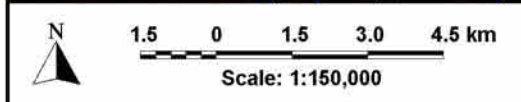
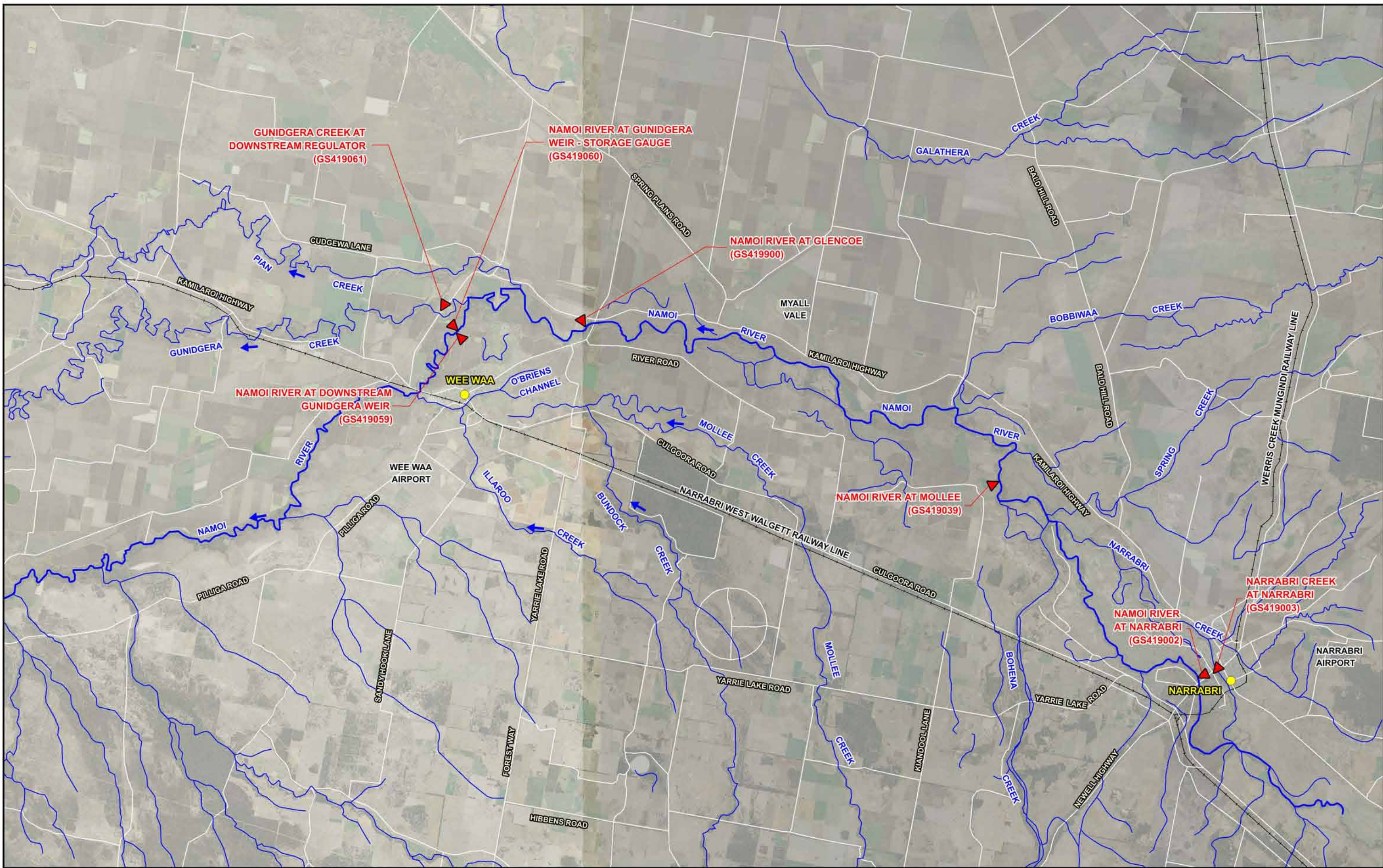


