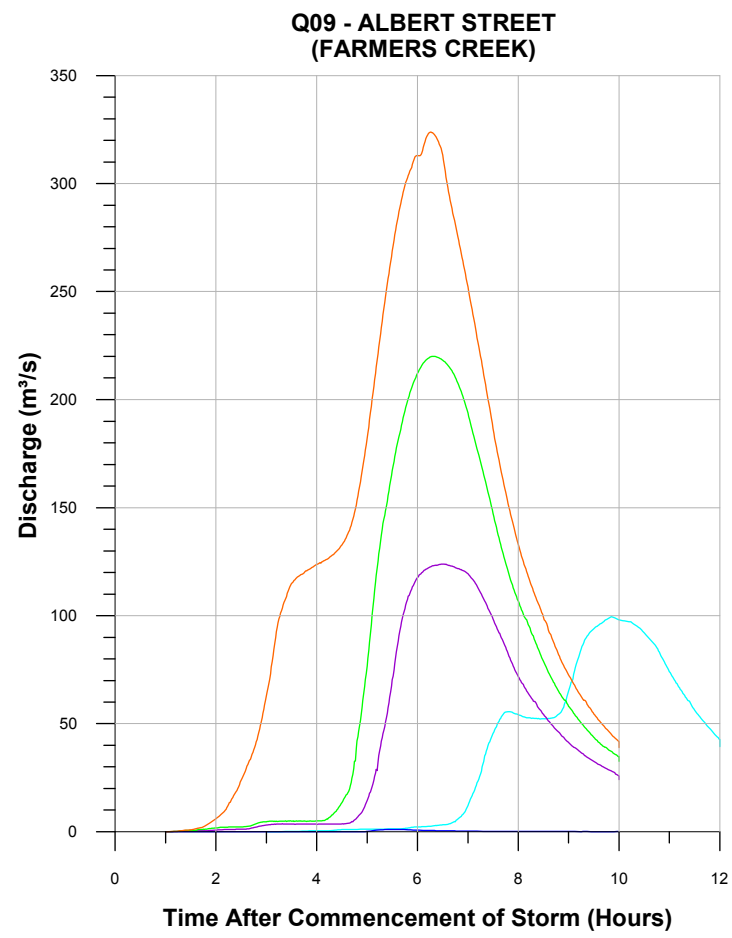


**LEGEND**

- 200 year ARI
- 100 year ARI
- 50 year ARI
- 10 year ARI
- 5 year ARI

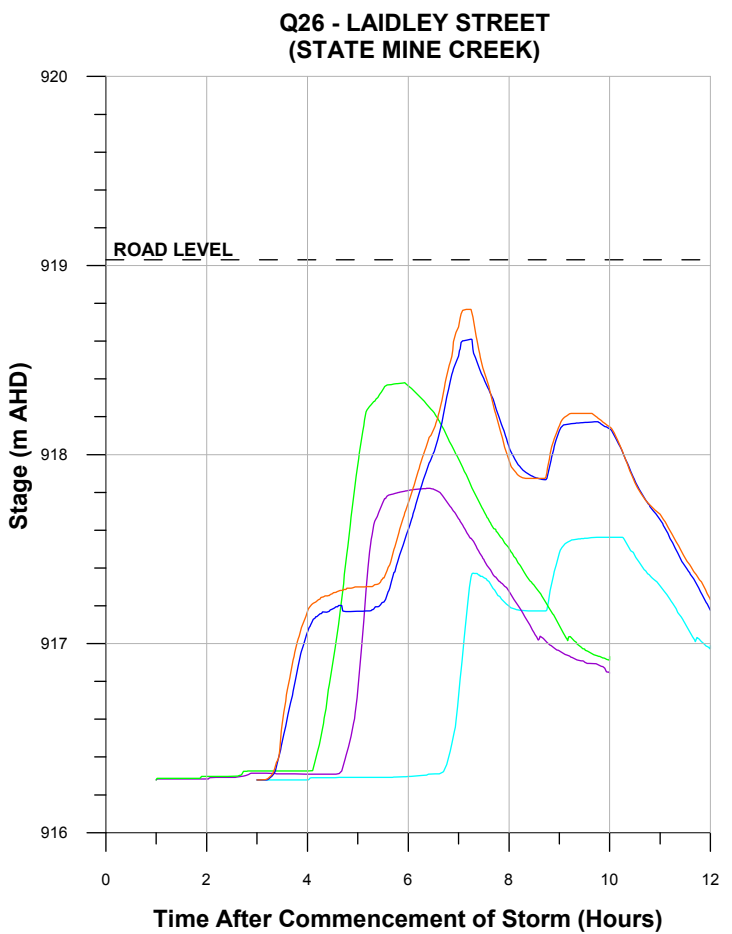
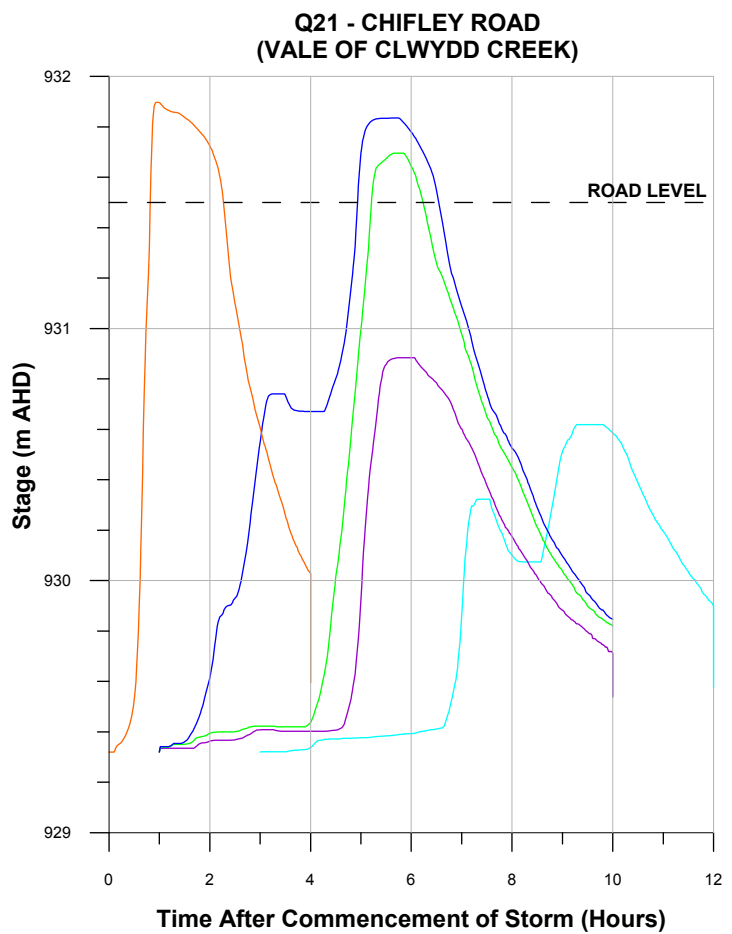
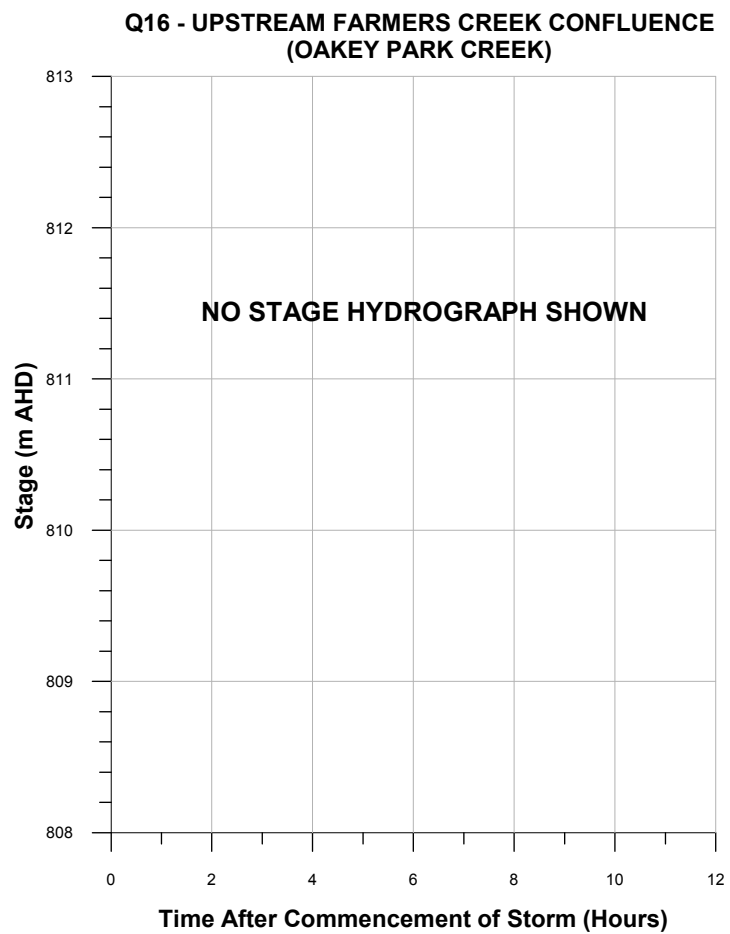
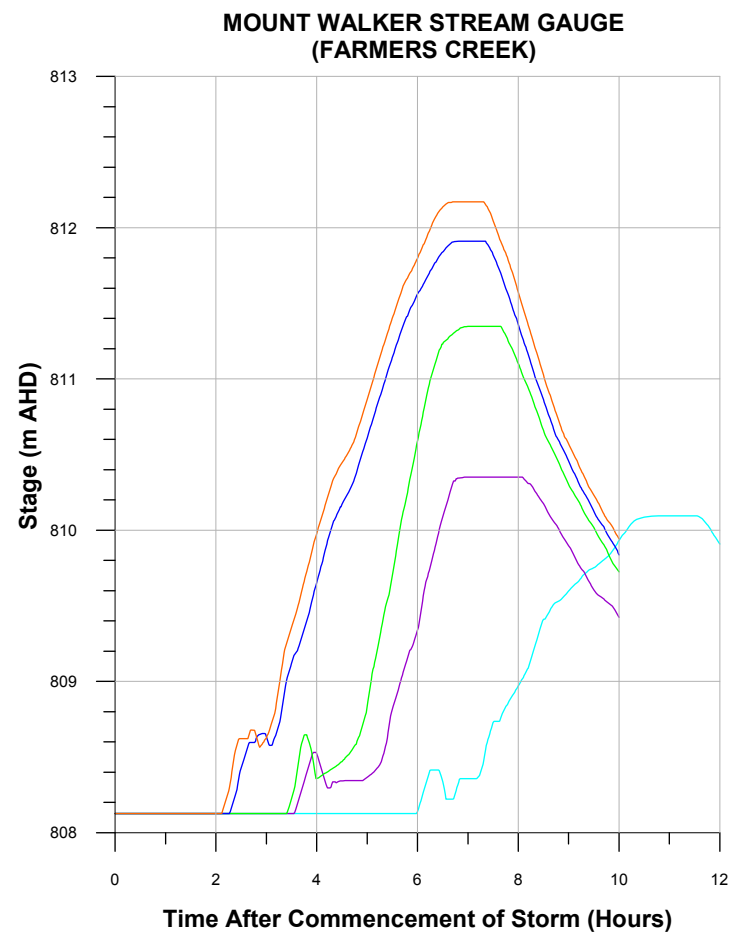
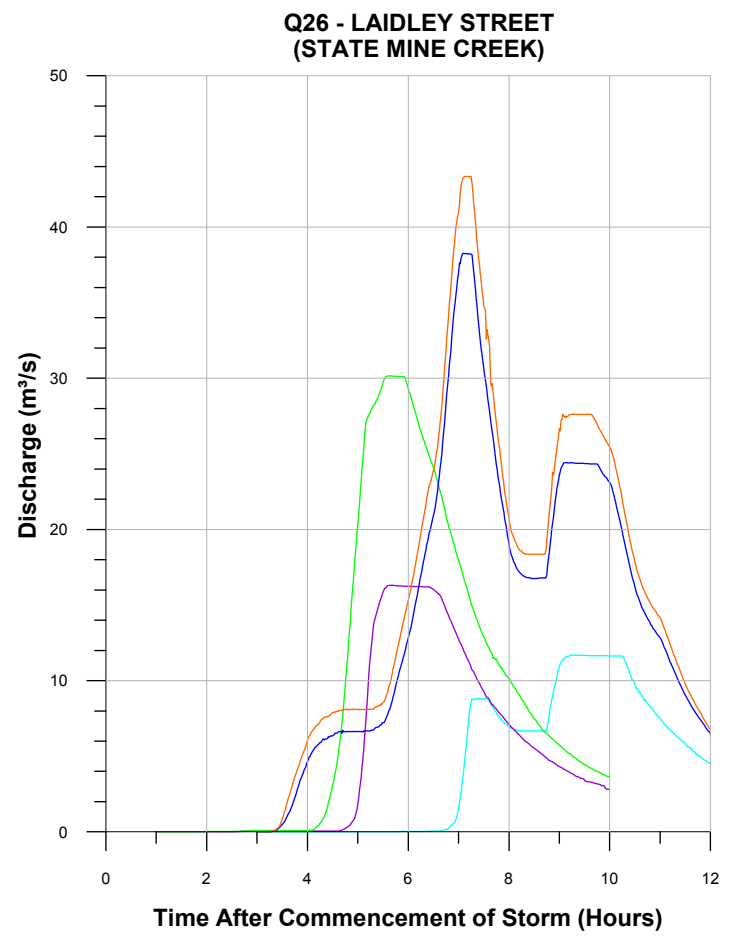
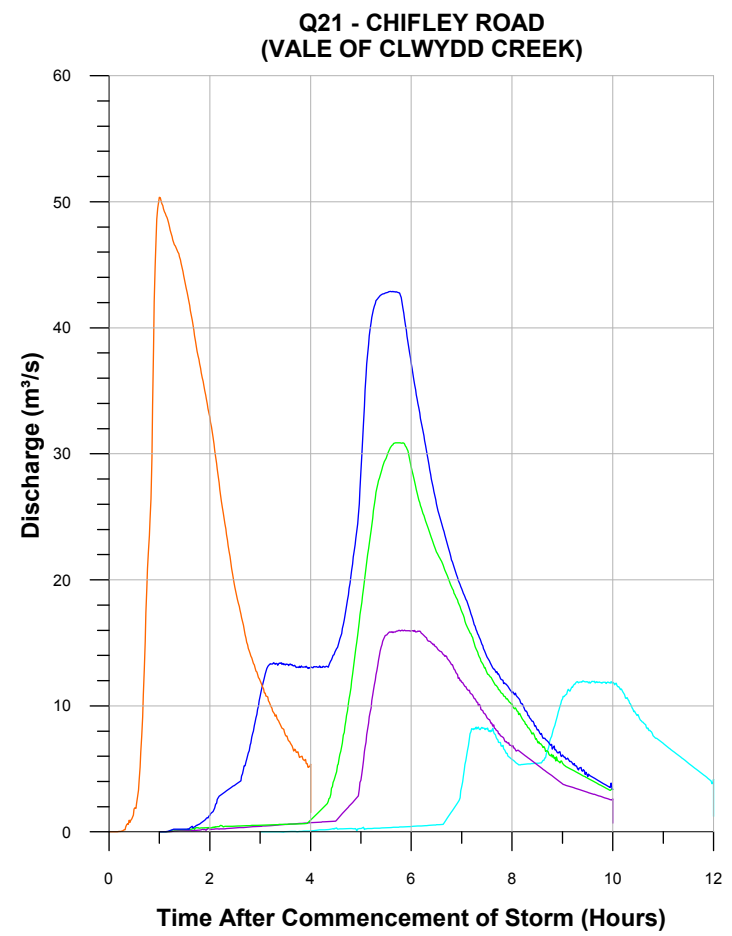
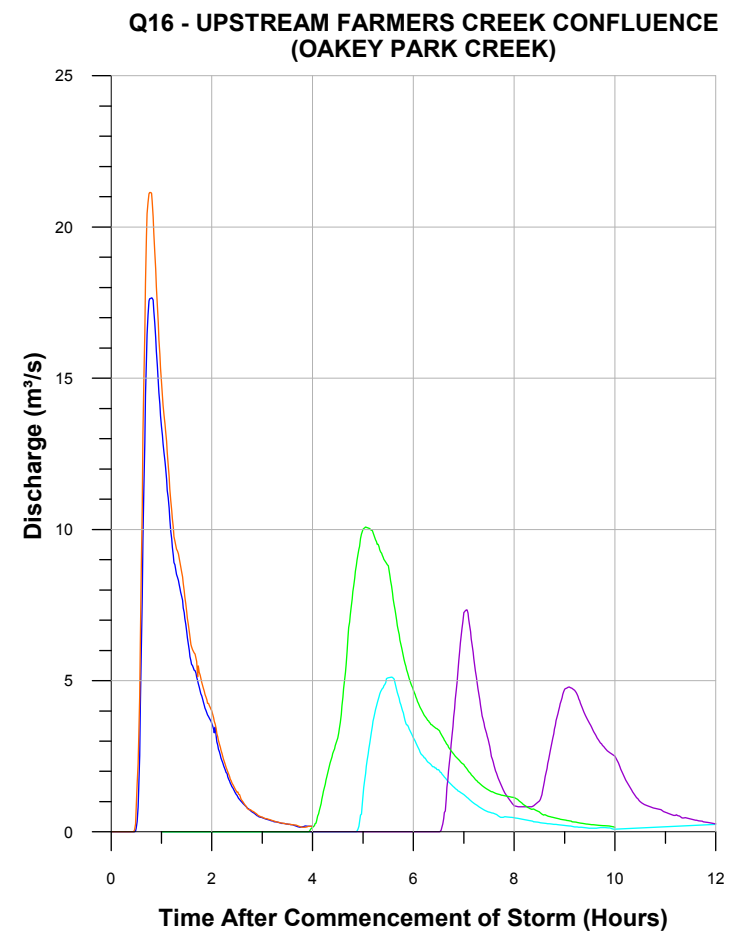
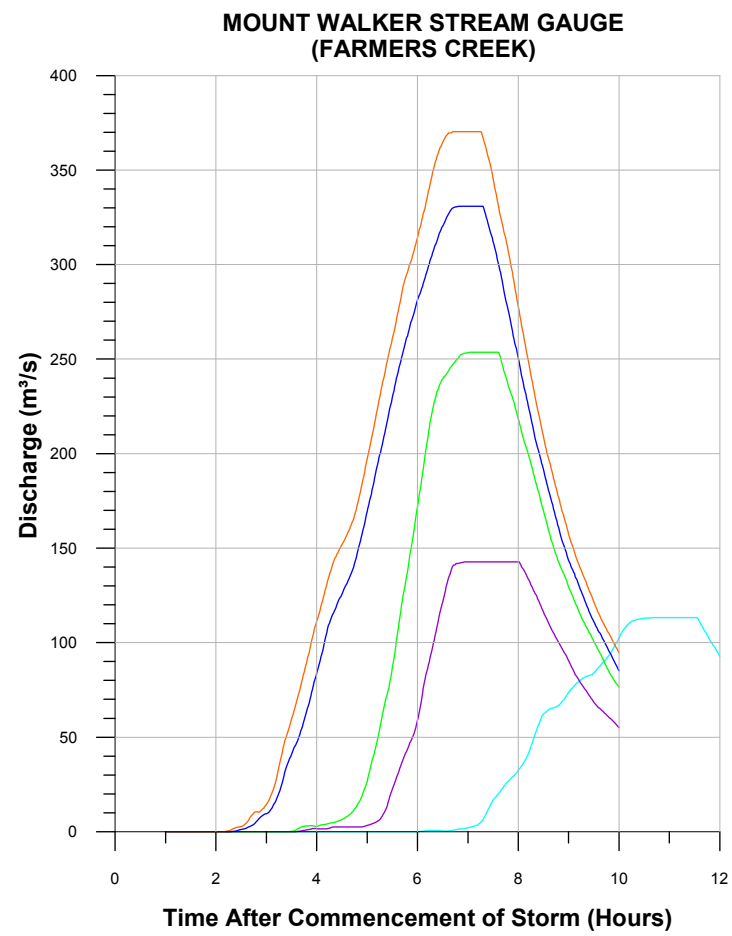
**NOTE:**  
Refer table F1 for duration of critical storm.





**NOTE:**  
Refer table F1 for duration of critical storm.

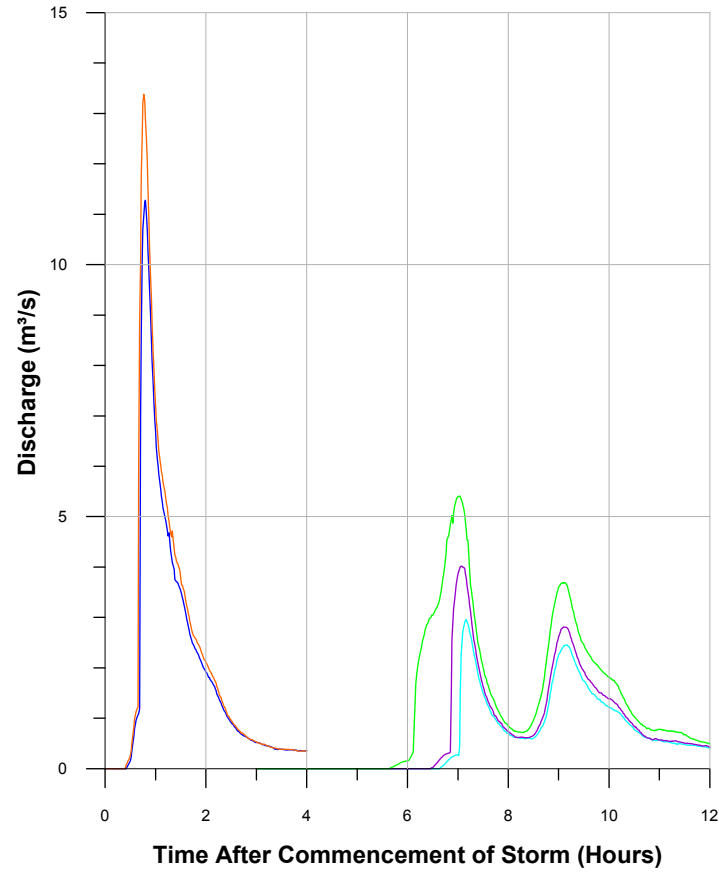




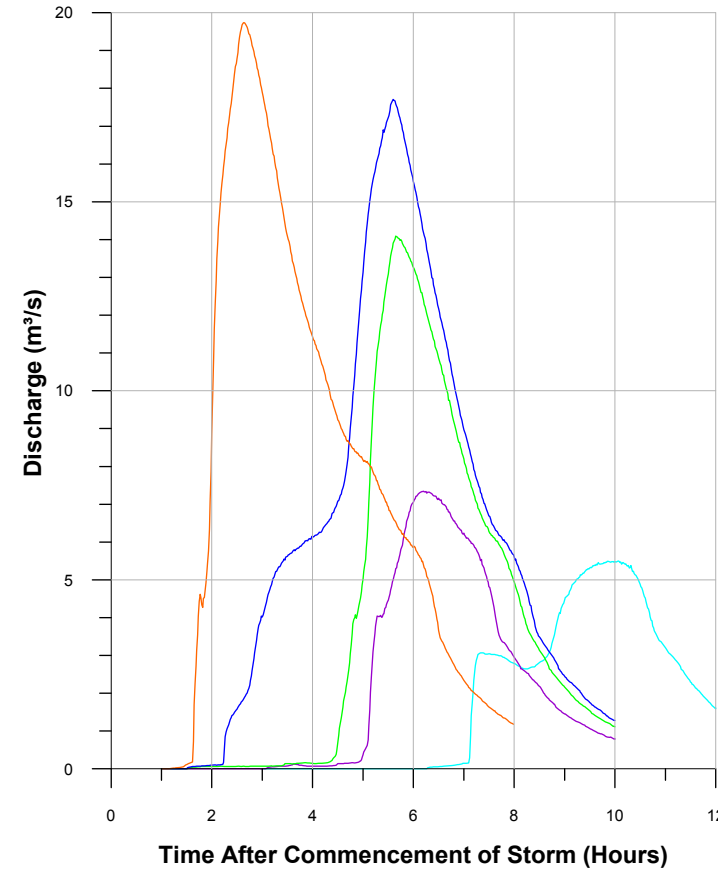
**NOTE:**  
Refer table F1 for duration of critical storm.