## **FIGURES**





LEGEND

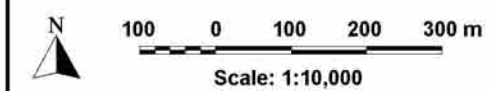
- WaterNSW Stream Gauge

WEE WAA HIGH SCHOOL  
CONSTRUCTION FLOOD EMERGENCY RESPONSE SUB-PLAN





REFER SHEET 2



-  Existing Levee Centre Line and Chainage
-  Existing Flood Gate Location and Identifier
-  Existing Pump Location and Identifier

- LEGEND**
-  Existing Drainage System
  -  Construction Site Boundary

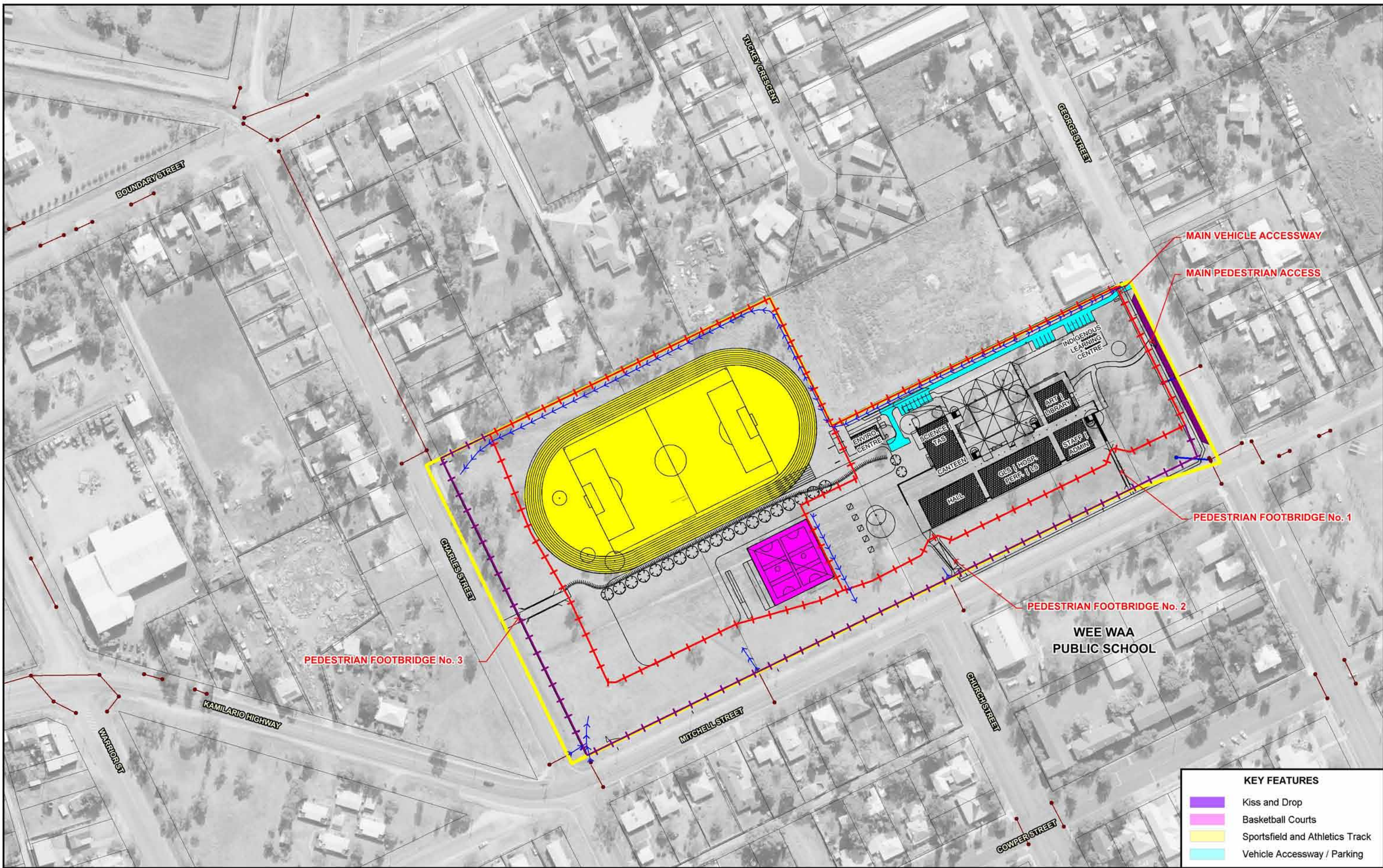
**WEE WAA HIGH SCHOOL  
CONSTRUCTION FLOOD EMERGENCY RESPONSE SUB-PLAN**

Figure 2  
(Sheet 1 of 2)

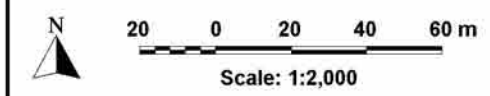


KEY FEATURES OF THE PROPOSAL AND FMW





KEY FEATURES	
	Kiss and Drop
	Basketball Courts
	Sportsfield and Athletics Track
	Vehicle Accessway / Parking



**Lyall & Associates**

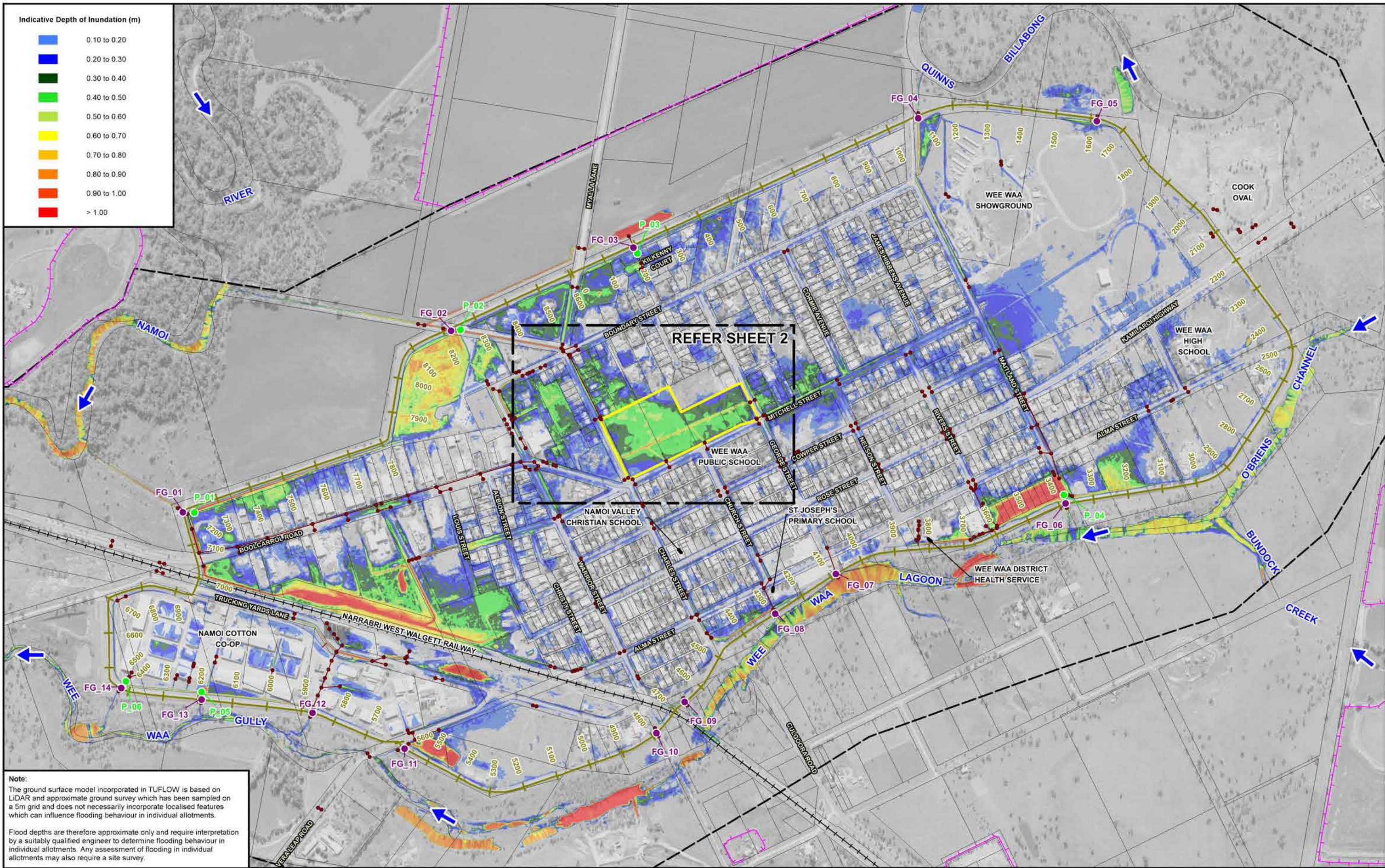
LEGEND			
	Existing Drainage System		Construction Site Boundary
	Proposed Drainage System		Proposal Design Strings
	Proposed 1.2 m High Perimeter Fence		Proposal Building Footprint
	Proposed 2.1 m High Perimeter Fence		
	Proposed Grassed Catch Drain / Swale		