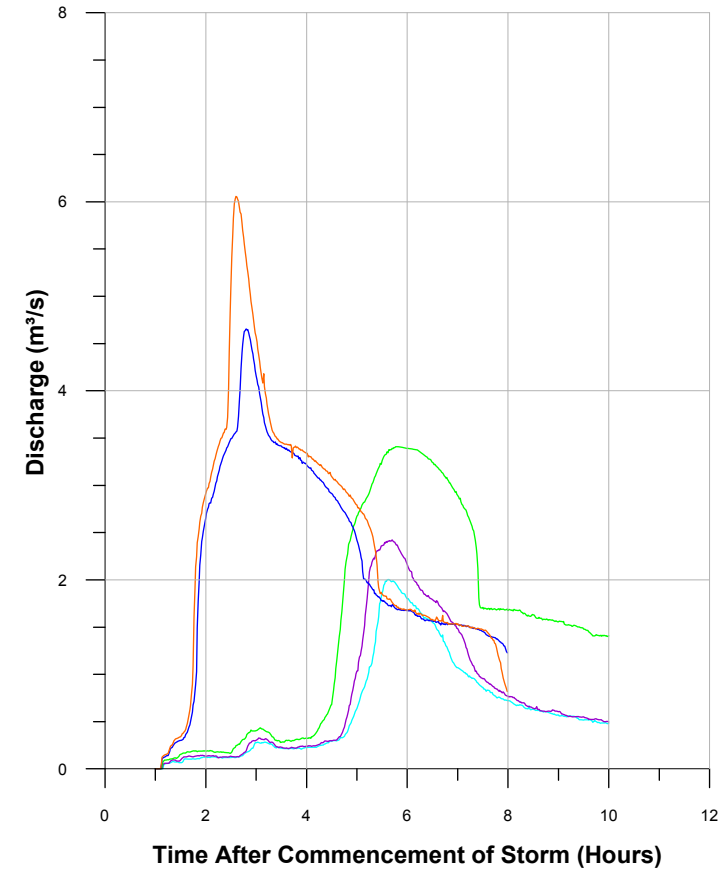
**Q27 - LITHGOW HIGH SCHOOL  
(UNNAMED TRIBUTARY)**



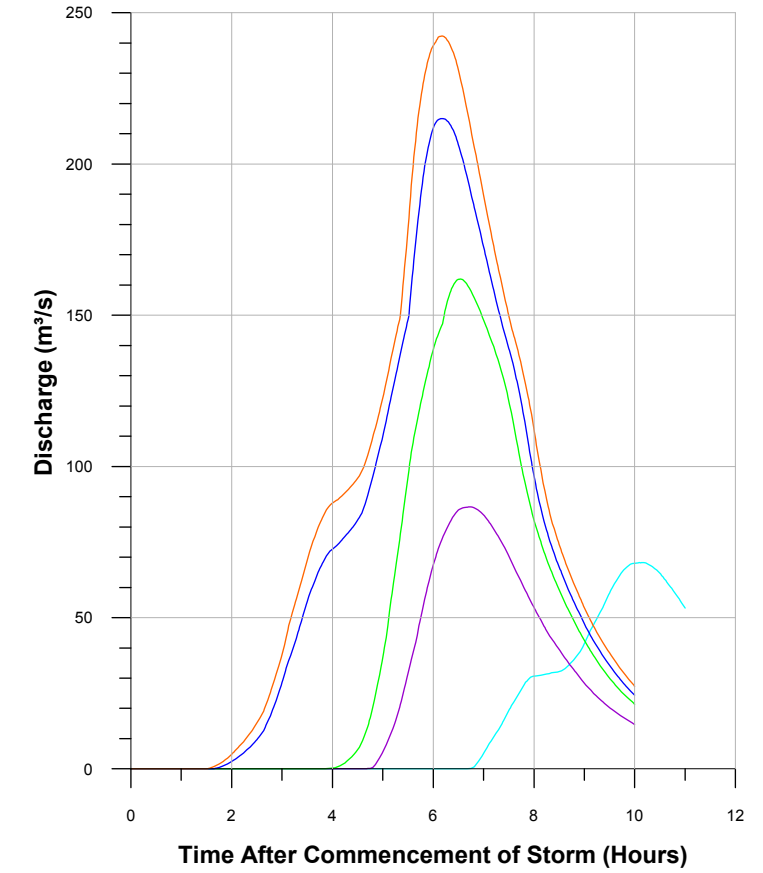
**Q33 - UPSTREAM VALLEY DRIVE  
(SHEEDYS GULLY TRIBUTARY)**



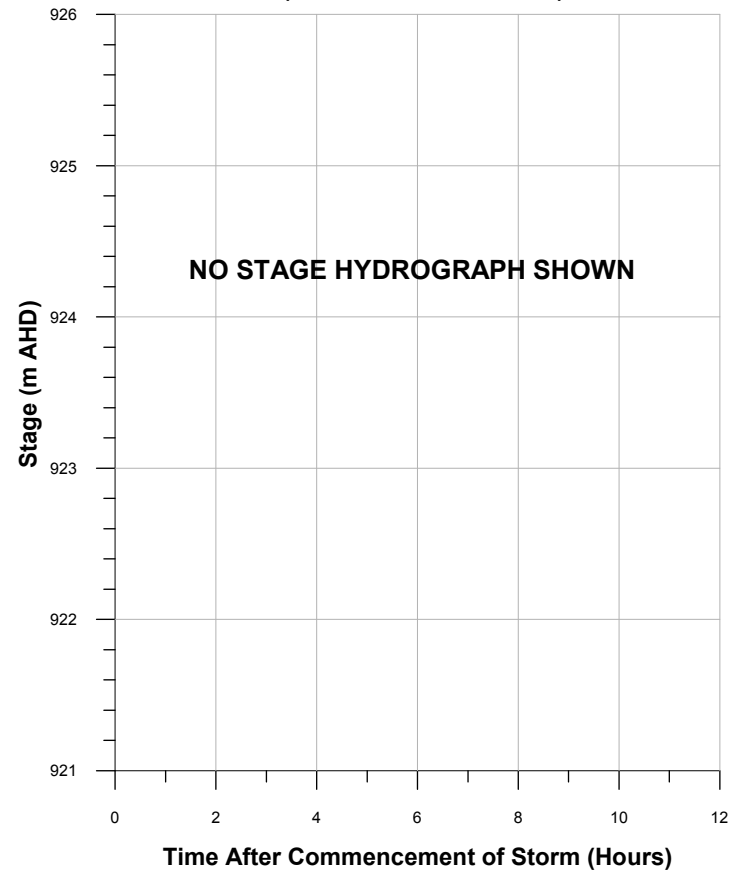
**GREAT WESTERN HIGHWAY  
(GOOD LUCK HOLLOW)**



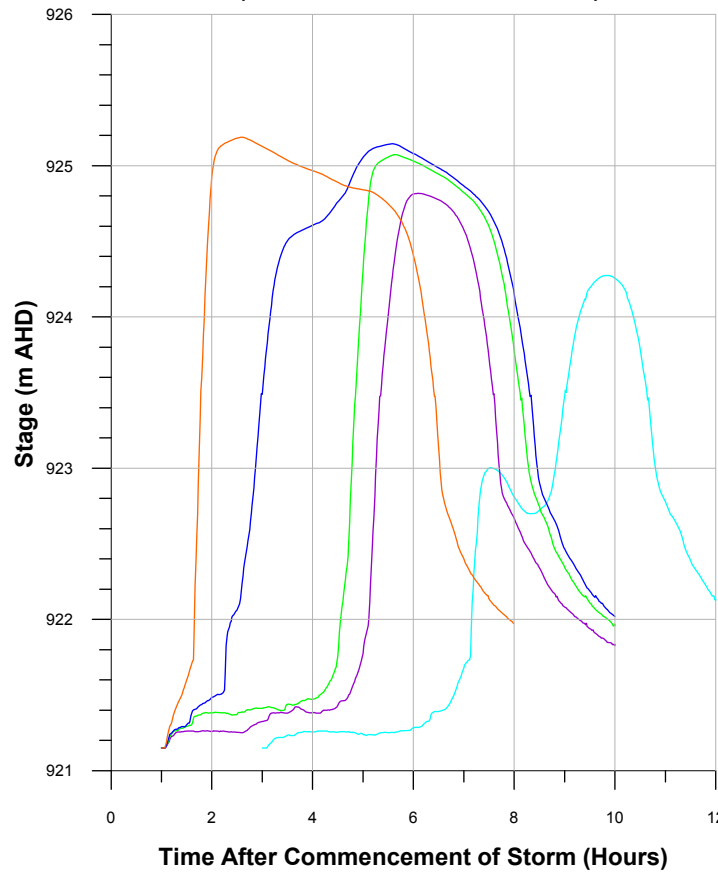
**Q48 - LOCAL ACCESS ROAD  
(MARRANGAROO CREEK)**



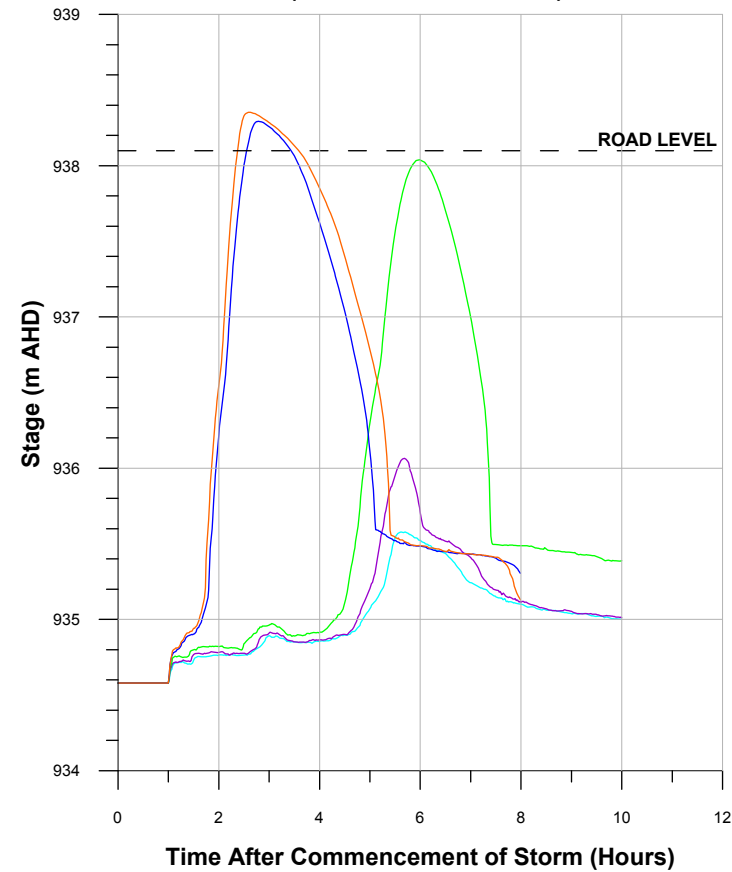
**Q27 - LITHGOW HIGH SCHOOL  
(UNNAMED TRIBUTARY)**



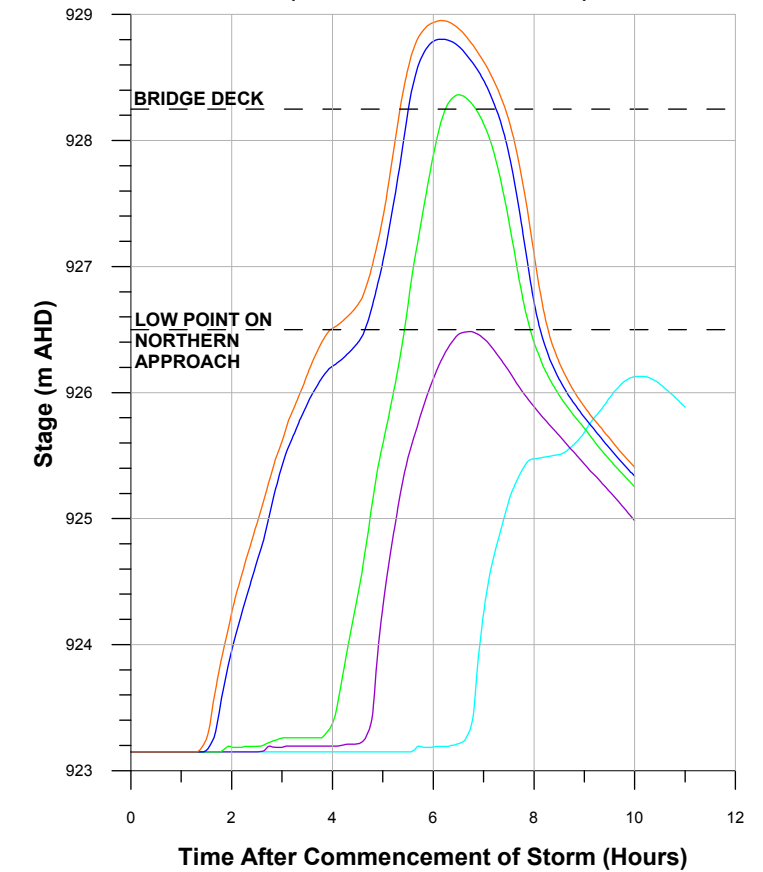
**Q33 - UPSTREAM VALLEY DRIVE  
(SHEEDYS GULLY TRIBUTARY)**



**GREAT WESTERN HIGHWAY  
(GOOD LUCK HOLLOW)**



**Q48 - LOCAL ACCESS ROAD  
(MARRANGAROO CREEK)**



**LEGEND**

- 200 year ARI
- 100 year ARI
- 50 year ARI
- 10 year ARI
- 5 year ARI

**NOTE:**  
Refer table F1 for duration  
of critical storm.

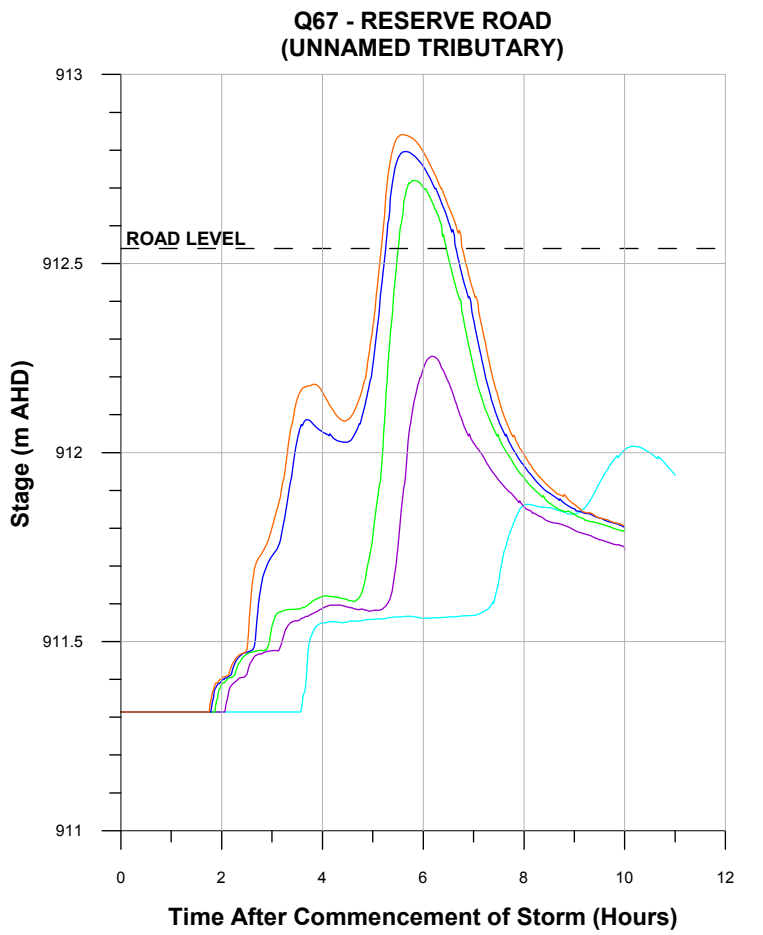
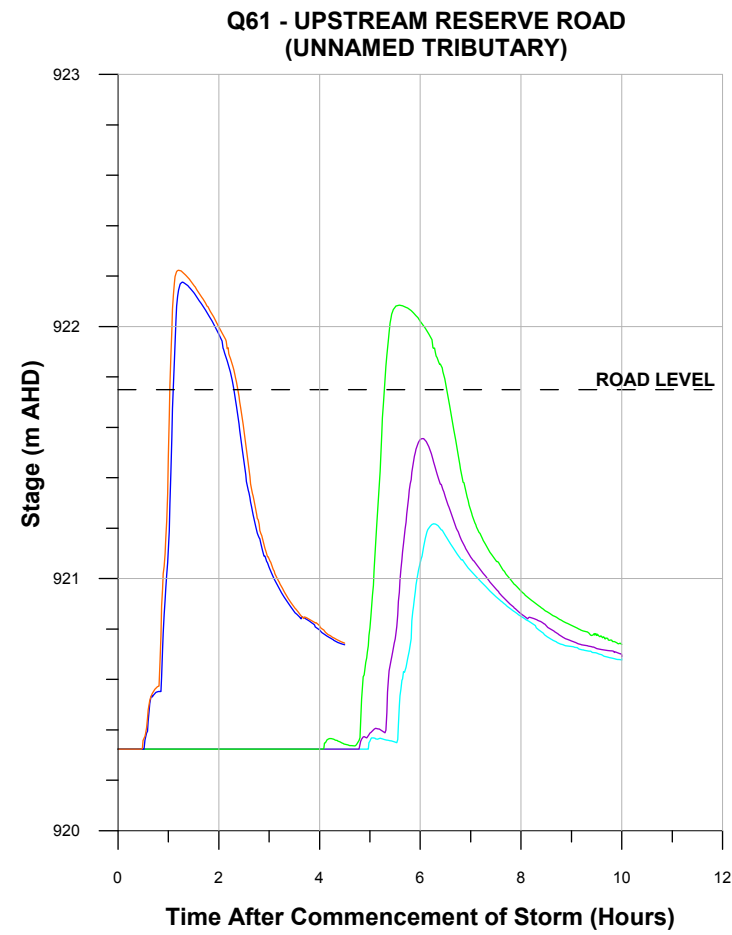
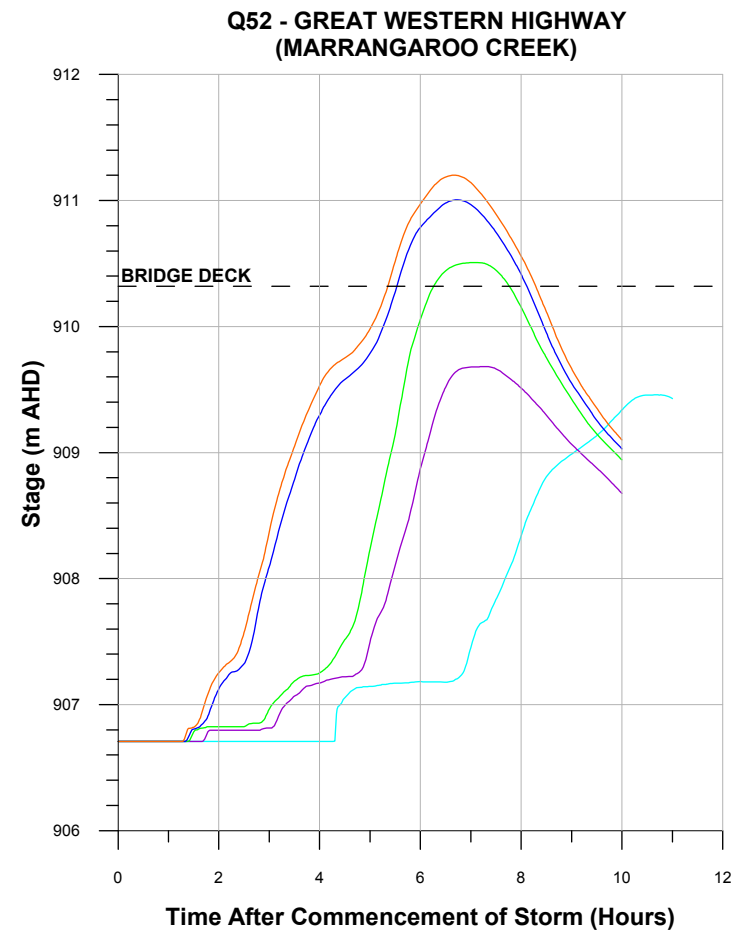
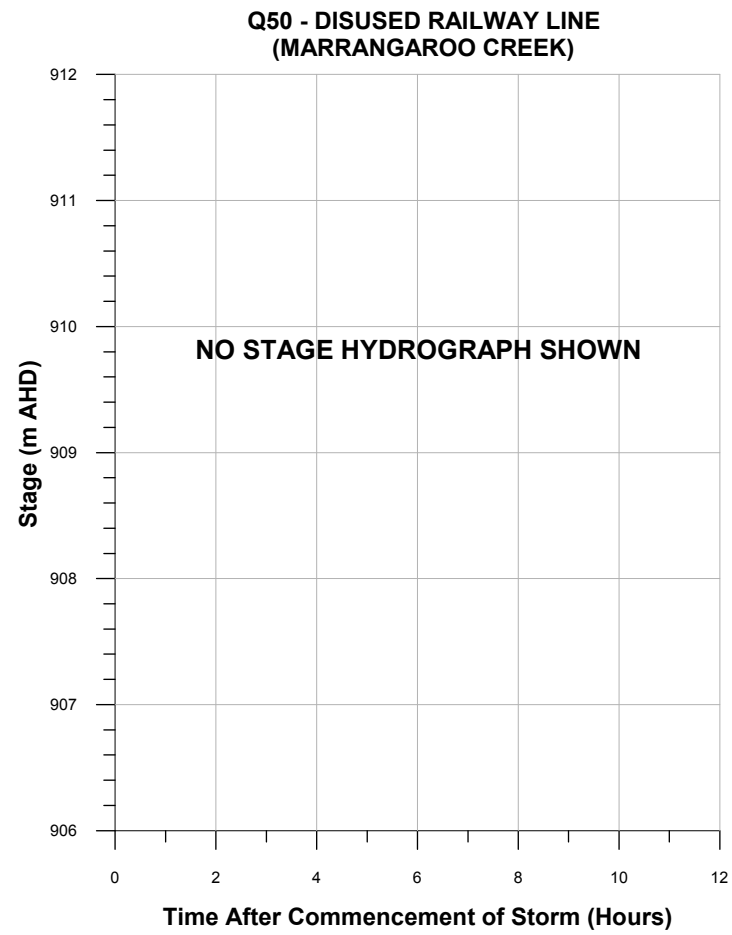
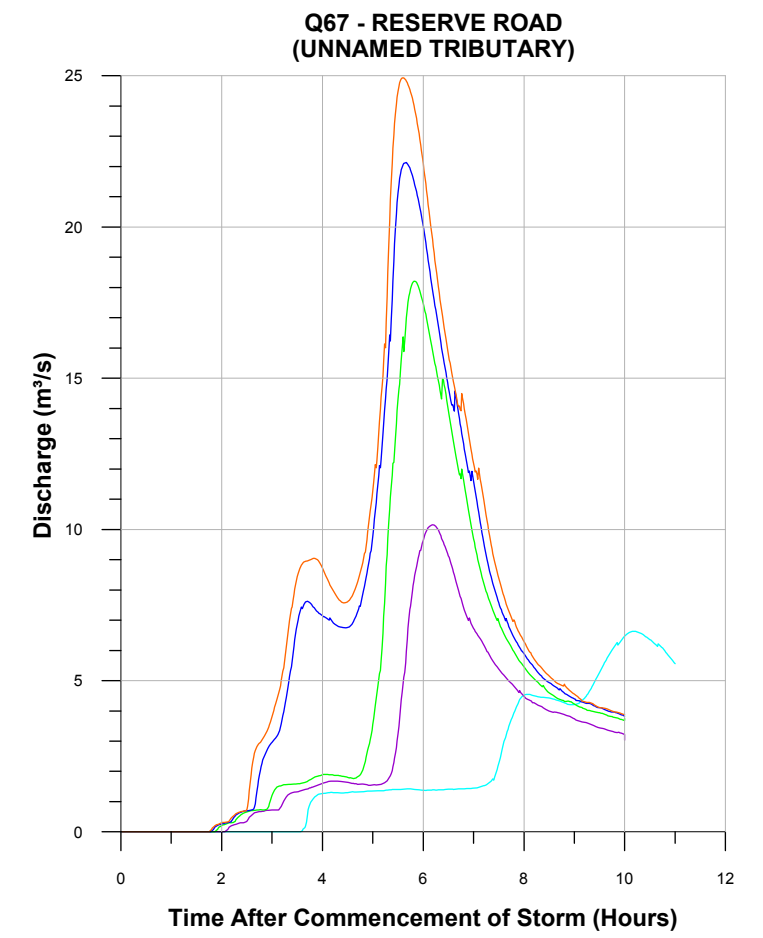
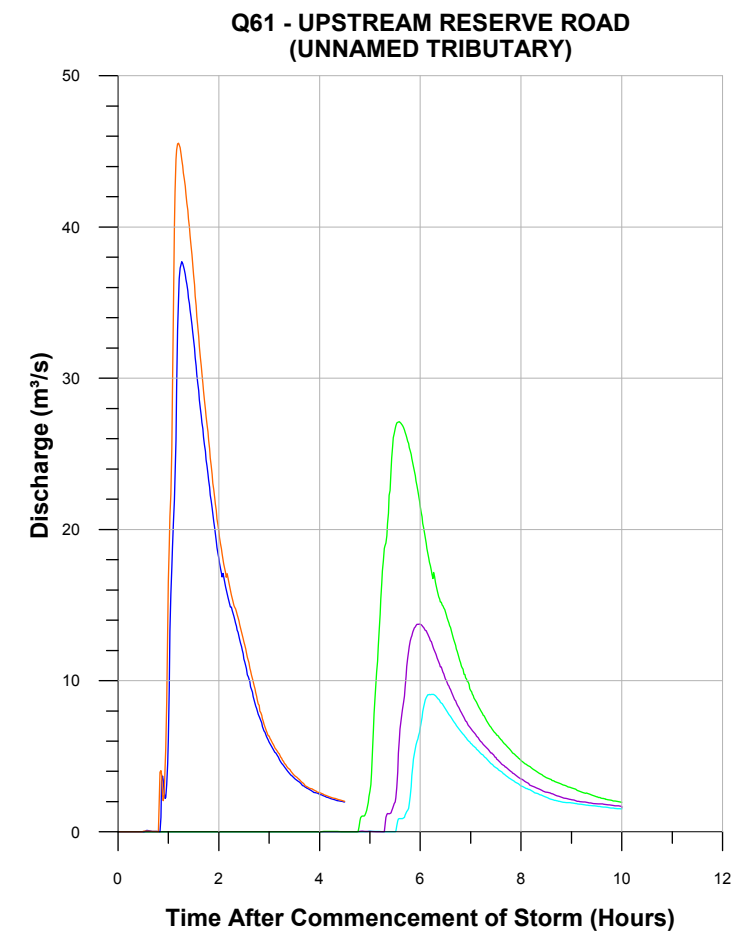
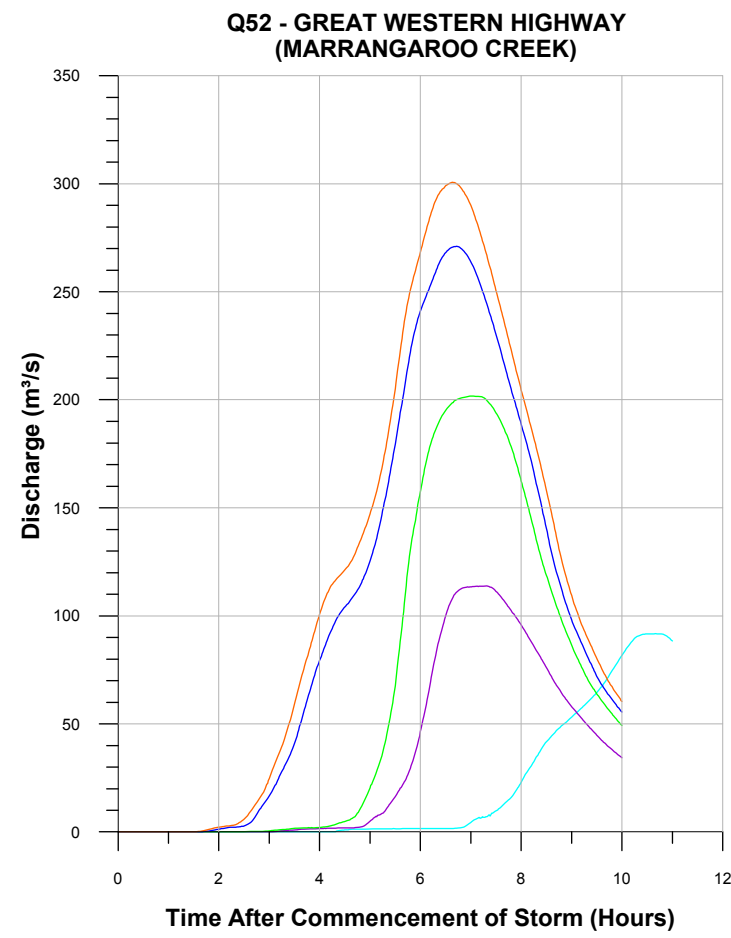
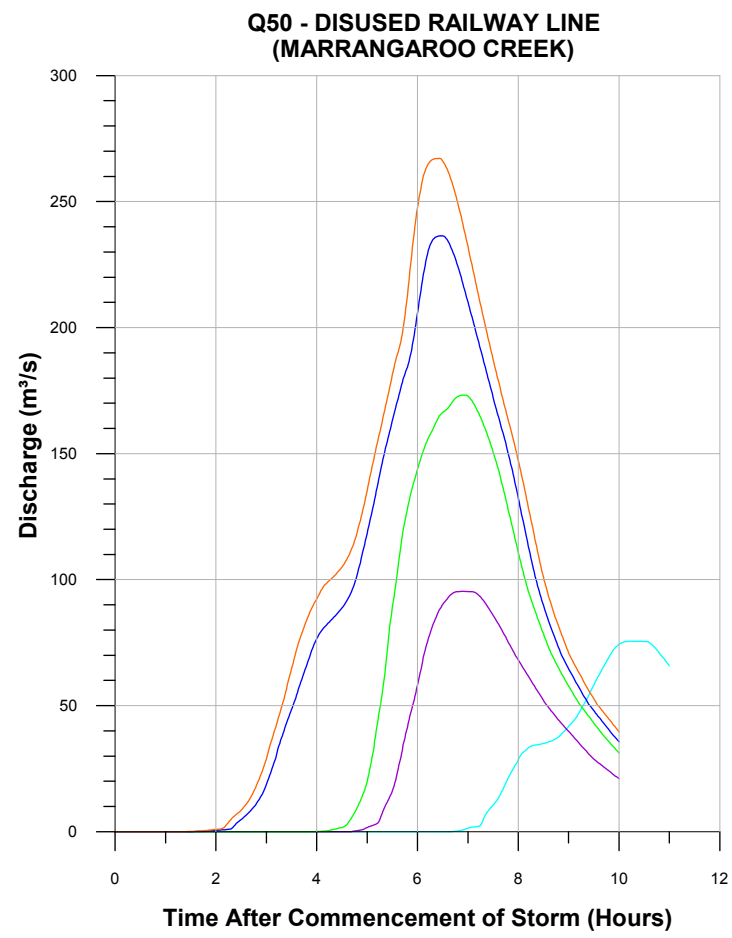


**LITHGOW FLOOD STUDY REVIEW**

Figure 6.8  
(Sheet 4 of 5)

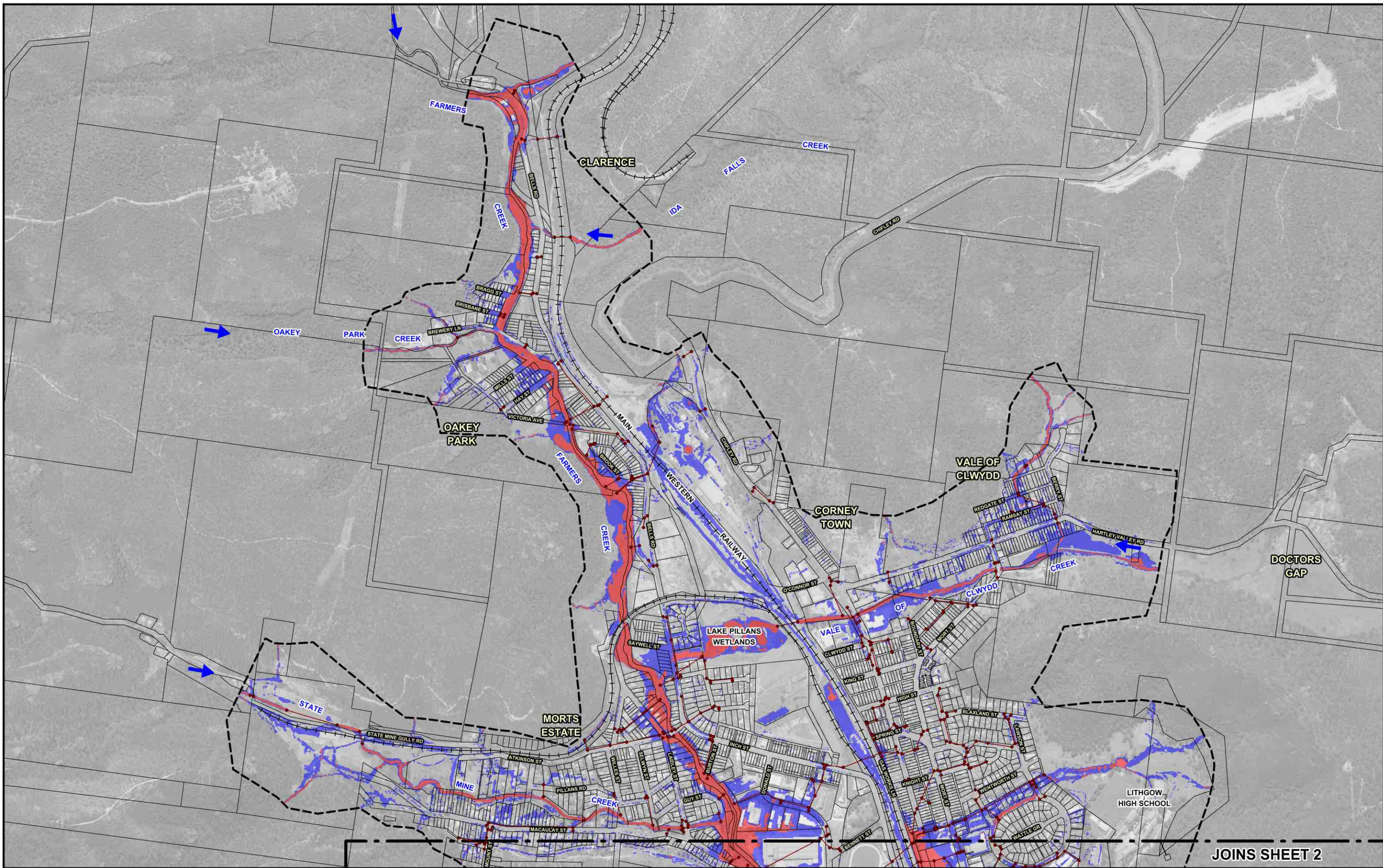
STAGE AND DISCHARGE HYDROGRAPHS  
DESIGN STORM EVENTS



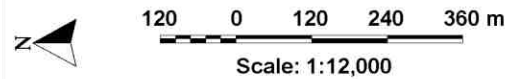


**NOTE:**  
Refer table F1 for duration  
of critical storm.





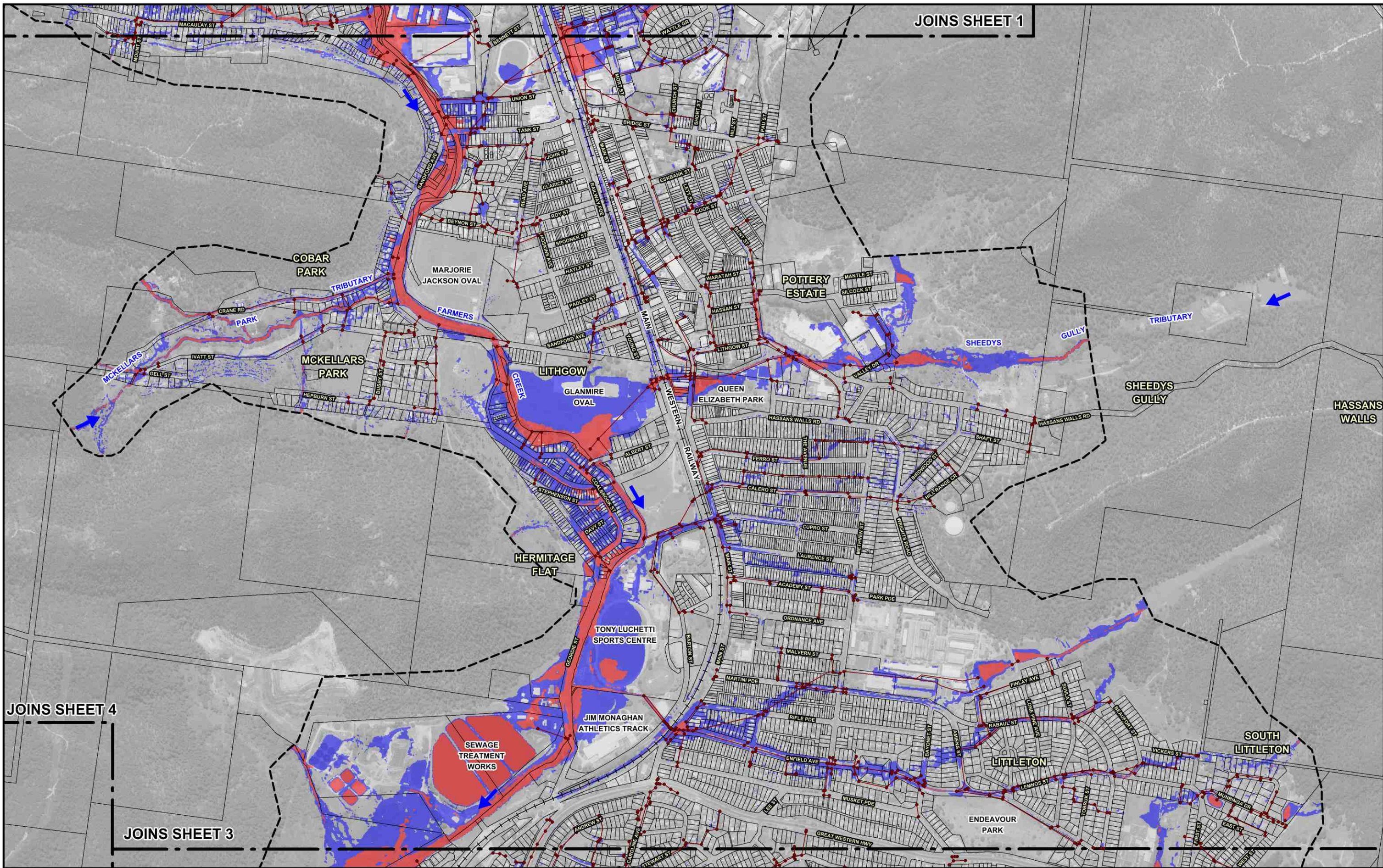
JOINS SHEET 2



**NOTE:**  
 The ground surface model incorporated in TUFLOW is based on LiDAR survey which has been sampled on a 3m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.  
 Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

- LEGEND**
- Two-Dimensional Model Boundary
  - Modelled Stormwater Network
  - High Provisional Hydraulic Hazard
  - Low Provisional Hydraulic Hazard  
(Categories based on Figure L2 of NSW Government's Floodplain Development Manual, 2005)

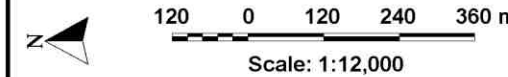
**LITHGOW FLOOD STUDY REVIEW**



JOINS SHEET 1

JOINS SHEET 4

JOINS SHEET 3

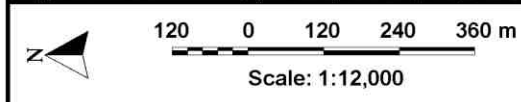
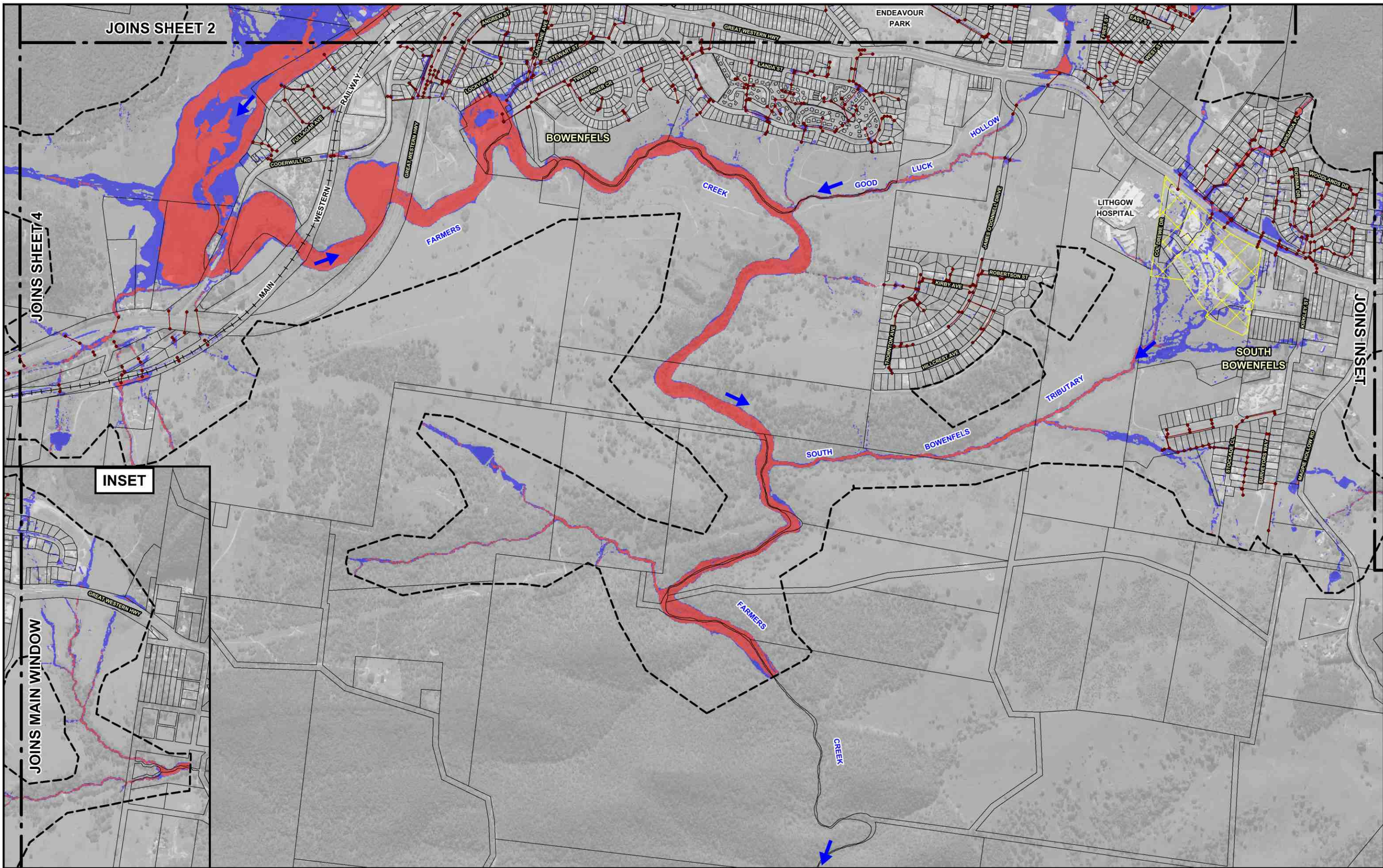


**NOTE:**  
 The ground surface model incorporated in TUFLOW is based on LIDAR survey which has been sampled on a 3m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.  
 Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

**LEGEND**

- Two-Dimensional Model Boundary
- Modelled Stormwater Network
- High Provisional Hydraulic Hazard
- Low Provisional Hydraulic Hazard  
(Categories based on Figure L2 of NSW Government's Floodplain Development Manual, 2005)

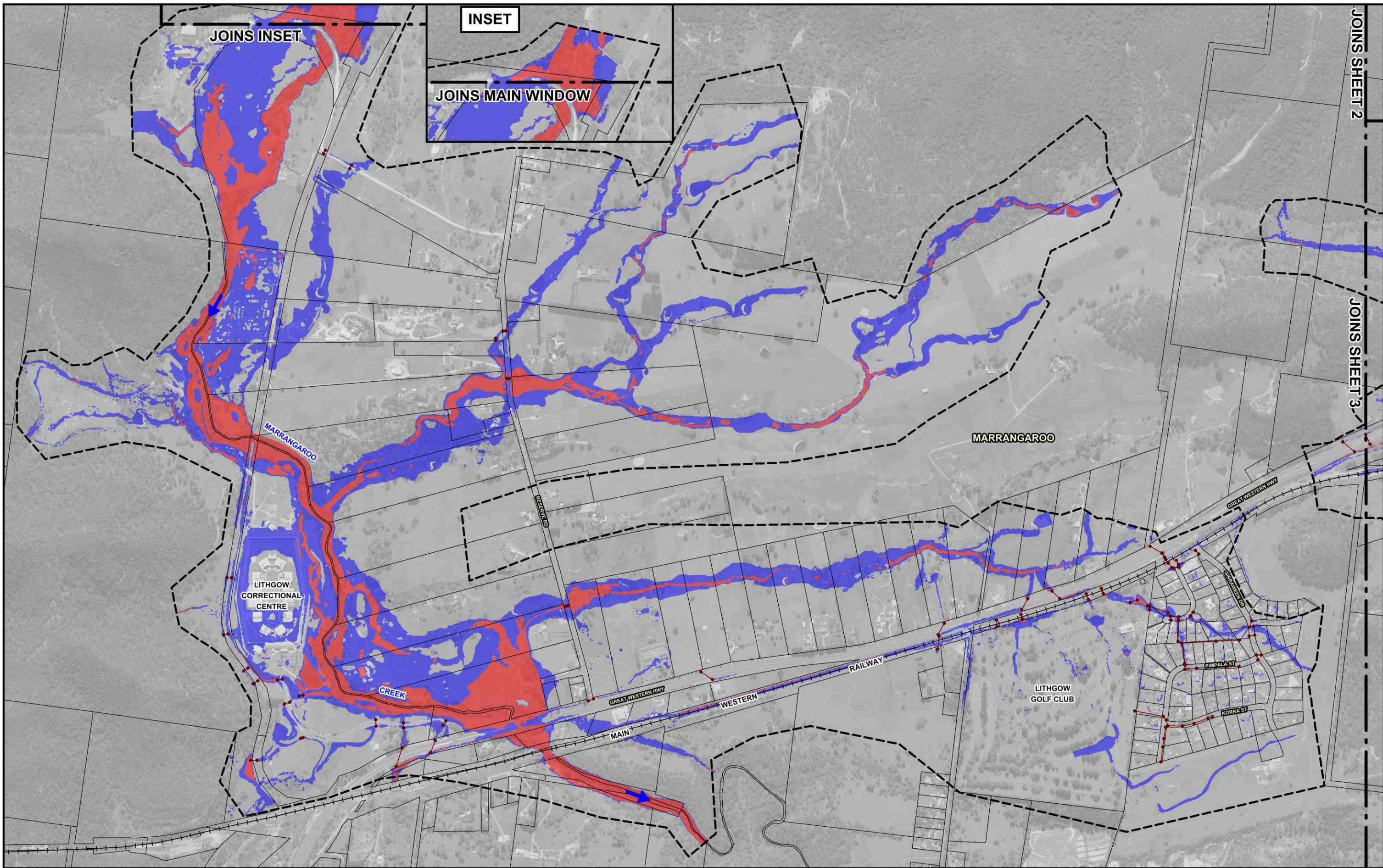
**LITHGOW FLOOD STUDY REVIEW**



**NOTE:**  
 The ground surface model incorporated in TUFLOW is based on LiDAR survey which has been sampled on a 3m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.  
 Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

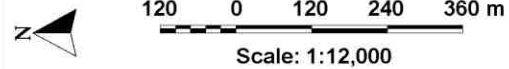
- LEGEND**
- Two-Dimensional Model Boundary
  - Modelled Stormwater Network
  - High Provisional Hydraulic Hazard
  - Low Provisional Hydraulic Hazard  
(Categories based on Figure L2 of NSW Government's Floodplain Development Manual, 2005)
  - Extent of Recent Subdivision Development. Details of New Stormwater Drainage System have not been Incorporated in Farmers Creek TUFLOW Model.