**WEE WAA HIGH SCHOOL  
CONSTRUCTION FLOOD EMERGENCY RESPONSE SUB-PLAN**

Figure 2  
(Sheet 2 of 2)

KEY FEATURES OF THE PROPOSAL AND FMW

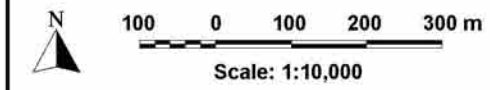




Indicative Depth of Inundation (m)

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 and approximate ground survey which has been sampled on a 5m 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

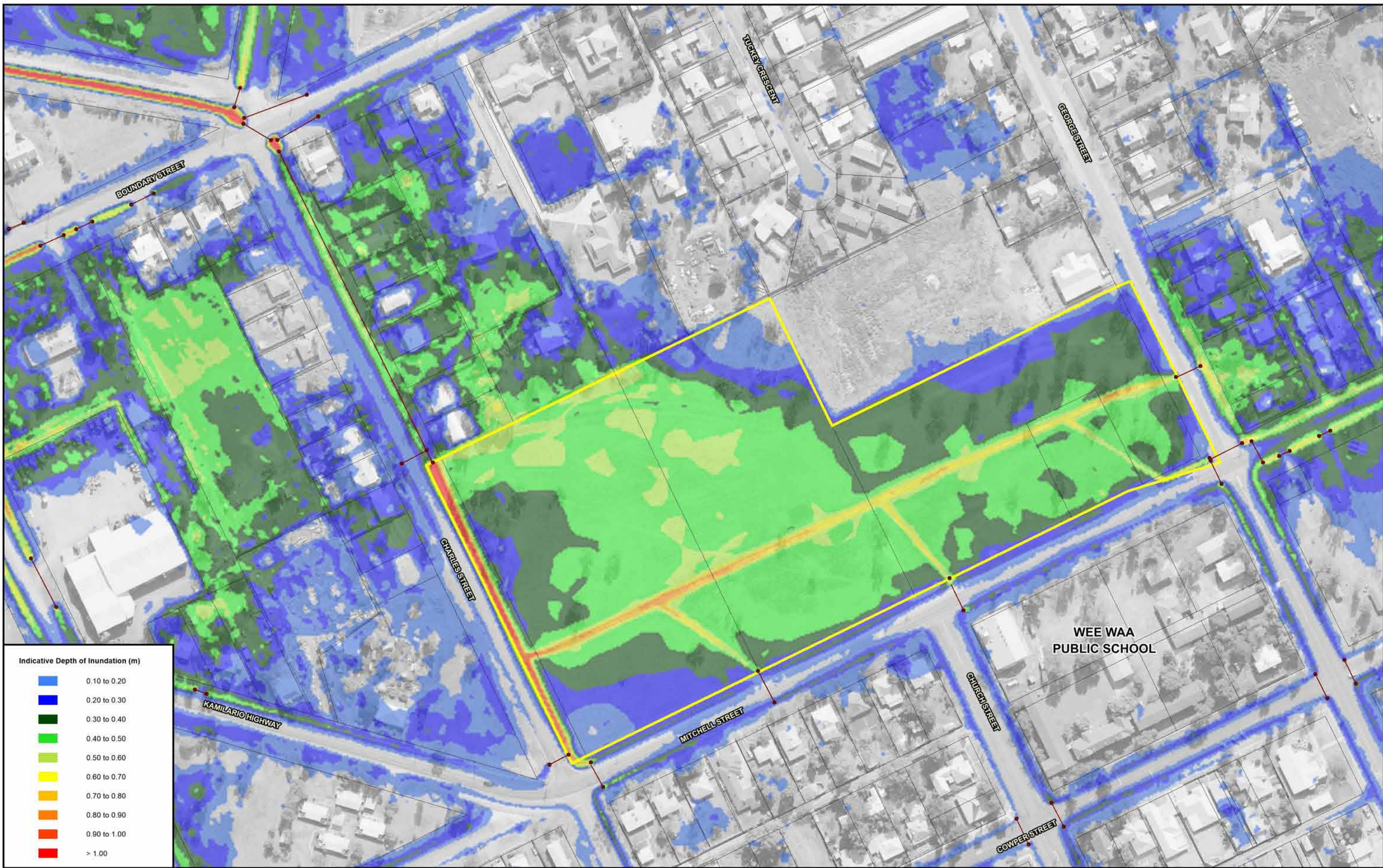
	Existing Levee Centre Line and Chainage		Two-Dimensional Model Extent
	Existing Rural Levees on Namoi River Floodplain		Modelled Stormwater Network
	Existing Flood Gate Location and Identifier		Construction Site Boundary
	Existing Pump Location and Identifier		