JOINS SHEET 2

JOINS SHEET 3



Scale: 1:12,000

**NOTE:**

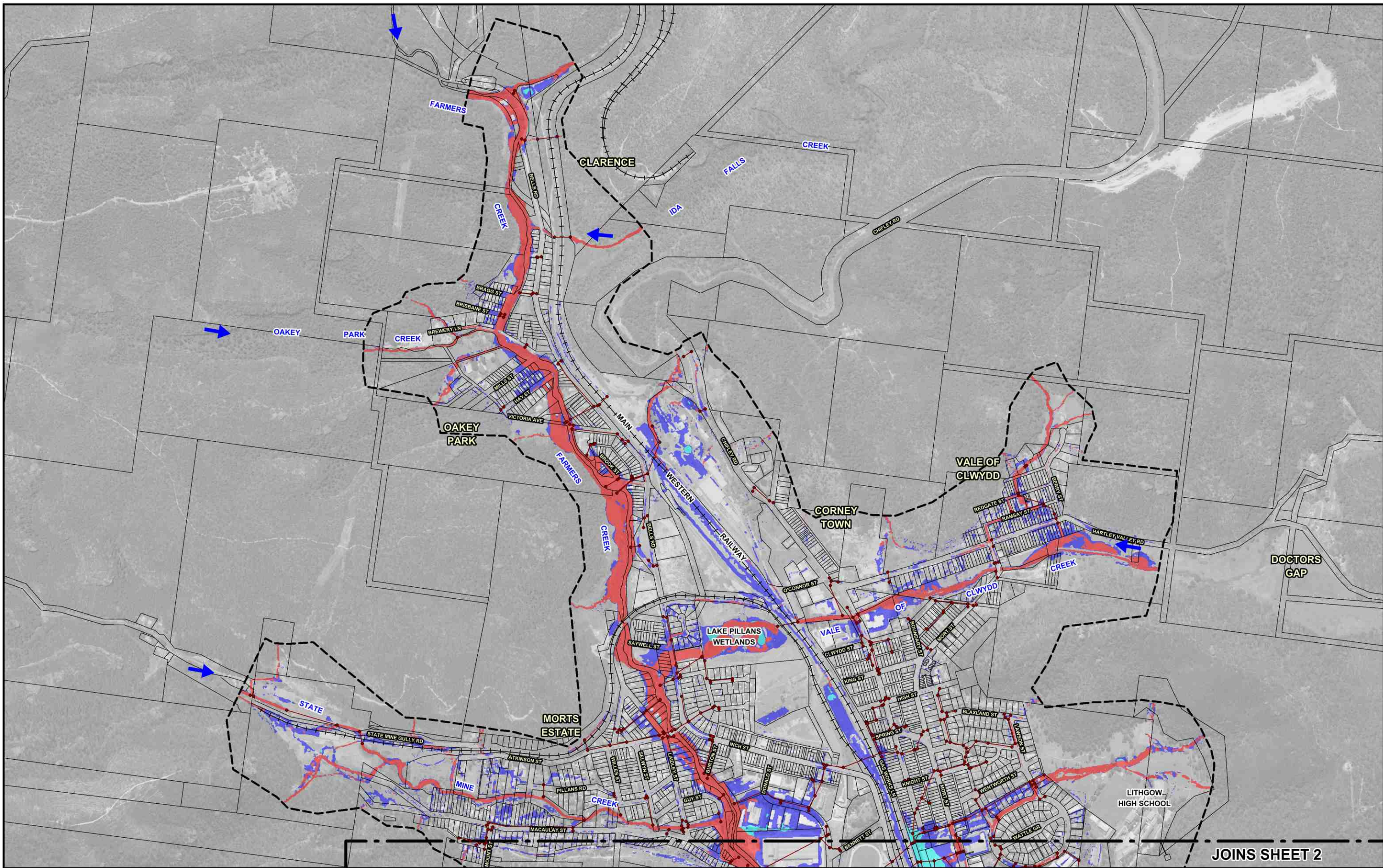
The ground surface model incorporated in TUFLOW is based on LiDAR survey which has been sampled on a 3m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.

Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

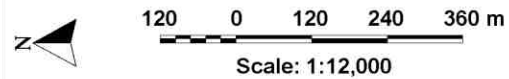
**LEGEND**

- Two-Dimensional Model Boundary
- Modelled Stormwater Network
- High Provisional Hydraulic Hazard
- Low Provisional Hydraulic Hazard  
(Categories based on Figure L2 of NSW Government's Floodplain Development Manual, 2005)

**LITHGOW FLOOD STUDY REVIEW**



JOINS SHEET 2

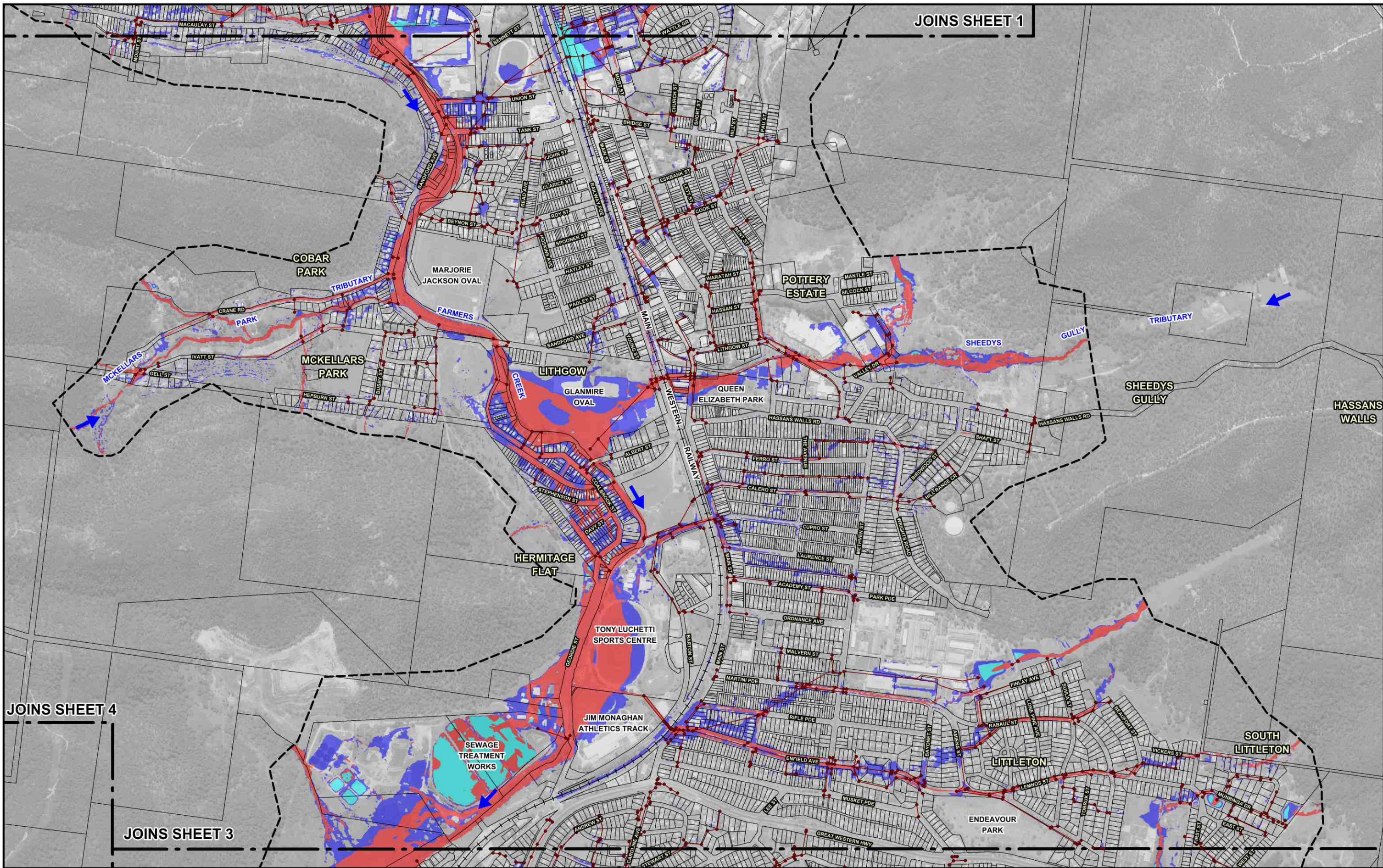


Scale: 1:12,000

**NOTE:**  
 The ground surface model incorporated in TUFLOW is based on LiDAR survey which has been sampled on a 3m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.  
 Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

LEGEND	
	Two-Dimensional Model Boundary
	Modelled Stormwater Network
	Floodway
	Flood Storage
	Flood Fringe

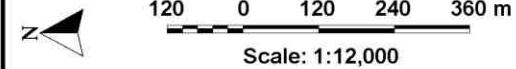
LITHGOW FLOOD STUDY REVIEW



JOINS SHEET 1

JOINS SHEET 4

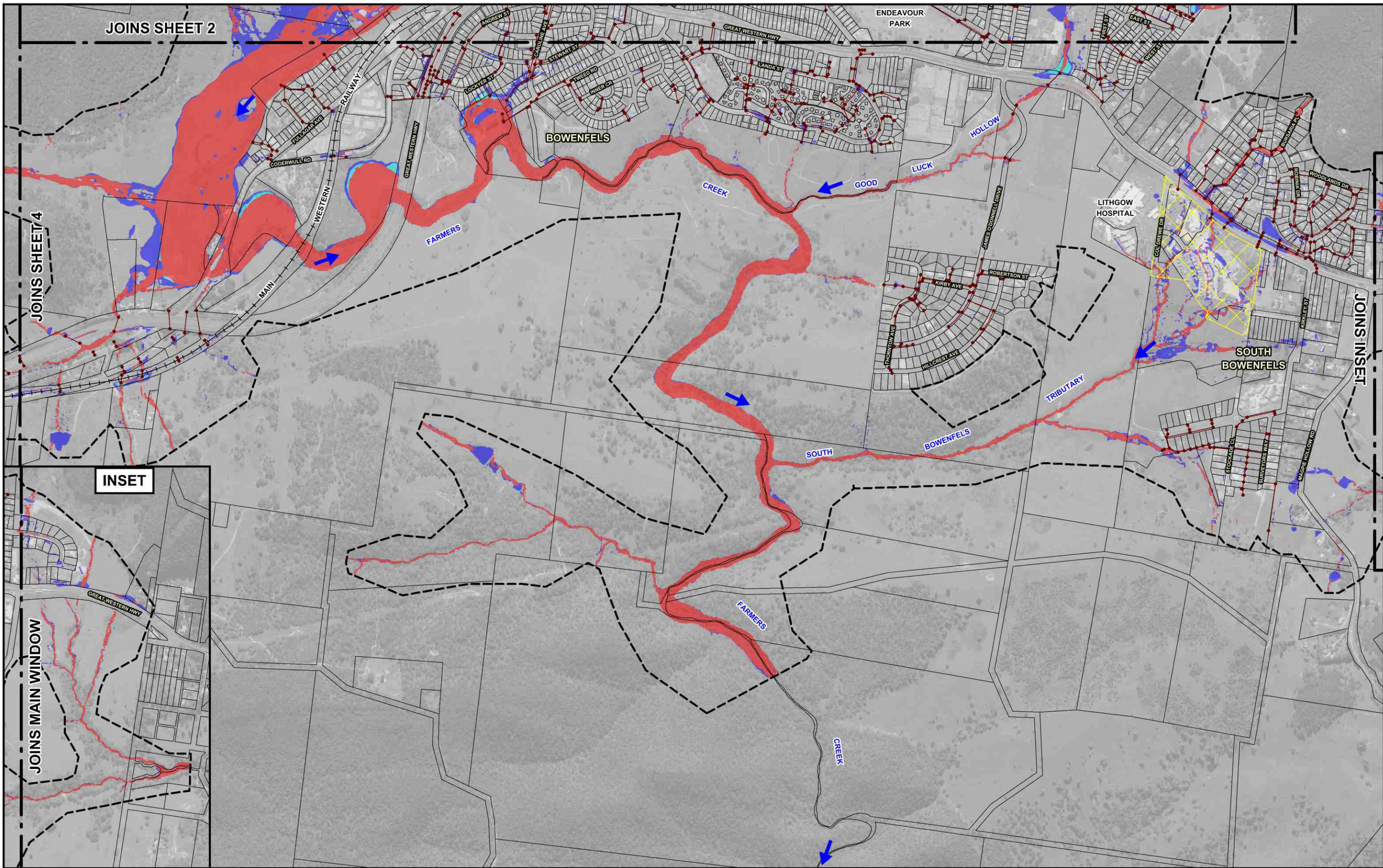
JOINS SHEET 3



**NOTE:**  
 The ground surface model incorporated in TUFLOW is based on LIDAR survey which has been sampled on a 3m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.  
 Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

- LEGEND**
- Two-Dimensional Model Boundary
  - Modelled Stormwater Network
  - Floodway
  - Flood Storage
  - Flood Fringe

**LITHGOW FLOOD STUDY REVIEW**



INSET

JOINS MAIN WINDOW



Scale: 1:12,000

**NOTE:**  
 The ground surface model incorporated in TUFLOW is based on LiDAR survey which has been sampled on a 3m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.  
 Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

- LEGEND**
- Two-Dimensional Model Boundary
  - Modelled Stormwater Network
  - Extent of Recent Subdivision Development. Details of New Stormwater Drainage System have not been Incorporated in Farmers Creek TUFLOW Model.

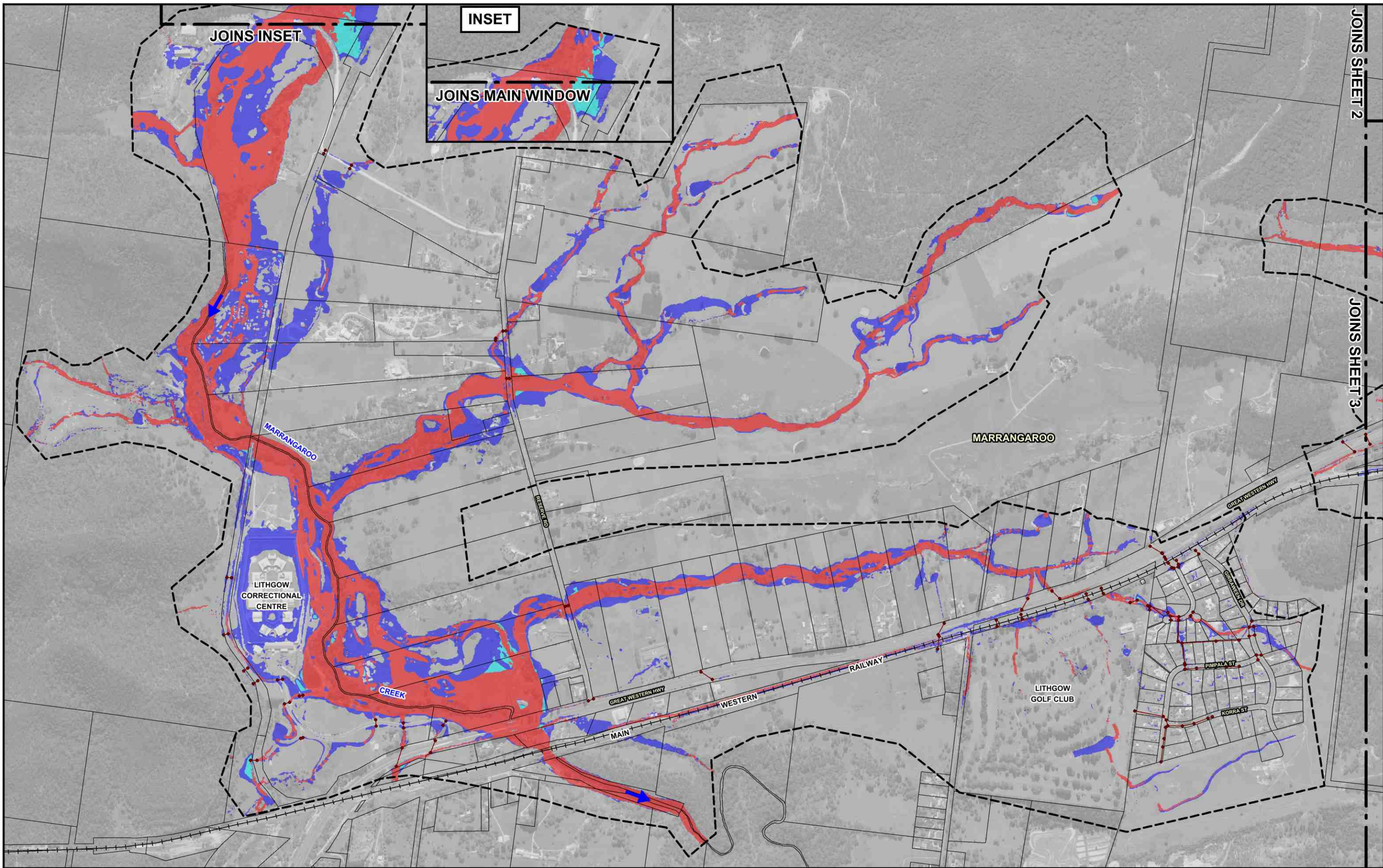
- Floodway
- Flood Storage
- Flood Fringe

**Lyall & Associates**

**LITHGOW FLOOD STUDY REVIEW**

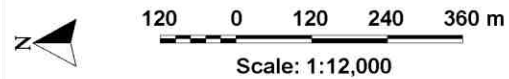
Figure 6.10  
 (Sheet 3 of 4)  
 HYDRAULIC CATEGORISATION OF FLOODPLAIN  
 100 YEAR ARI





JOINS SHEET 2

JOINS SHEET 3

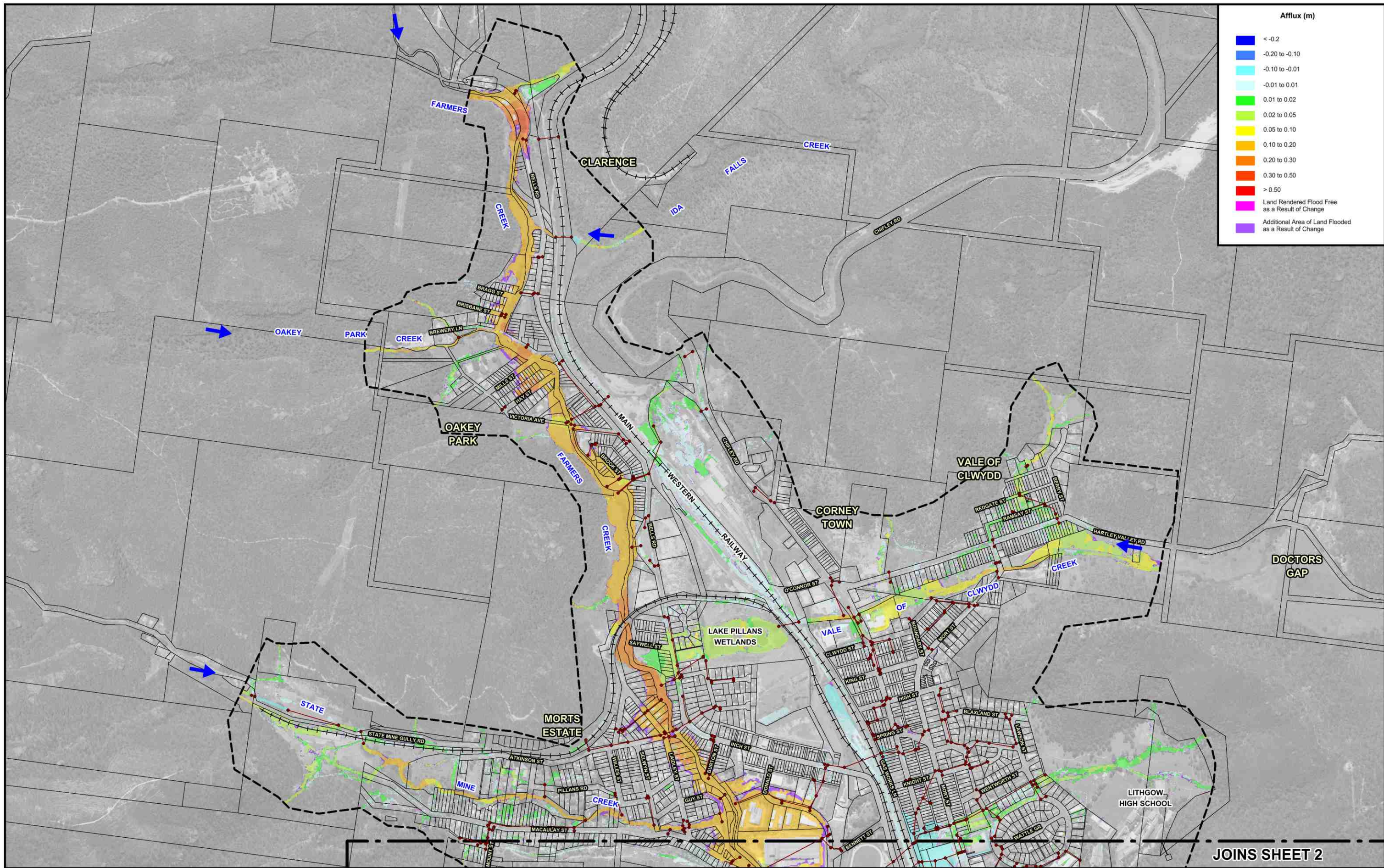


Scale: 1:12,000

**NOTE:**  
 The ground surface model incorporated in TUFLOW is based on LiDAR survey which has been sampled on a 3m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.  
 Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

**LEGEND**

- Two-Dimensional Model Boundary
- Modelled Stormwater Network
- Floodway
- Flood Storage
- Flood Fringe



Afflux (m)	
Blue	< -0.2
Light Blue	-0.20 to -0.10
Cyan	-0.10 to -0.01
Light Green	-0.01 to 0.01
Green	0.01 to 0.02
Yellow-Green	0.02 to 0.05
Yellow	0.05 to 0.10
Orange	0.10 to 0.20
Red-Orange	0.20 to 0.30
Red	0.30 to 0.50
Dark Red	> 0.50
Pink	Land Rendered Flood Free as a Result of Change
Purple	Additional Area of Land Flooded as a Result of Change

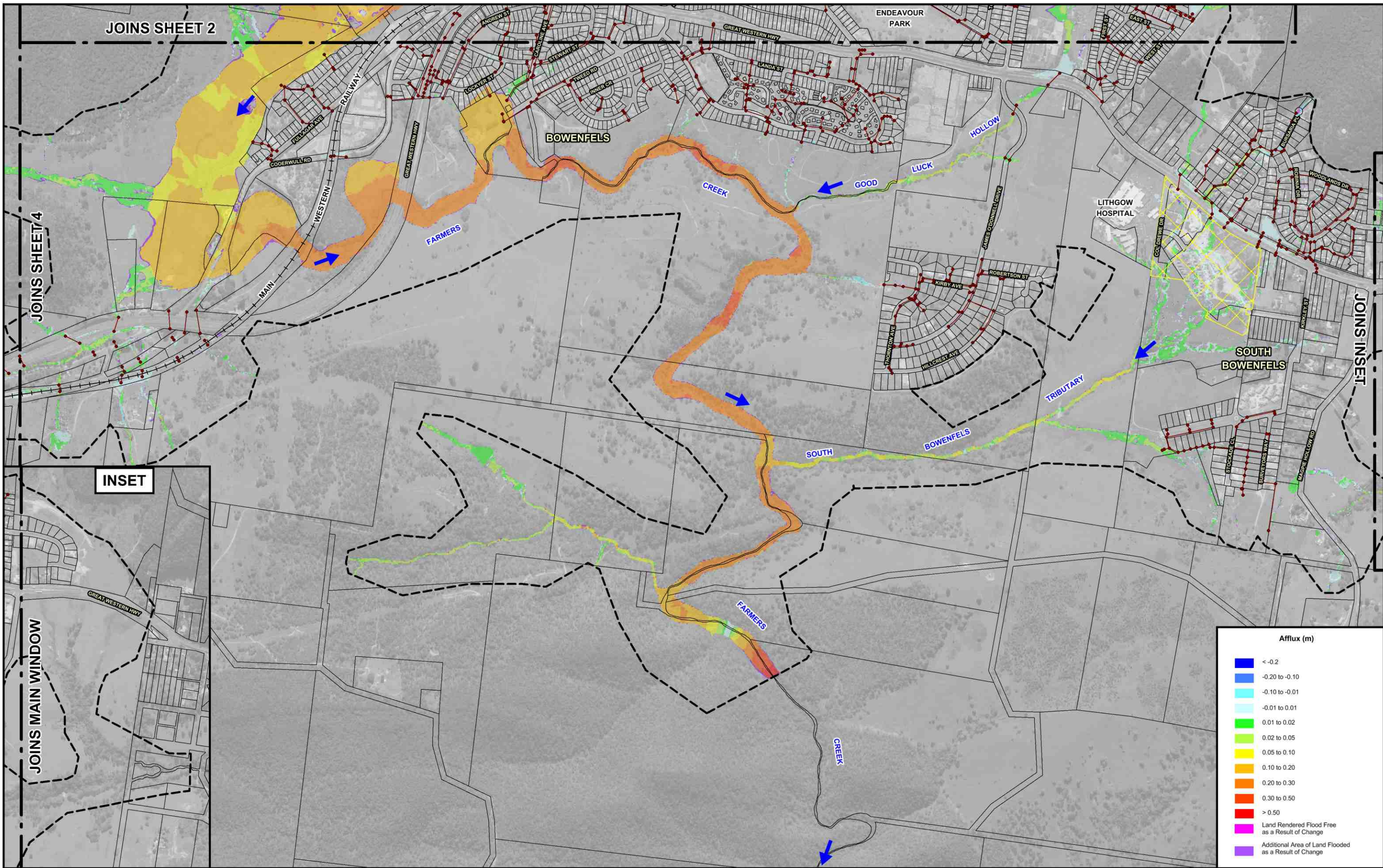
120 0 120 240 360 m  
Scale: 1:12,000

**NOTE:**  
The ground surface model incorporated in TUFLOW is based on LiDAR survey which has been sampled on a 3m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.  
Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

**LEGEND**  
 - - - Two-Dimensional Model Boundary  
 ● Modelled Stormwater Network

LITHGOW FLOOD STUDY REVIEW





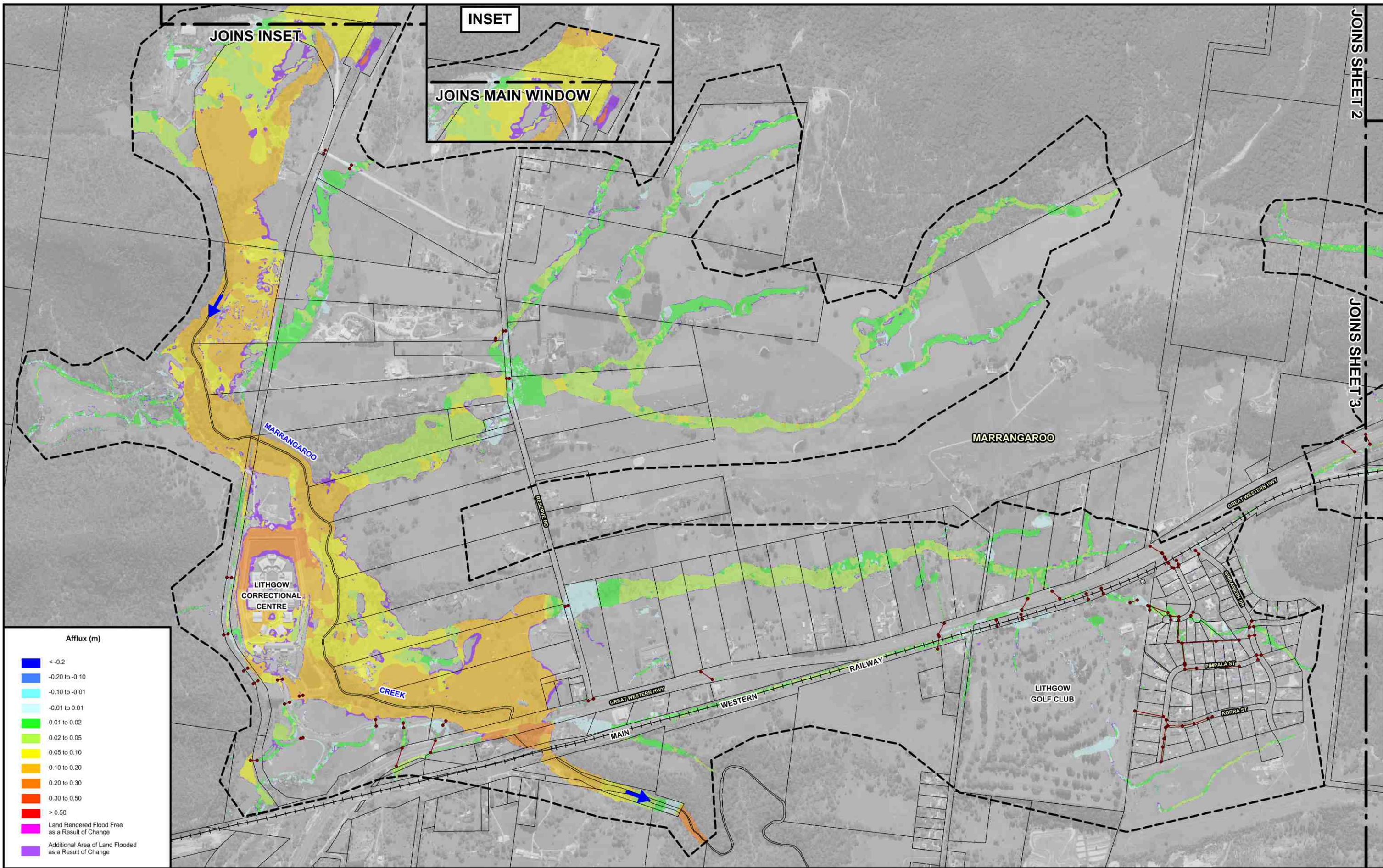
Afflux (m)	
<math>< -0.2</math>	Dark Blue
<math>-0.20 \text{ to } -0.10</math>	Blue
<math>-0.10 \text{ to } -0.01</math>	Cyan
<math>-0.01 \text{ to } 0.01</math>	Light Cyan
0.01 to 0.02	Green
0.02 to 0.05	Light Green
0.05 to 0.10	Yellow
0.10 to 0.20	Orange
0.20 to 0.30	Dark Orange
0.30 to 0.50	Red-Orange
> 0.50	Red
Land Rendered Flood Free as a Result of Change	Pink
Additional Area of Land Flooded as a Result of Change	Purple

Scale: 1:12,000  
 120 0 120 240 360 m

**NOTE:**  
 The ground surface model incorporated in TUFLOW is based on LiDAR survey which has been sampled on a 3m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.  
 Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

**LEGEND**  
 - - - Two-Dimensional Model Boundary  
 ● Modelled Stormwater Network  
 [Hatched Box] Extent of Recent Subdivision Development. Details of New Stormwater Drainage System have not been incorporated in Farmers Creek TUFLOW Model.

**LITHGOW FLOOD STUDY REVIEW**



JOINS SHEET 2

JOINS SHEET 3

**Afflux (m)**

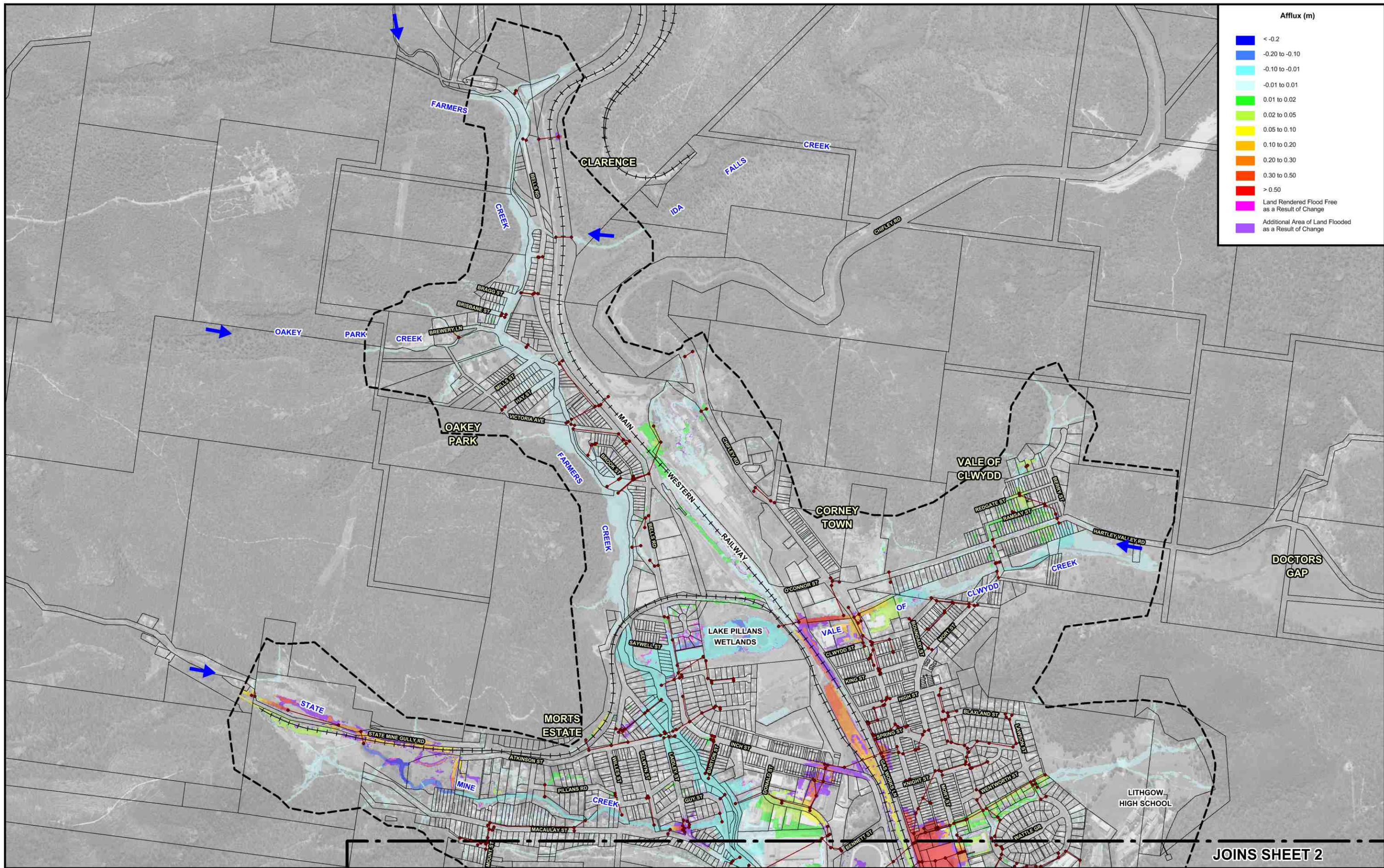
Blue	< -0.2
Dark Blue	-0.20 to -0.10
Light Blue	-0.10 to -0.01
Very Light Blue	-0.01 to 0.01
Light Green	0.01 to 0.02
Yellow-Green	0.02 to 0.05
Yellow	0.05 to 0.10
Orange	0.10 to 0.20
Dark Orange	0.20 to 0.30
Red-Orange	0.30 to 0.50
Red	> 0.50
Pink	Land Rendered Flood Free as a Result of Change
Purple	Additional Area of Land Flooded as a Result of Change

120 0 120 240 360 m  
Scale: 1:12,000

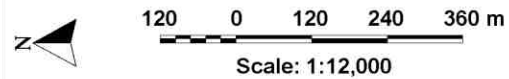
**NOTE:**  
The ground surface model incorporated in TUFLOW is based on LiDAR survey which has been sampled on a 3m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.  
Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

**LEGEND**  
 - - - Two-Dimensional Model Boundary  
 ● Modelled Stormwater Network

**LITHGOW FLOOD STUDY REVIEW**



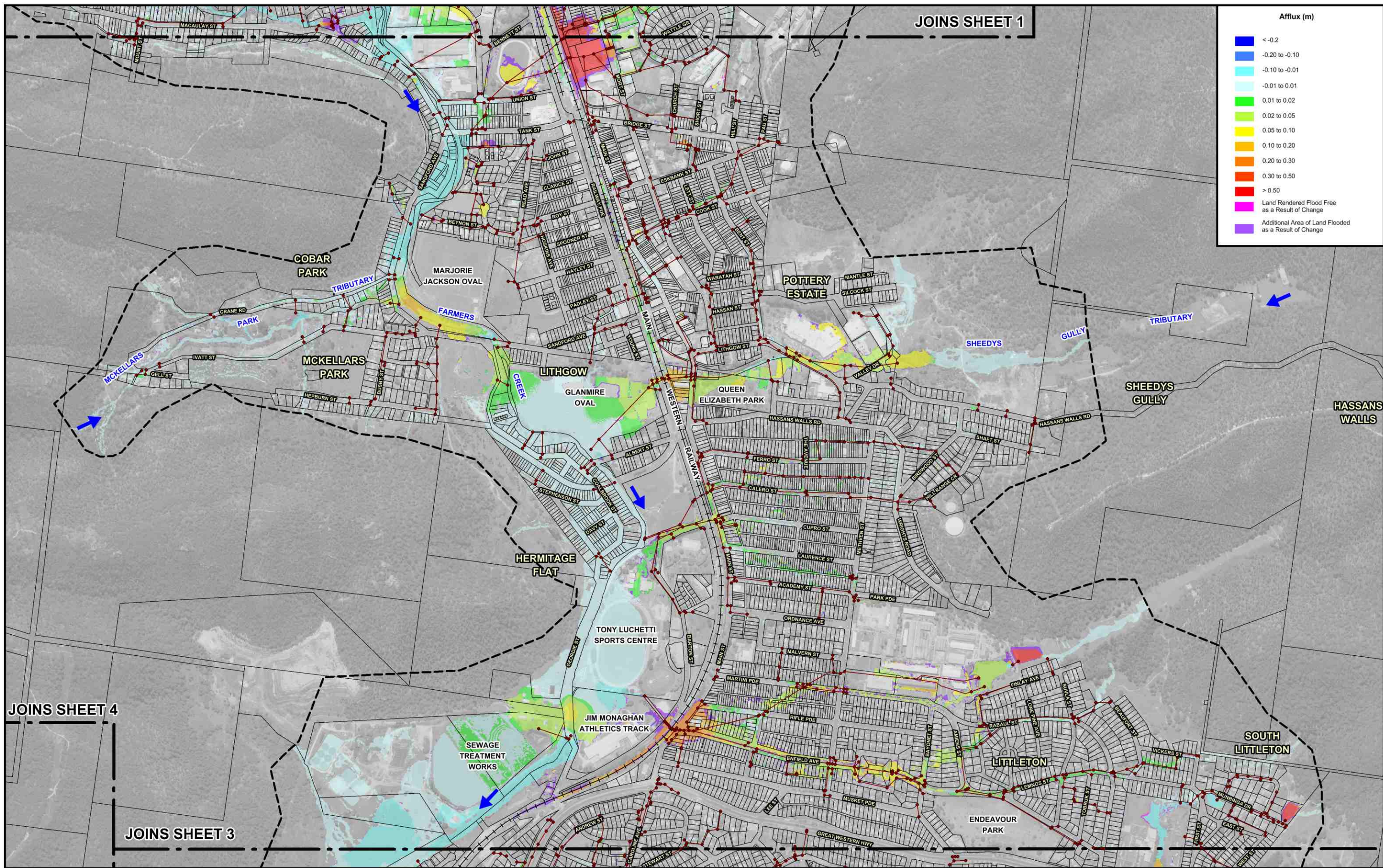
Afflux (m)	
Blue	< -0.2
Light Blue	-0.20 to -0.10
Cyan	-0.10 to -0.01
Light Green	-0.01 to 0.01
Green	0.01 to 0.02
Yellow-Green	0.02 to 0.05
Yellow	0.05 to 0.10
Orange	0.10 to 0.20
Red-Orange	0.20 to 0.30
Red	0.30 to 0.50
Dark Red	> 0.50
Pink	Land Rendered Flood Free as a Result of Change
Purple	Additional Area of Land Flooded as a Result of Change



**NOTE:**  
 The ground surface model incorporated in TUFLOW is based on LiDAR survey which has been sampled on a 3m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.  
 Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

- LEGEND**
- Two-Dimensional Model Boundary
  - Modelled Stormwater Network

JOINS SHEET 2



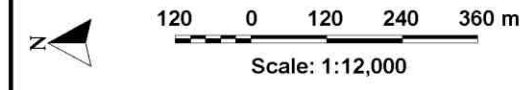
JOINS SHEET 1

**Afflux (m)**

- <math>< -0.2</math>
- 0.20 to -0.10
- 0.10 to -0.01
- 0.01 to 0.01
- 0.01 to 0.02
- 0.02 to 0.05
- 0.05 to 0.10
- 0.10 to 0.20
- 0.20 to 0.30
- 0.30 to 0.50
- > 0.50
- Land Rendered Flood Free as a Result of Change
- Additional Area of Land Flooded as a Result of Change

JOINS SHEET 4

JOINS SHEET 3



**NOTE:**  
 The ground surface model incorporated in TUFLOW is based on LIDAR survey which has been sampled on a 3m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.  
 Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

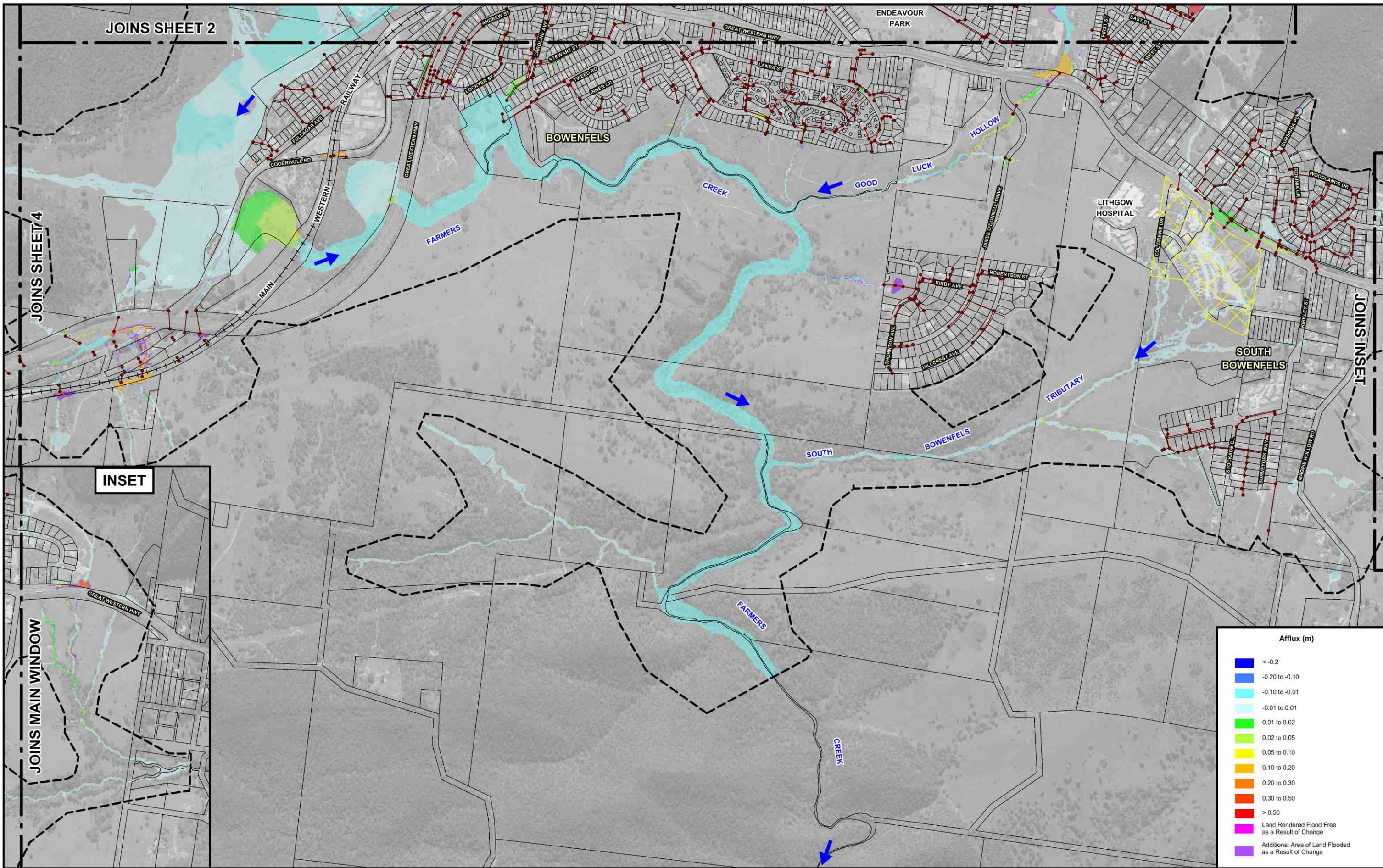
**LEGEND**

- Two-Dimensional Model Boundary
- Modelled Stormwater Network

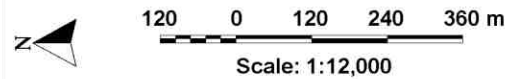
LITHGOW FLOOD STUDY REVIEW

**Lyall & Associates**

Figure 6.12  
 (Sheet 2 of 4)  
 SENSITIVITY OF FLOOD BEHAVIOUR TO A PARTIAL BLOCKAGE OF MAJOR HYDRAULIC STRUCTURES  
 100 YEAR ARI



Afflux (m)	
Blue	< -0.2
Light Blue	-0.20 to -0.10
Light Cyan	-0.10 to -0.01
Light Green	-0.01 to 0.01
Green	0.01 to 0.02
Light Green	0.02 to 0.05
Yellow	0.05 to 0.10
Orange	0.10 to 0.20
Red-Orange	0.20 to 0.30
Red	0.30 to 0.50
Dark Red	> 0.50
Pink	Land Rendered Flood Free as a Result of Change
Purple	Additional Area of Land Flooded as a Result of Change

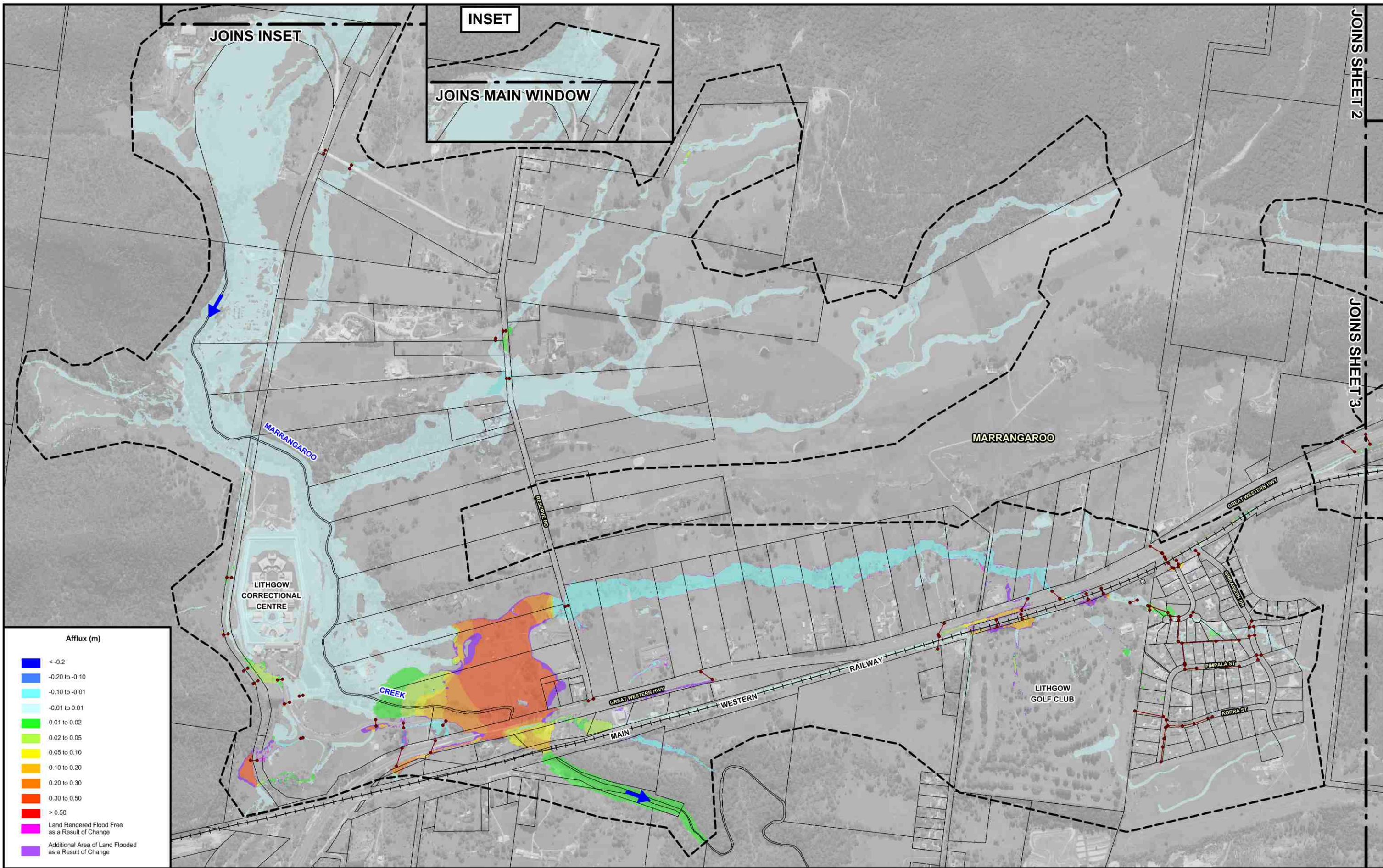


**NOTE:**  
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 Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

- LEGEND**
- Two-Dimensional Model Boundary
  - Extent of Recent Subdivision Development. Details of New Stormwater Drainage System have not been Incorporated in Farmers Creek TUFLOW Model.
  - Modelled Stormwater Network