WEE WAA HIGH SCHOOL  
 CONSTRUCTION FLOOD EMERGENCY RESPONSE SUB-PLAN

Figure 3  
 (Sheet 1 of 2)  
 INDICATIVE EXTENT AND DEPTH OF INUNDATION INTERNAL TO TOWN LEVEE  
 PRE-PROPOSAL AND FMW CONDITIONS - 1% AEP

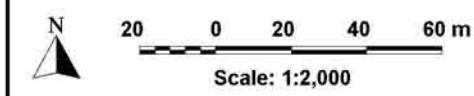






Indicative Depth of Inundation (m)

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

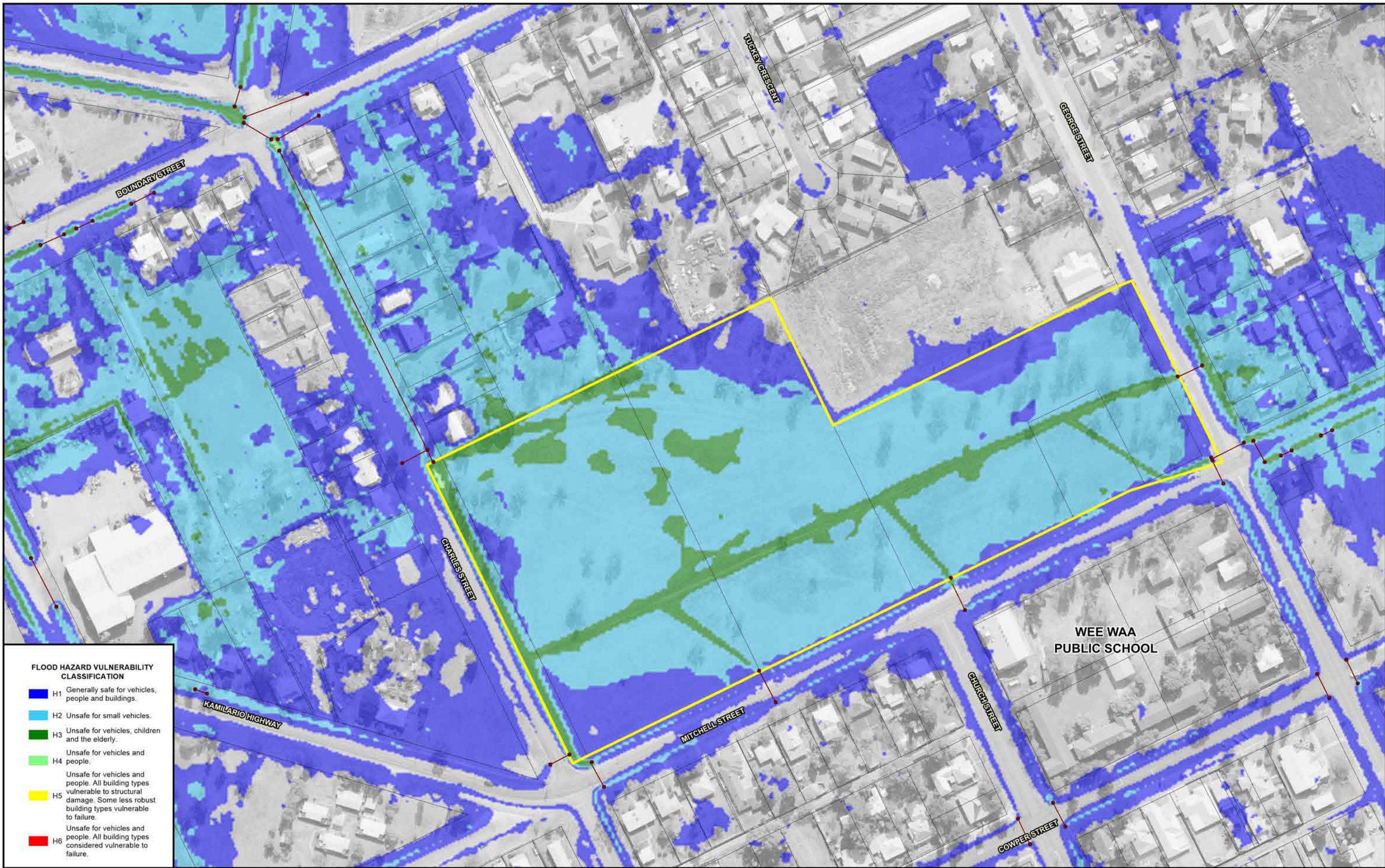


**Note:**  
 The ground surface model incorporated in TUFLOW is based on LiDAR and approximate ground survey which has been sampled on a 5m grid and does not necessarily incorporate localised features which can influence flooding behaviour in individual allotments.  
 Flood depths are therefore approximate 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**
- Modelled Stormwater Network
  - ▭ Construction Site Boundary

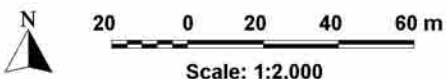
**WEE WAA HIGH SCHOOL  
 CONSTRUCTION FLOOD EMERGENCY RESPONSE SUB-PLAN**





**FLOOD HAZARD VULNERABILITY CLASSIFICATION**

- H1 Generally safe for vehicles, people and buildings.
- H2 Unsafe for small vehicles.
- H3 Unsafe for vehicles, children and the elderly.
- H4 Unsafe for vehicles and people.
- H5 Unsafe for vehicles and people. All building types vulnerable to structural damage. Some less robust building types vulnerable to failure.
- H6 Unsafe for vehicles and people. All building types considered vulnerable to failure.



**Note:**  
The ground surface model incorporated in TUFLOW is based on LiDAR and approximate ground survey which has been sampled on a 5m 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.