**LITHGOW FLOOD STUDY REVIEW**





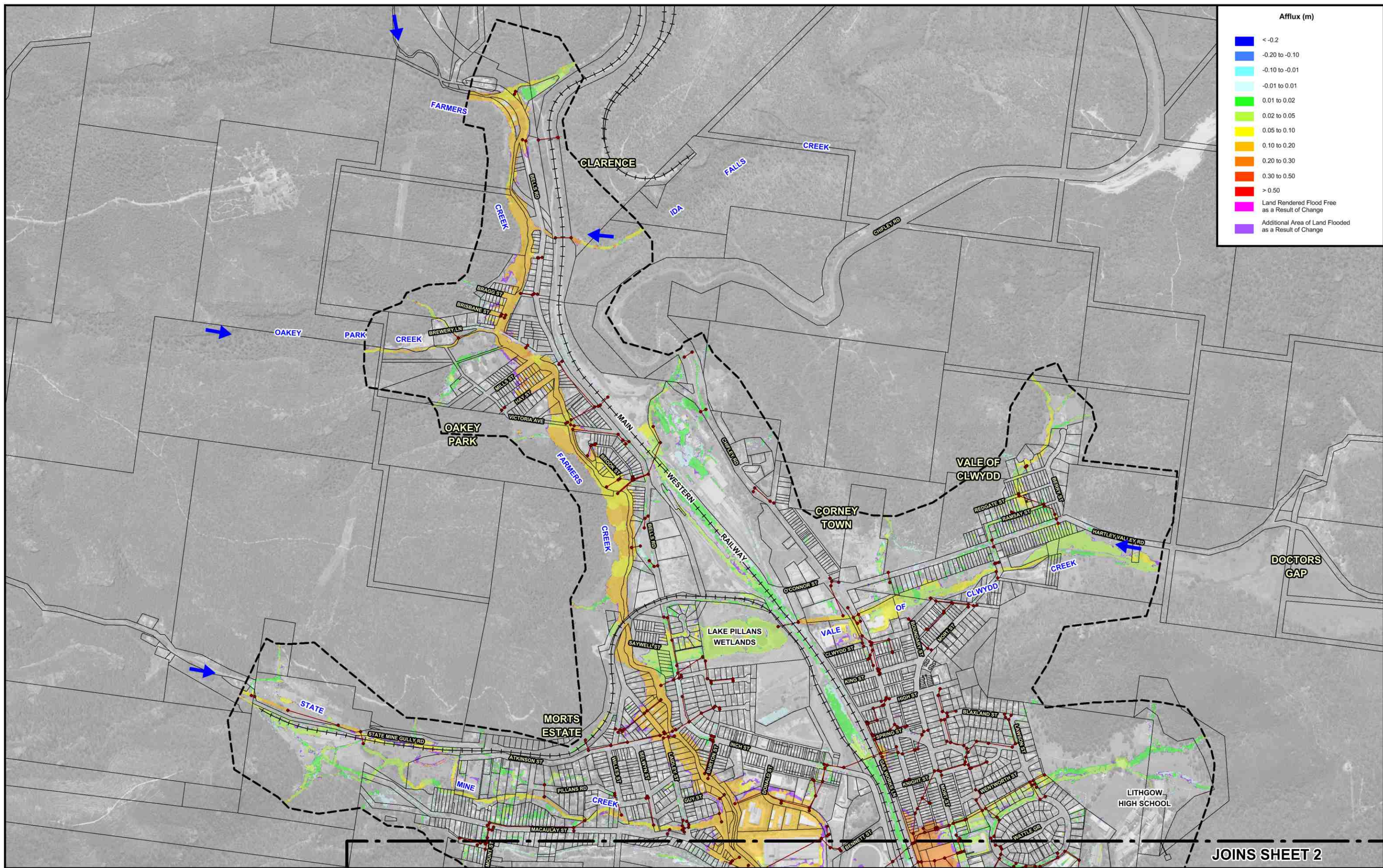
Scale: 1:12,000

**NOTE:**  
 The ground surface model incorporated in TUFLOW is based on LiDAR survey which has been sampled on a 3m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.  
 Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

**LEGEND**  
 - - - Two-Dimensional Model Boundary  
 ●●● Modelled Stormwater Network

**LITHGOW FLOOD STUDY REVIEW**

JOINS SHEET 2  
 JOINS SHEET 3



Afflux (m)	
Blue	< -0.2
Light Blue	-0.20 to -0.10
Cyan	-0.10 to -0.01
Light Green	-0.01 to 0.01
Green	0.01 to 0.02
Yellow-Green	0.02 to 0.05
Yellow	0.05 to 0.10
Orange	0.10 to 0.20
Red-Orange	0.20 to 0.30
Red	0.30 to 0.50
Dark Red	> 0.50
Pink	Land Rendered Flood Free as a Result of Change
Purple	Additional Area of Land Flooded as a Result of Change

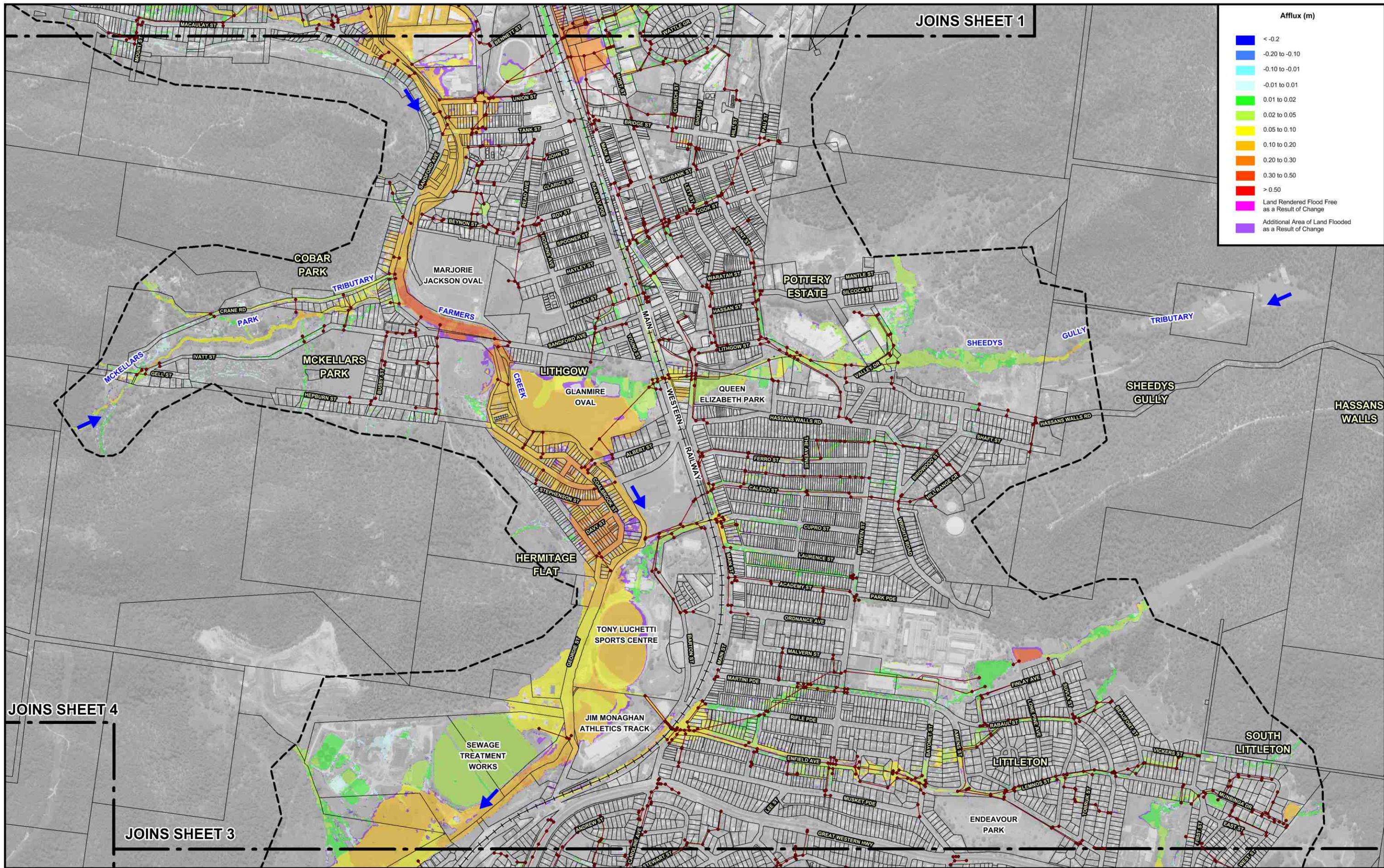
120 0 120 240 360 m  
 Scale: 1:12,000

**NOTE:**  
 The ground surface model incorporated in TUFLOW is based on LiDAR survey which has been sampled on a 3m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.  
 Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

**LEGEND**  
 - - - Two-Dimensional Model Boundary  
 ● Modelled Stormwater Network

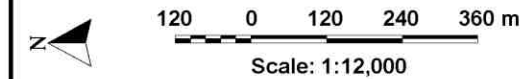
**LITHGOW FLOOD STUDY REVIEW**

JOINS SHEET 2



**Afflux (m)**

Blue	< -0.2
Light Blue	-0.20 to -0.10
Cyan	-0.10 to -0.01
Light Green	-0.01 to 0.01
Green	0.01 to 0.02
Yellow-Green	0.02 to 0.05
Yellow	0.05 to 0.10
Orange	0.10 to 0.20
Red-Orange	0.20 to 0.30
Red	0.30 to 0.50
Dark Red	> 0.50
Pink	Land Rendered Flood Free as a Result of Change
Purple	Additional Area of Land Flooded as a Result of Change



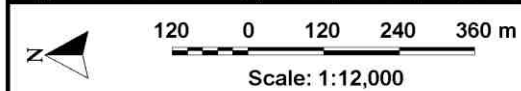
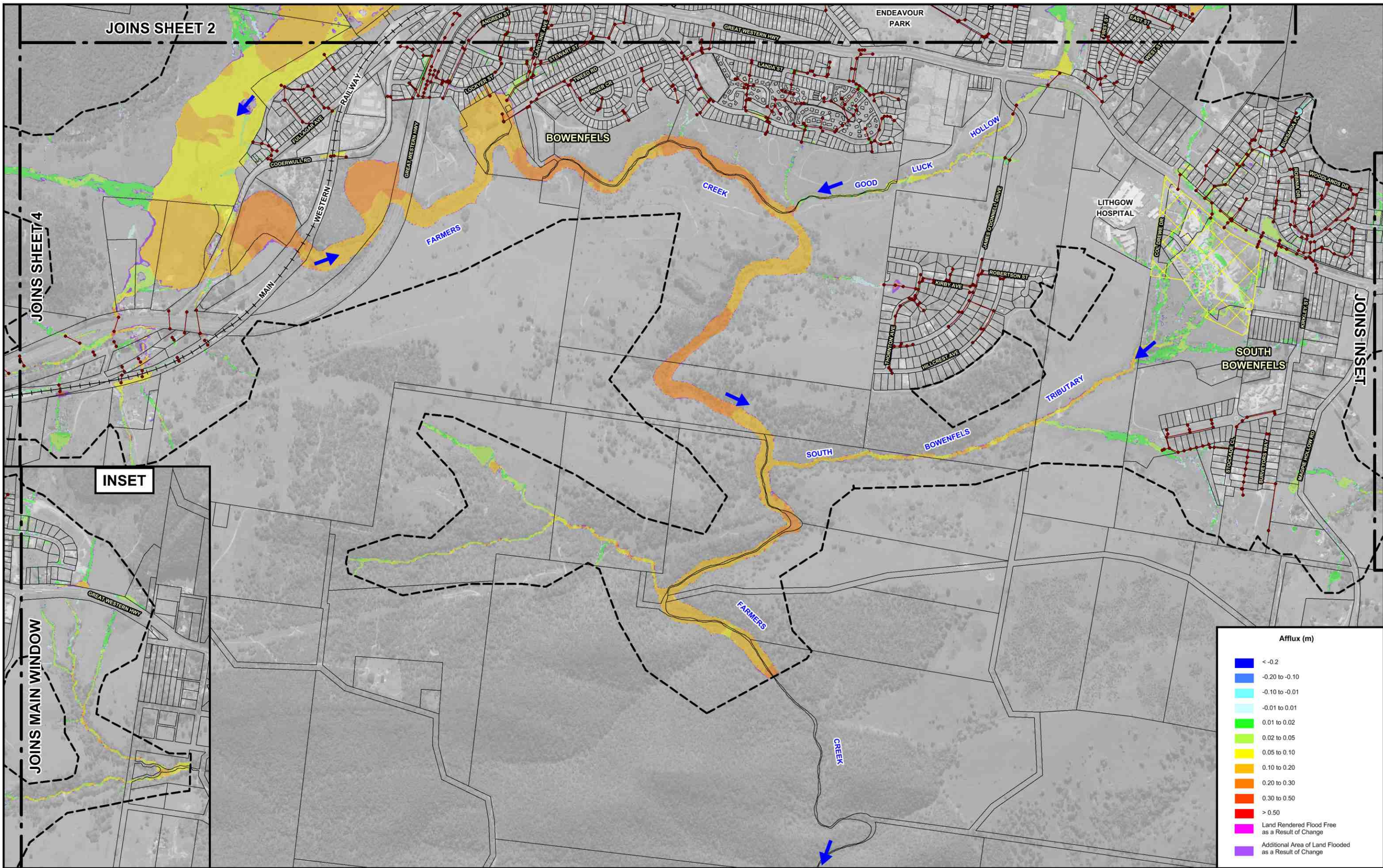
**NOTE:**  
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 Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

- LEGEND**
- Two-Dimensional Model Boundary
  - Modelled Stormwater Network



**LITHGOW FLOOD STUDY REVIEW**

Figure 6.13  
 (Sheet 2 of 4)  
 SENSITIVITY OF FLOOD BEHAVIOUR TO 10% INCREASE IN RAINFALL INTENSITY  
 100 YEAR ARI



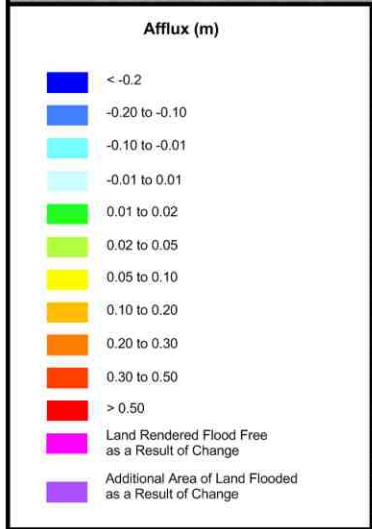
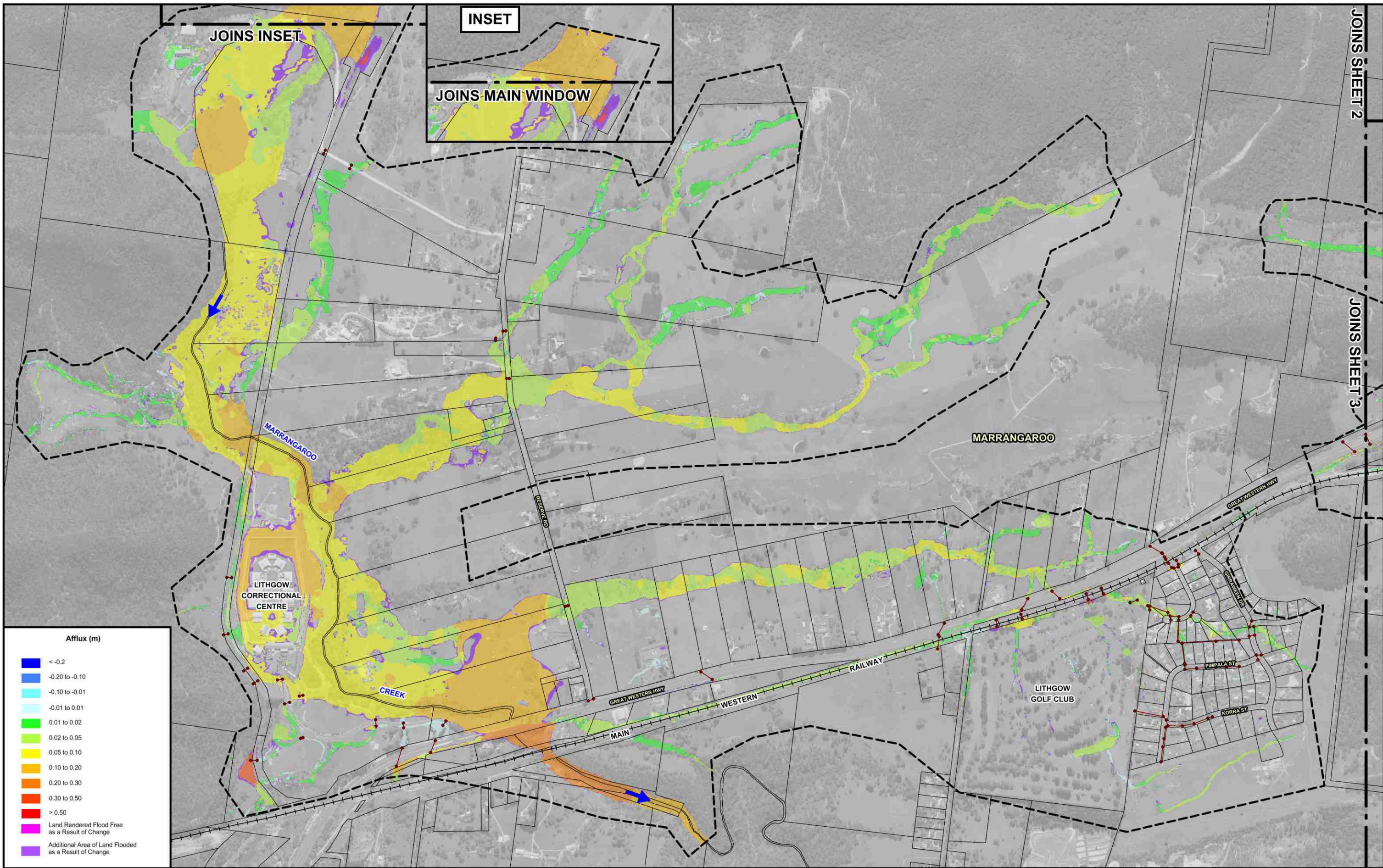
**NOTE:**  
 The ground surface model incorporated in TUFLOW is based on LiDAR survey which has been sampled on a 3m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.  
 Flood depths are therefore approximate only and require interpretation by a suitably qualified engineer to determine flooding behaviour in individual allotments. Any assessment of flooding in individual allotments may also require a site survey.

- LEGEND**
- Two-Dimensional Model Boundary
  - Modelled Stormwater Network
  - ▭ Extent of Recent Subdivision Development. Details of New Stormwater Drainage System have not been incorporated in Farmers Creek TUFLOW Model.

**LITHGOW FLOOD STUDY REVIEW**

Figure 6.13  
 (Sheet 3 of 4)

SENSITIVITY OF FLOOD BEHAVIOUR TO 10% INCREASE IN RAINFALL INTENSITY  
 100 YEAR ARI

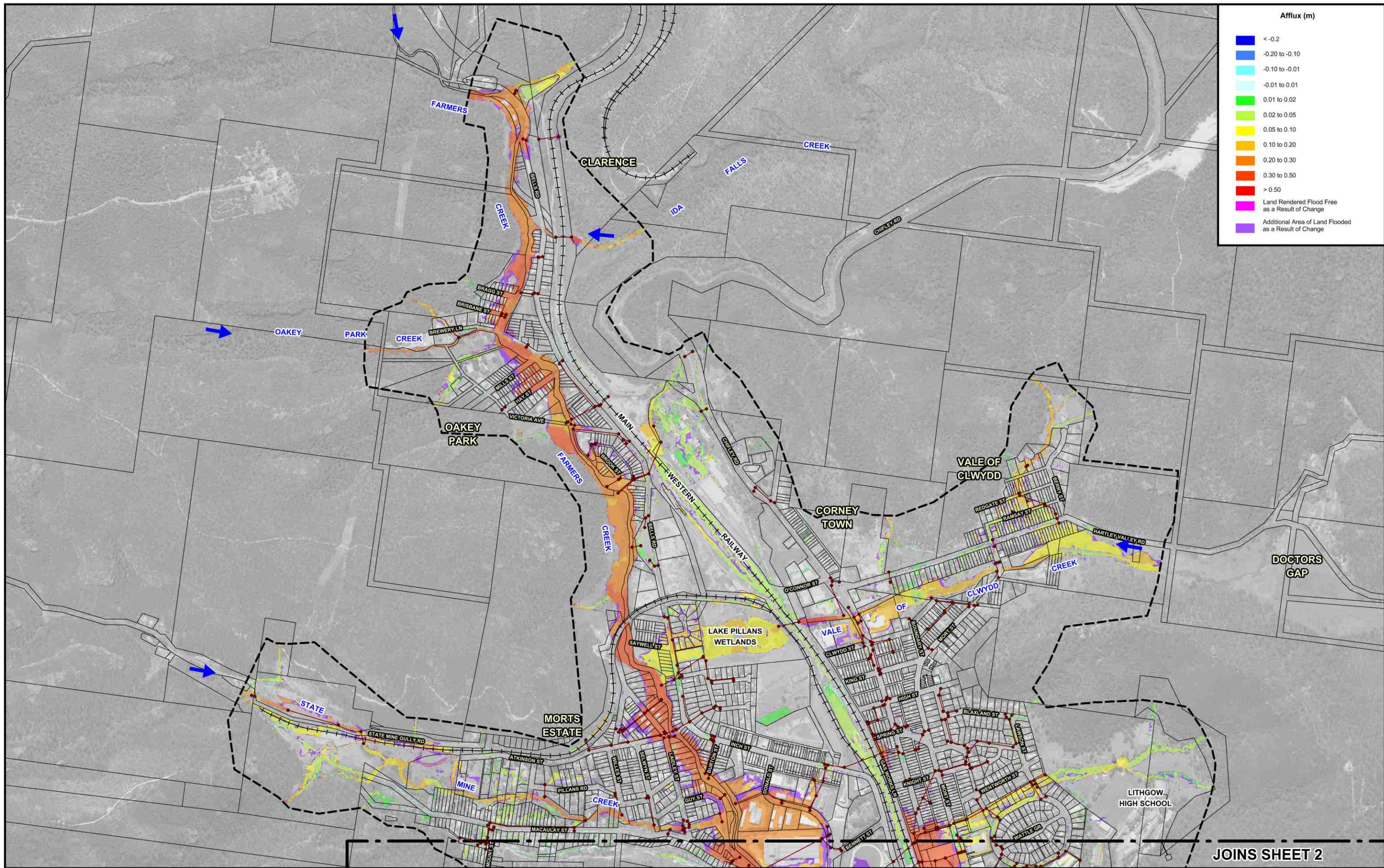


**NOTE:**  
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**LEGEND**

- Two-Dimensional Model Boundary
- Modelled Stormwater Network



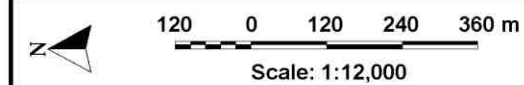
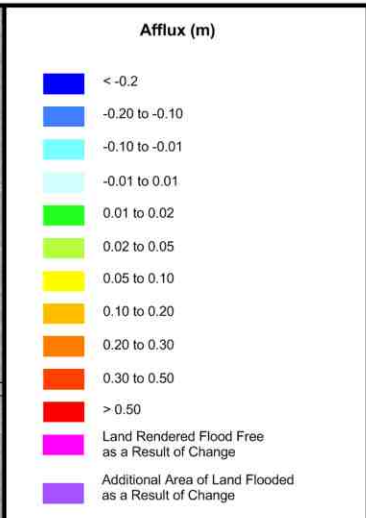
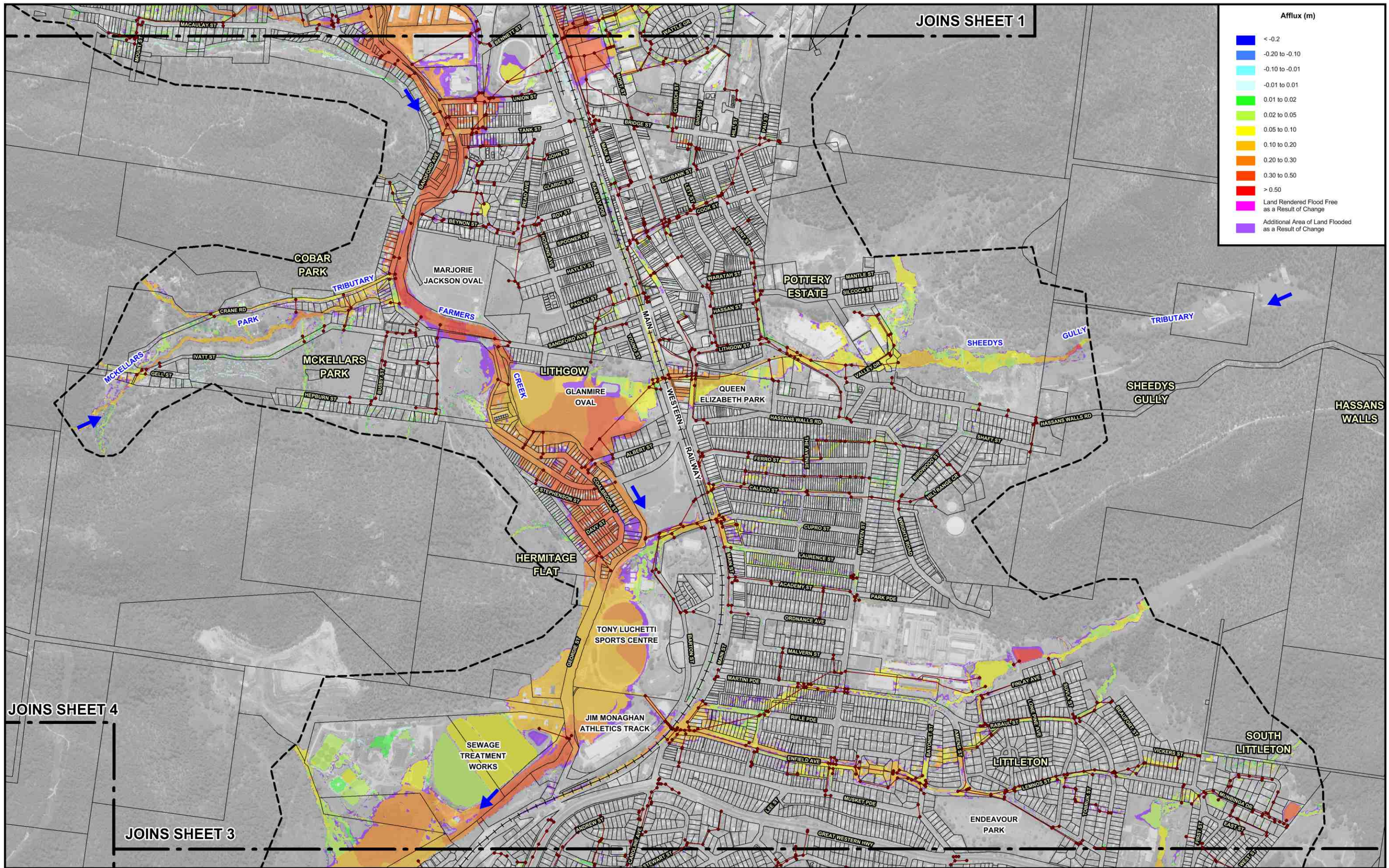
Afflux (m)	
Blue	< -0.2
Light Blue	-0.20 to -0.10
Cyan	-0.10 to -0.01
Light Green	-0.01 to 0.01
Green	0.01 to 0.02
Yellow-Green	0.02 to 0.05
Yellow	0.05 to 0.10
Orange	0.10 to 0.20
Red-Orange	0.20 to 0.30
Red	0.30 to 0.50
Dark Red	> 0.50
Pink	Land Rendered Flood Free as a Result of Change
Purple	Additional Area of Land Flooded as a Result of Change

120 0 120 240 360 m  
 Scale: 1:12,000

**NOTE:**  
 The ground surface model incorporated in TUFLOW is based on LiDAR survey which has been sampled on a 3m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.  
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**LEGEND**  
 - - - Two-Dimensional Model Boundary  
 ● Modelled Stormwater Network

LITHGOW FLOOD STUDY REVIEW



**NOTE:**  
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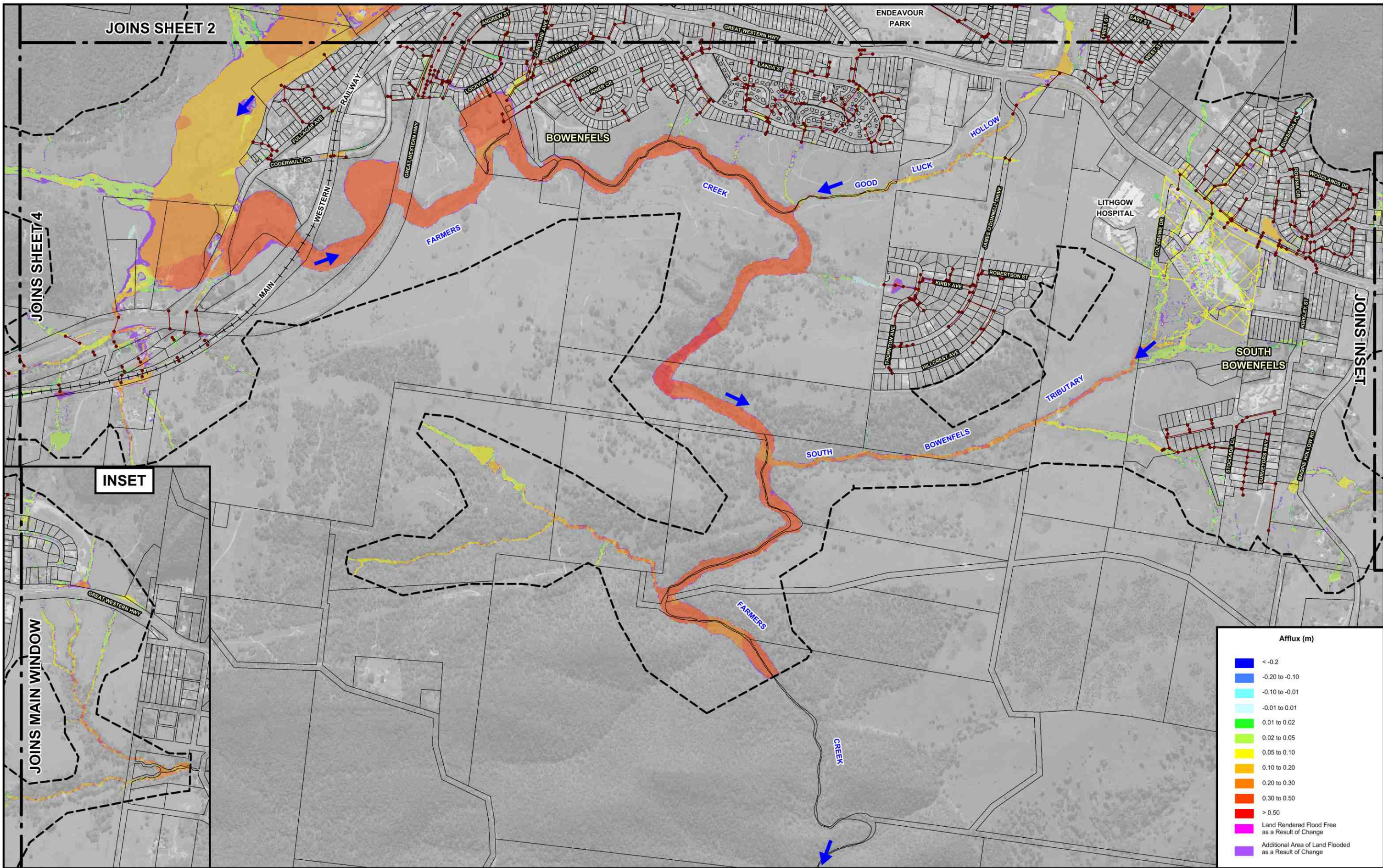
**LEGEND**

- Two-Dimensional Model Boundary
- Modelled Stormwater Network



**LITHGOW FLOOD STUDY REVIEW**

Figure 6.14  
 (Sheet 2 of 4)  
**SENSITIVITY OF FLOOD BEHAVIOUR TO 30% INCREASE IN RAINFALL INTENSITY  
 100 YEAR ARI**



Scale: 1:12,000

**NOTE:**  
 The ground surface model incorporated in TUFLOW is based on LiDAR survey which has been sampled on a 3m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.  
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**LEGEND**  
 - - - Two-Dimensional Model Boundary  
 ● Modelled Stormwater Network

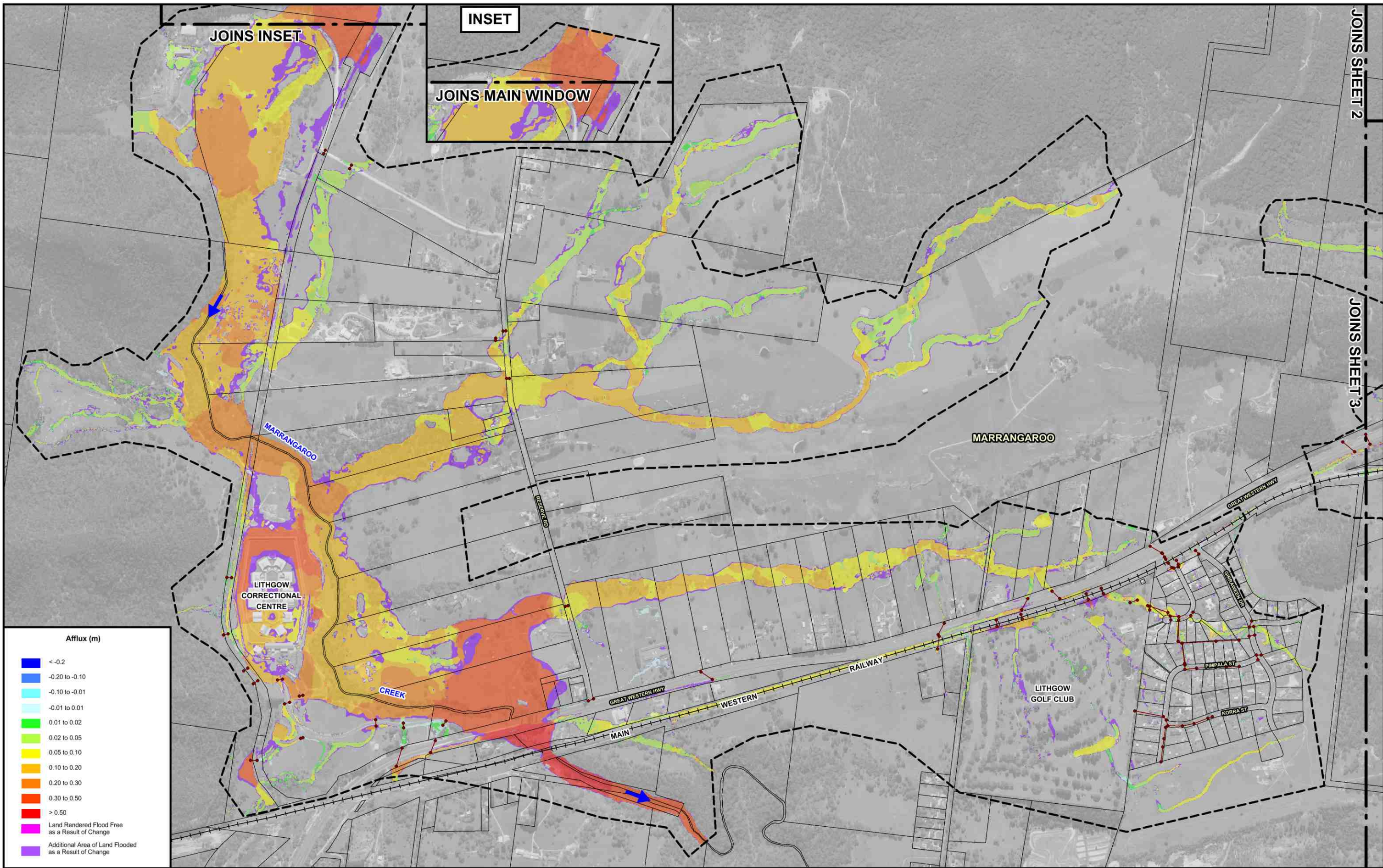
Extent of Recent Subdivision Development. Details of New Stormwater Drainage System have not been incorporated in Farmers Creek TUFLOW Model.

**LITHGOW FLOOD STUDY REVIEW**

Figure 6.14  
 (Sheet 3 of 4)

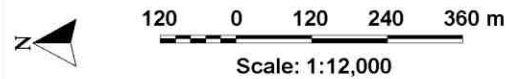
SENSITIVITY OF FLOOD BEHAVIOUR TO 30% INCREASE IN RAINFALL INTENSITY  
 100 YEAR ARI





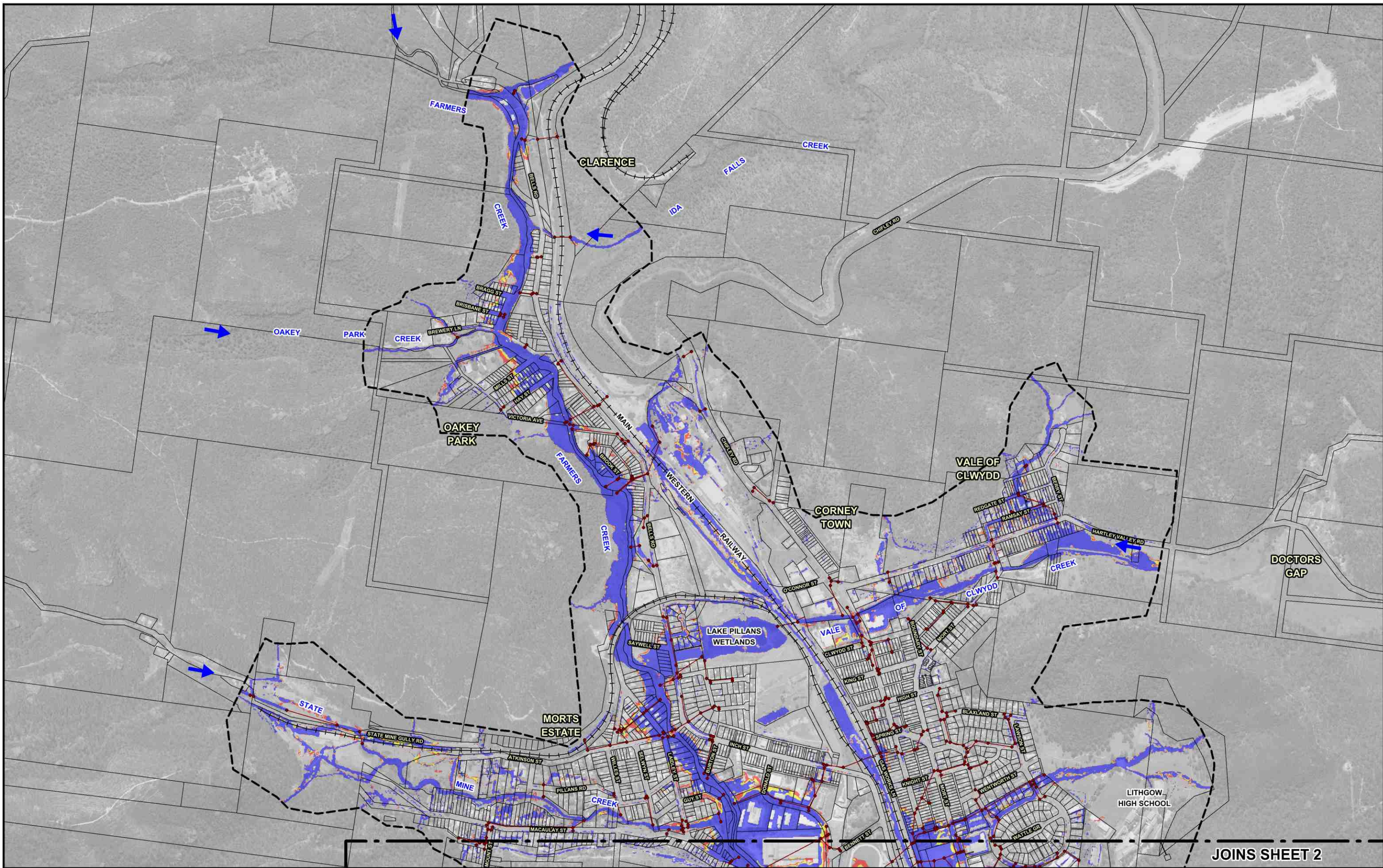
**Afflux (m)**

Blue	< -0.2
Dark Blue	-0.20 to -0.10
Light Blue	-0.10 to -0.01
Very Light Blue	-0.01 to 0.01
Light Green	0.01 to 0.02
Yellow-Green	0.02 to 0.05
Yellow	0.05 to 0.10
Orange	0.10 to 0.20
Red-Orange	0.20 to 0.30
Red	0.30 to 0.50
Dark Red	> 0.50
Pink	Land Rendered Flood Free as a Result of Change
Purple	Additional Area of Land Flooded as a Result of Change

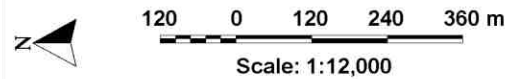


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- LEGEND**
- Two-Dimensional Model Boundary
  - Modelled Stormwater Network



JOINS SHEET 2



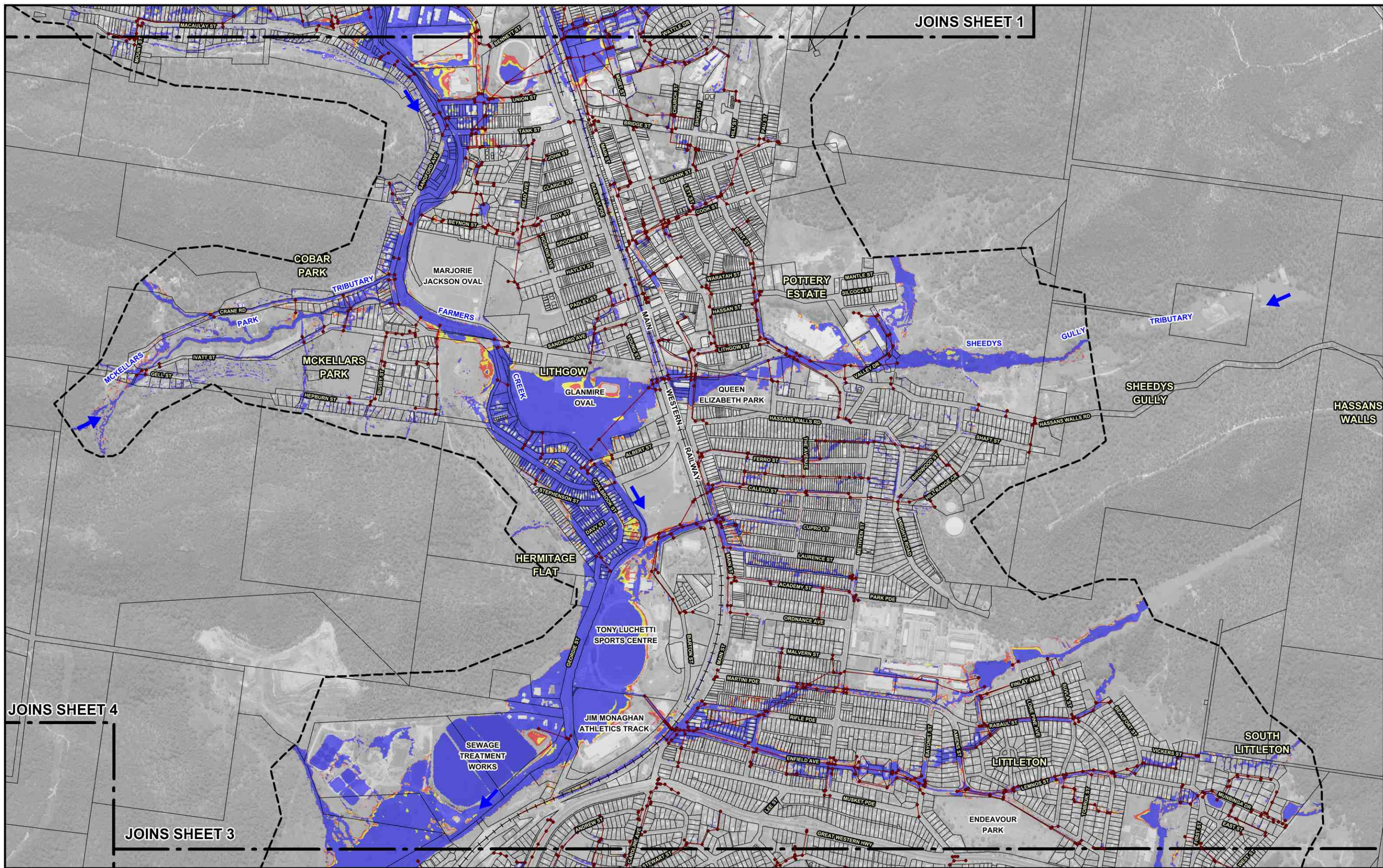
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**LEGEND**

- Two-Dimensional Model Boundary
- Modelled Stormwater Network

- 100 Year ARI
- 100 Year ARI Rainfall Increased by 10%
- 100 Year ARI Rainfall Increased by 30%

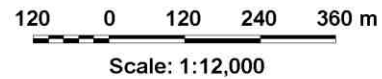
LITHGOW FLOOD STUDY REVIEW



JOINS SHEET 1

JOINS SHEET 4

JOINS SHEET 3



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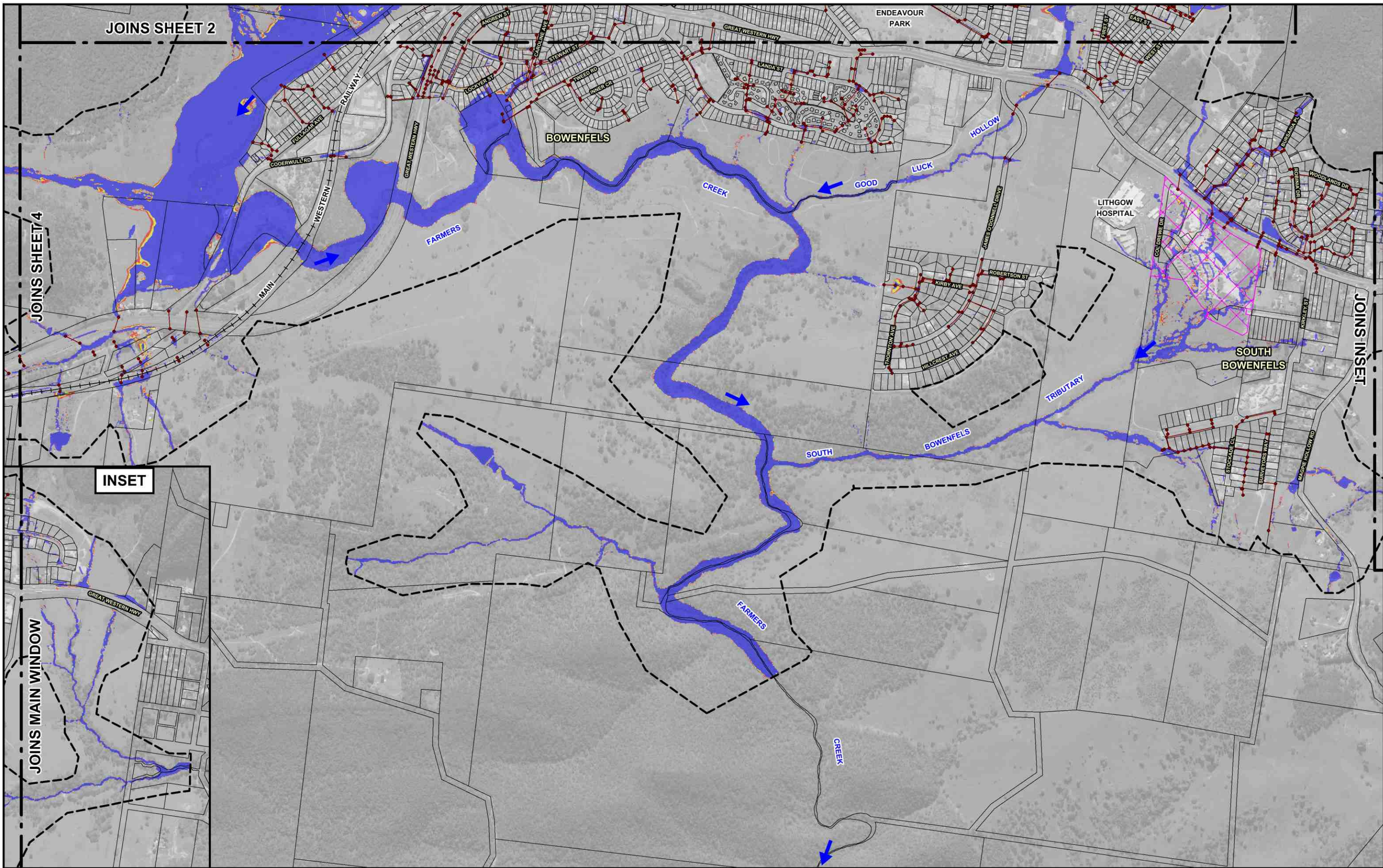
- LEGEND**
- Two-Dimensional Model Boundary
  - Modelled Stormwater Network

- 100 Year ARI
- 100 Year ARI Rainfall Increased by 10%
- 100 Year ARI Rainfall Increased by 30%

LITHGOW FLOOD STUDY REVIEW

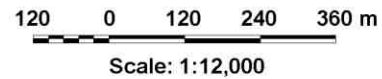
**Lyll & Associates**

Figure 6.15  
 (Sheet 2 of 4)  
 IMPACT OF INCREASED RAINFALL INTENSITIES ON EXTENT OF FLOODING  
 100 YEAR ARI



INSET

JOINS MAIN WINDOW



**NOTE:**  
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**Lyall & Associates**

**LEGEND**

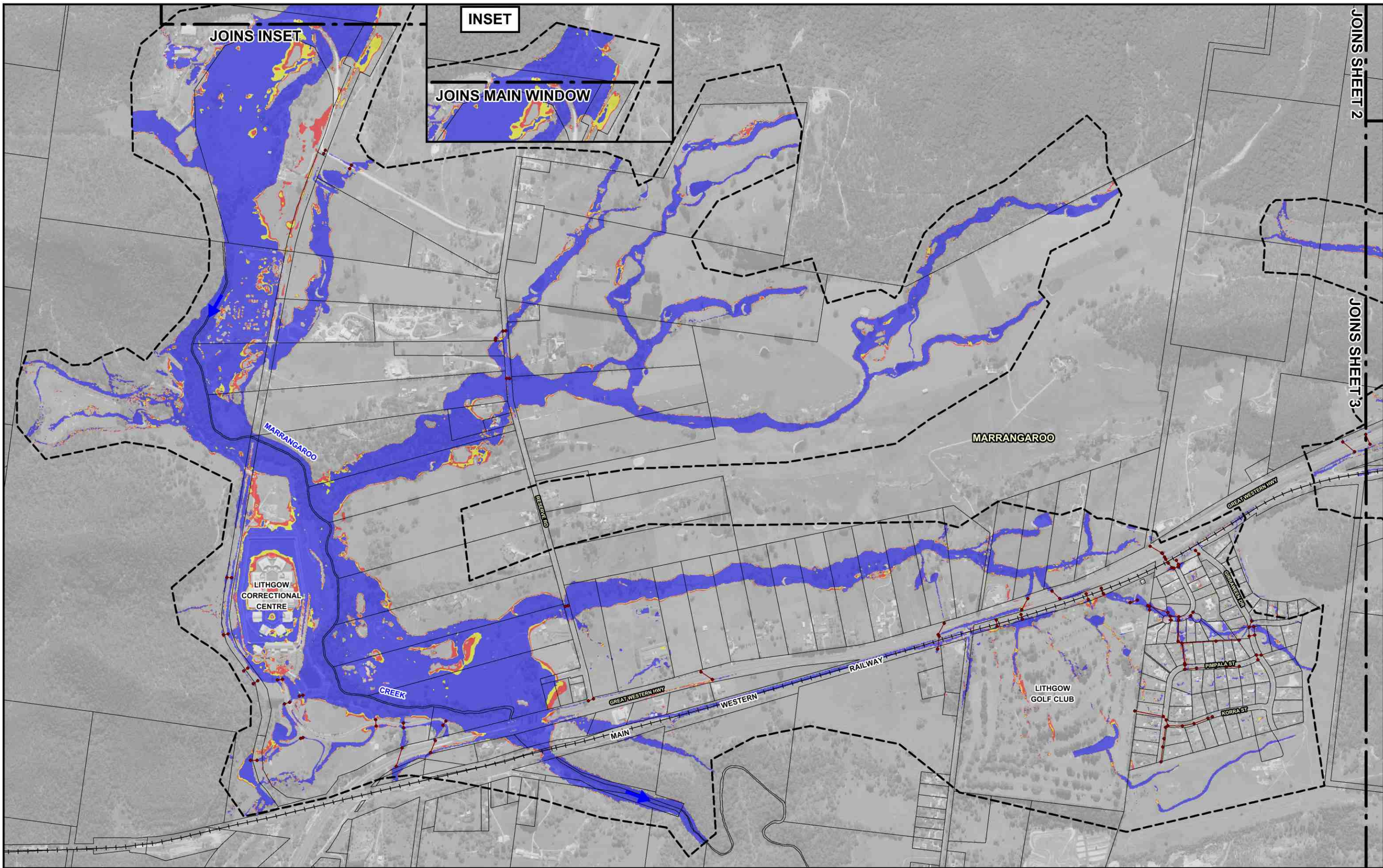
- Two-Dimensional Model Boundary
- Modelled Stormwater Network
- Extent of Recent Subdivision Development. Details of New Stormwater Drainage System have not been Incorporated in Farmers Creek TUFLOW Model.

- 100 Year ARI
- 100 Year ARI Rainfall Increased by 10%
- 100 Year ARI Rainfall Increased by 30%

**IMPACT OF INCREASED RAINFALL INTENSITIES ON EXTENT OF FLOODING 100 YEAR ARI**

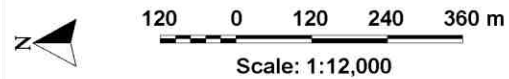
**LITHGOW FLOOD STUDY REVIEW**

Figure 6.15  
 (Sheet 3 of 4)  
 IMPACT OF INCREASED RAINFALL INTENSITIES ON EXTENT OF FLOODING  
 100 YEAR ARI



JOINS SHEET 2

JOINS SHEET 3



**NOTE:**  
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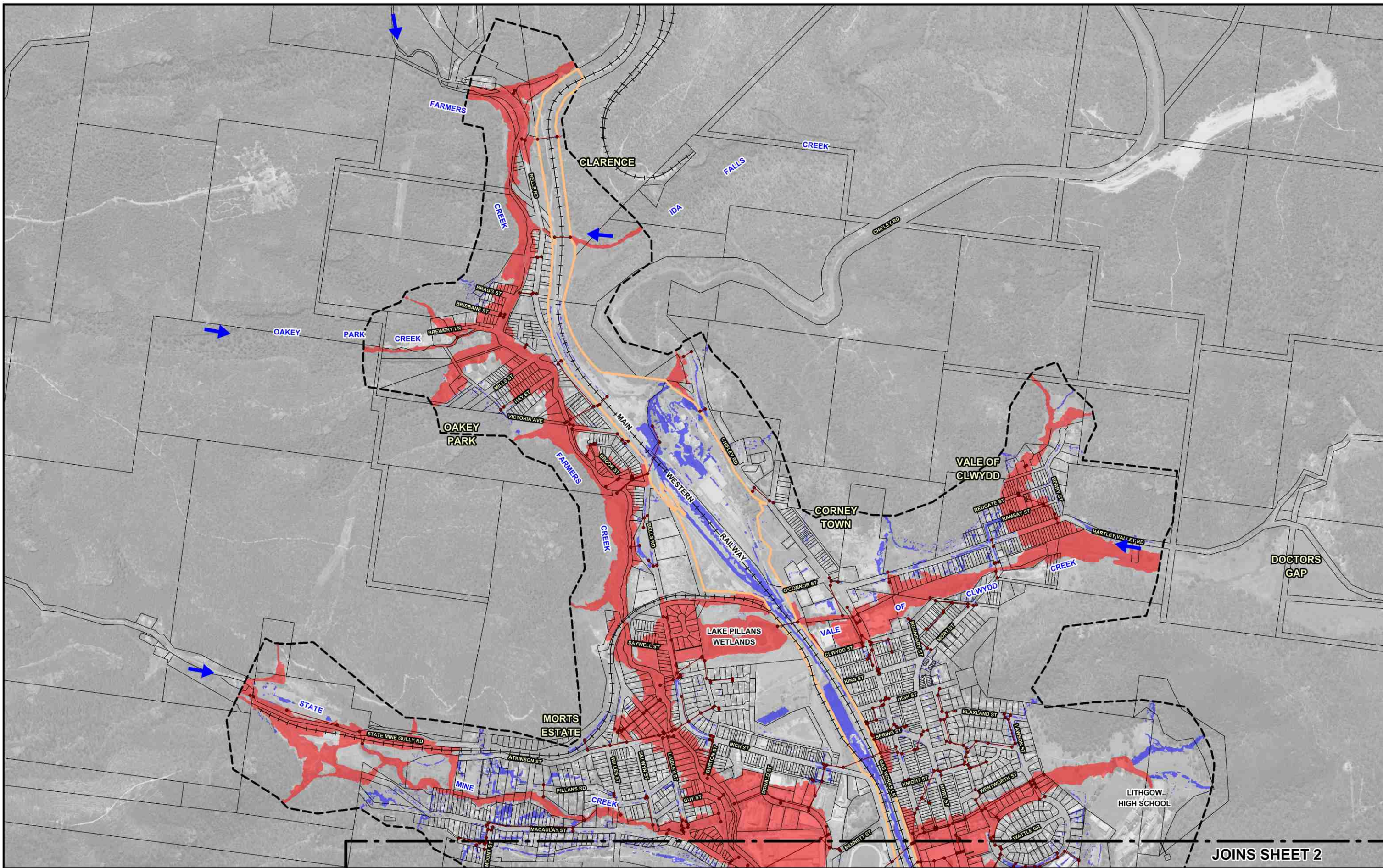
- LEGEND**
- Two-Dimensional Model Boundary
  - Modelled Stormwater Network

- 100 Year ARI
- 100 Year ARI Rainfall Increased by 10%
- 100 Year ARI Rainfall Increased by 30%

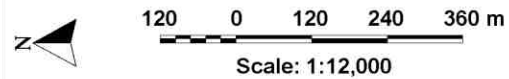
**Lyall & Associates**

**LITHGOW FLOOD STUDY REVIEW**

Figure 6.15  
 (Sheet 4 of 4)  
**IMPACT OF INCREASED RAINFALL INTENSITIES ON EXTENT OF FLOODING  
 100 YEAR ARI**



JOINS SHEET 2



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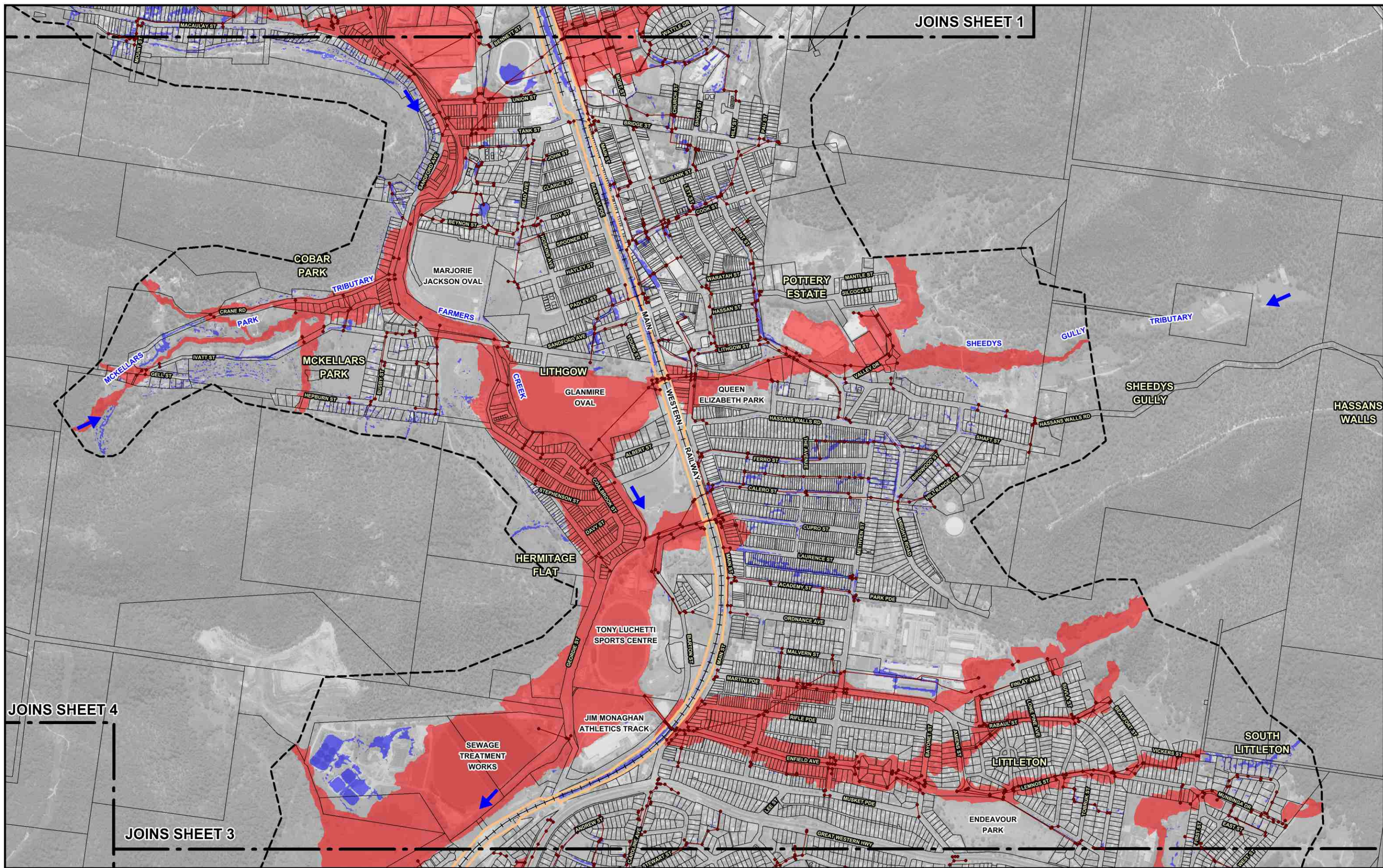
LEGEND	
	Two-Dimensional Model Boundary
	Modelled Stormwater Network
	Interim Flood Planning Area (Not Shown In Railway Land)
	Land Outside Interim Flood Planning Area Subject To Overland Flow Deeper Than 100 mm
	Extent Of Railway Land

LITHGOW FLOOD STUDY REVIEW

**Lyll & Associates**

Figure 6.16  
(Sheet 1 of 4)

INTERIM FLOOD PLANNING AREA  
 MAIN STREAM FLOODING AND MAJOR OVERLAND FLOW AFFECTED AREAS



JOINS SHEET 1

JOINS SHEET 4

JOINS SHEET 3

Scale: 1:12,000

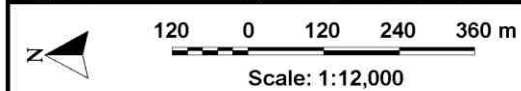
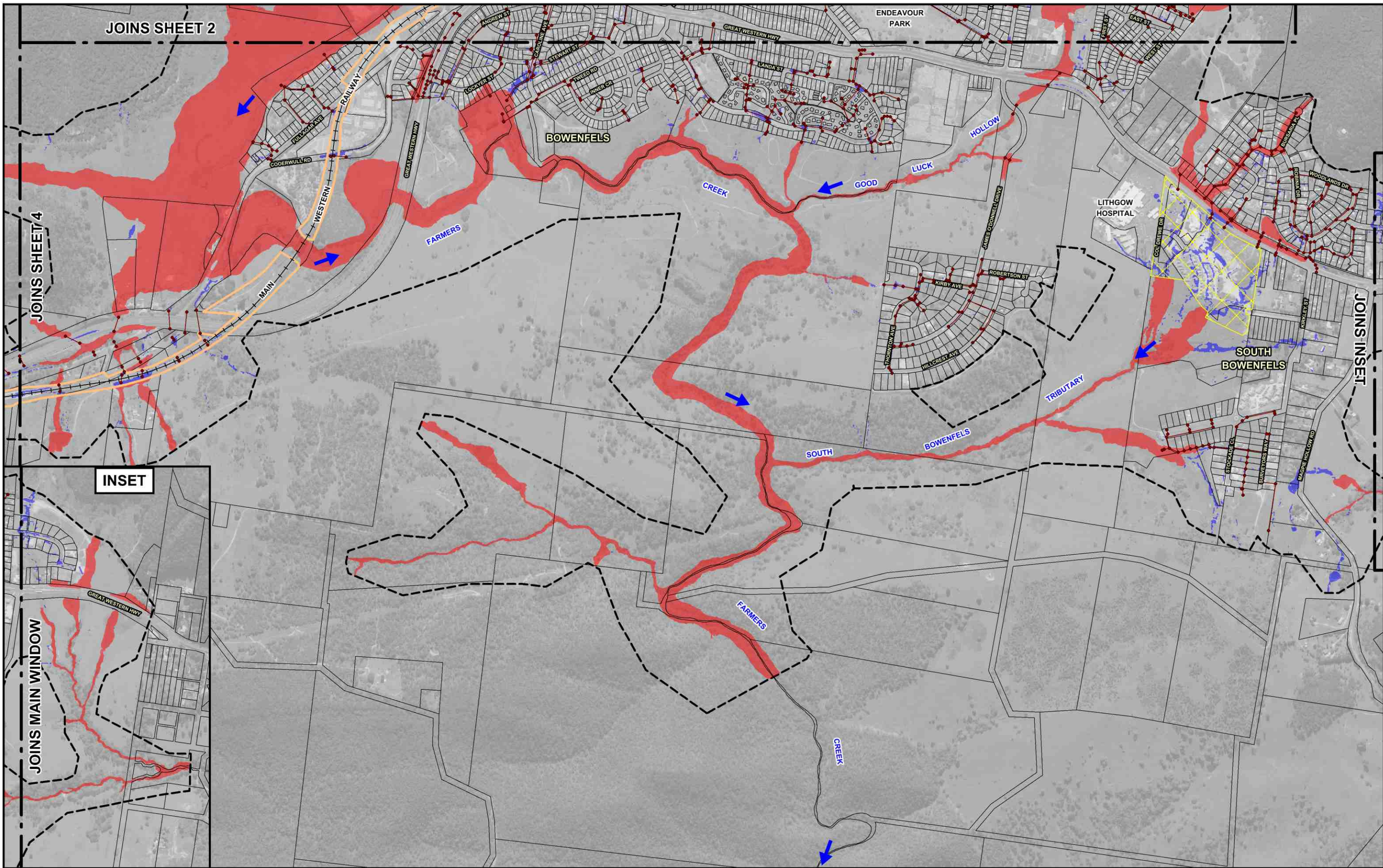
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- LEGEND**
- Two-Dimensional Model Boundary
  - Modelled Stormwater Network
  - Interim Flood Planning Area (Not Shown In Railway Land)
  - Land Outside Interim Flood Planning Area Subject To Overland Flow Deeper Than 100 mm
  - Extent Of Railway Land




LITHGOW FLOOD STUDY REVIEW

Figure 6.16  
(Sheet 2 of 4)

INTERIM FLOOD PLANNING AREA  
 MAIN STREAM FLOODING AND MAJOR OVERLAND FLOW AFFECTED AREAS



**NOTE:**  
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-  Two-Dimensional Model Boundary
-  Modelled Stormwater Network
-  Extent of Recent Subdivision Development. Details of New Stormwater Drainage System have not been Incorporated in Farmers Creek TUFLOW Model.

**LEGEND**

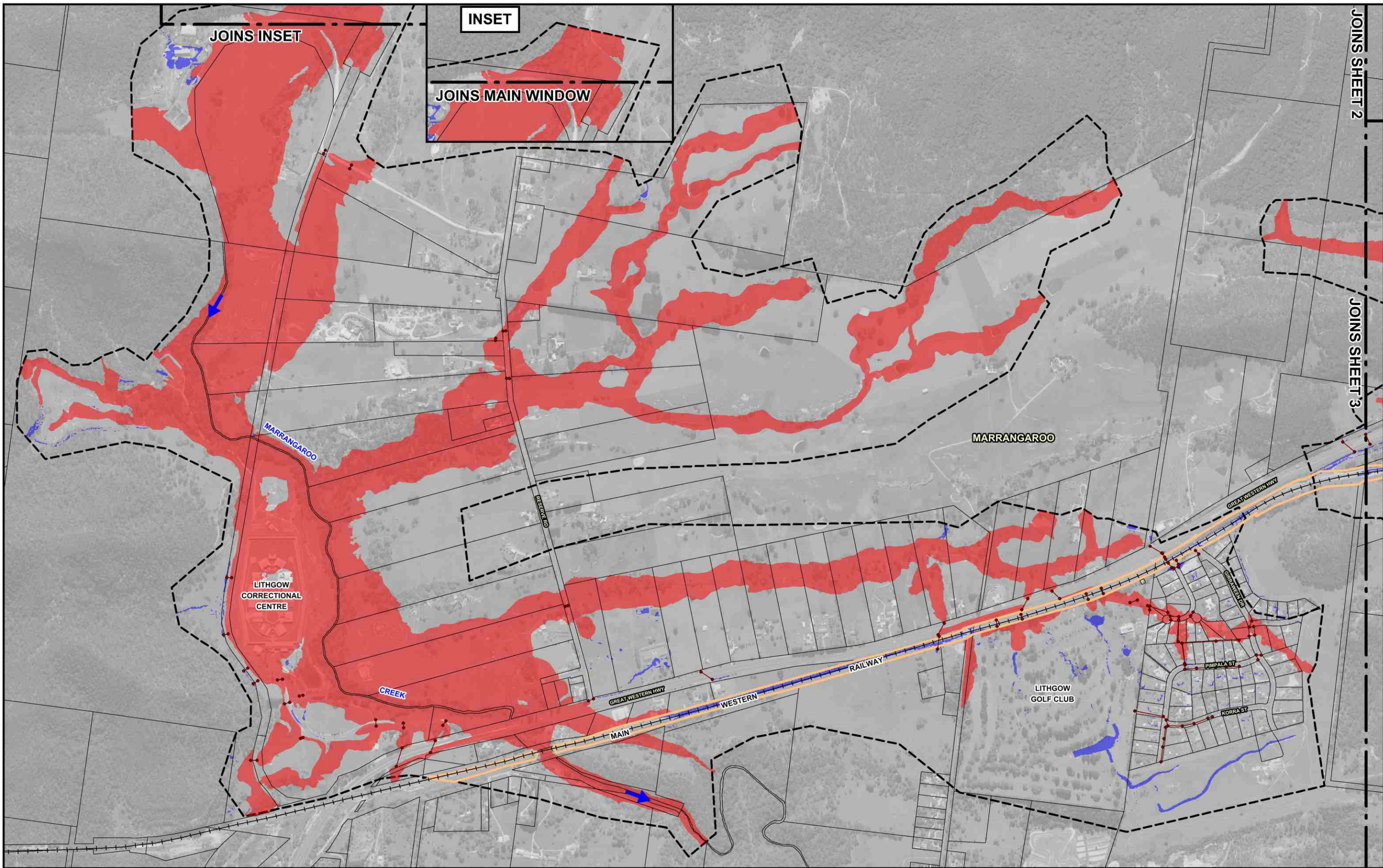
-  Interim Flood Planning Area (Not Shown In Railway Land)
-  Land Outside Interim Flood Planning Area Subject To Overland Flow Deeper Than 100 mm
-  Extent Of Railway Land

**LITHGOW FLOOD STUDY REVIEW**

Figure 6.16  
(Sheet 3 of 4)

**INTERIM FLOOD PLANNING AREA  
 MAIN STREAM FLOODING AND MAJOR OVERLAND FLOW AFFECTED AREAS**





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- Two-Dimensional Model Boundary
- Modelled Stormwater Network

**LEGEND**

- Interim Flood Planning Area (Not Shown In Railway Land)
- Land Outside Interim Flood Planning Area Subject To Overland Flow Deeper Than 100 mm
- ▭ Extent Of Railway Land



**LITHGOW FLOOD STUDY REVIEW**

Figure 6.16  
 (Sheet 4 of 4)  
 INTERIM FLOOD PLANNING AREA  
 MAIN STREAM FLOODING AND MAJOR OVERLAND FLOW AFFECTED AREAS