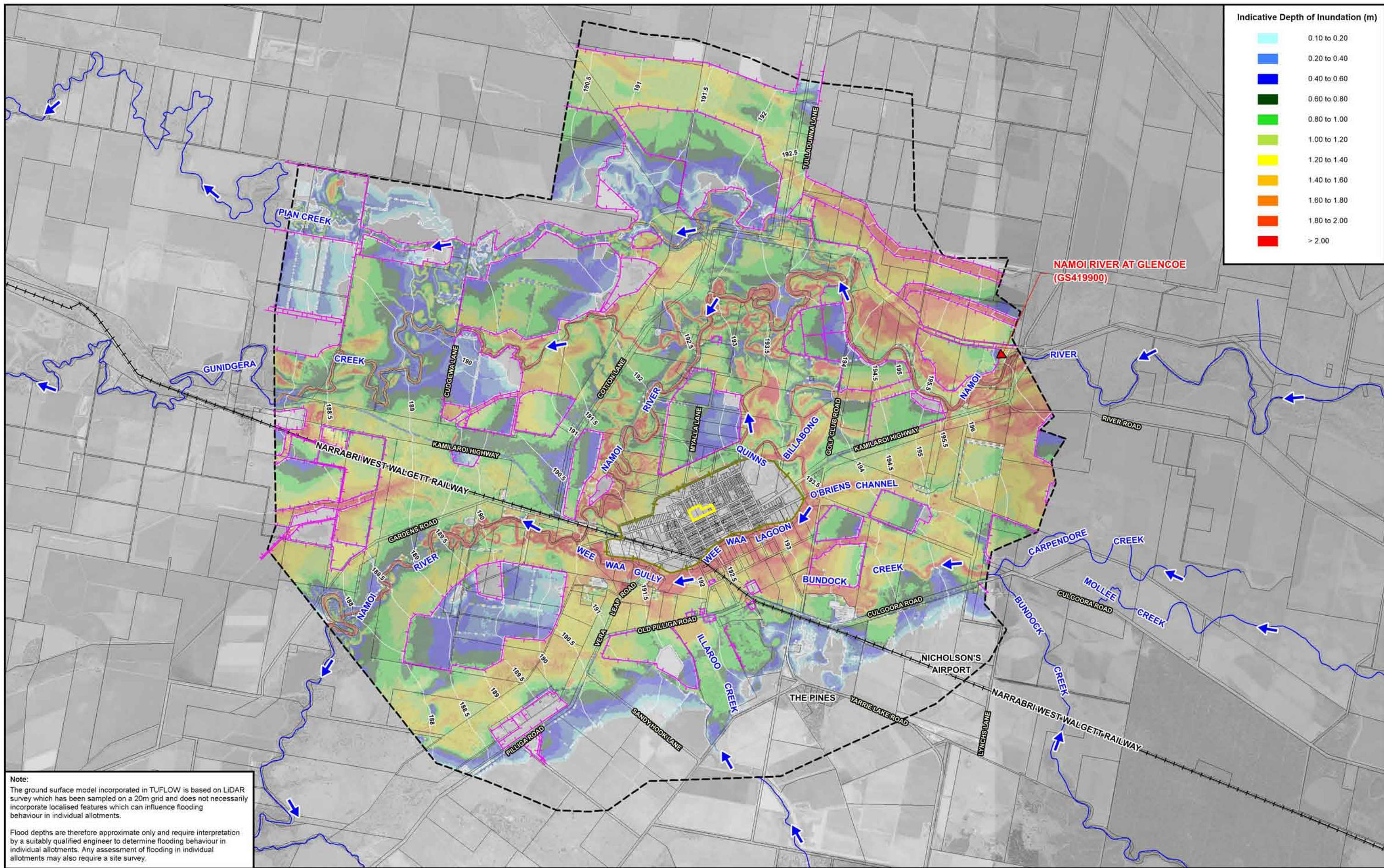
**LEGEND**

- Modelled Stormwater Network
- Construction Site Boundary

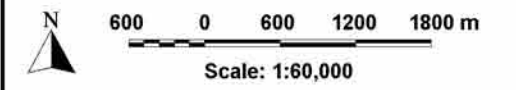
**WEE WAA HIGH SCHOOL  
CONSTRUCTION FLOOD EMERGENCY RESPONSE SUB-PLAN**

Figure 4





**Note:**  
 The ground surface model incorporated in TUFLOW is based on LiDAR survey which has been sampled on a 20m 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.



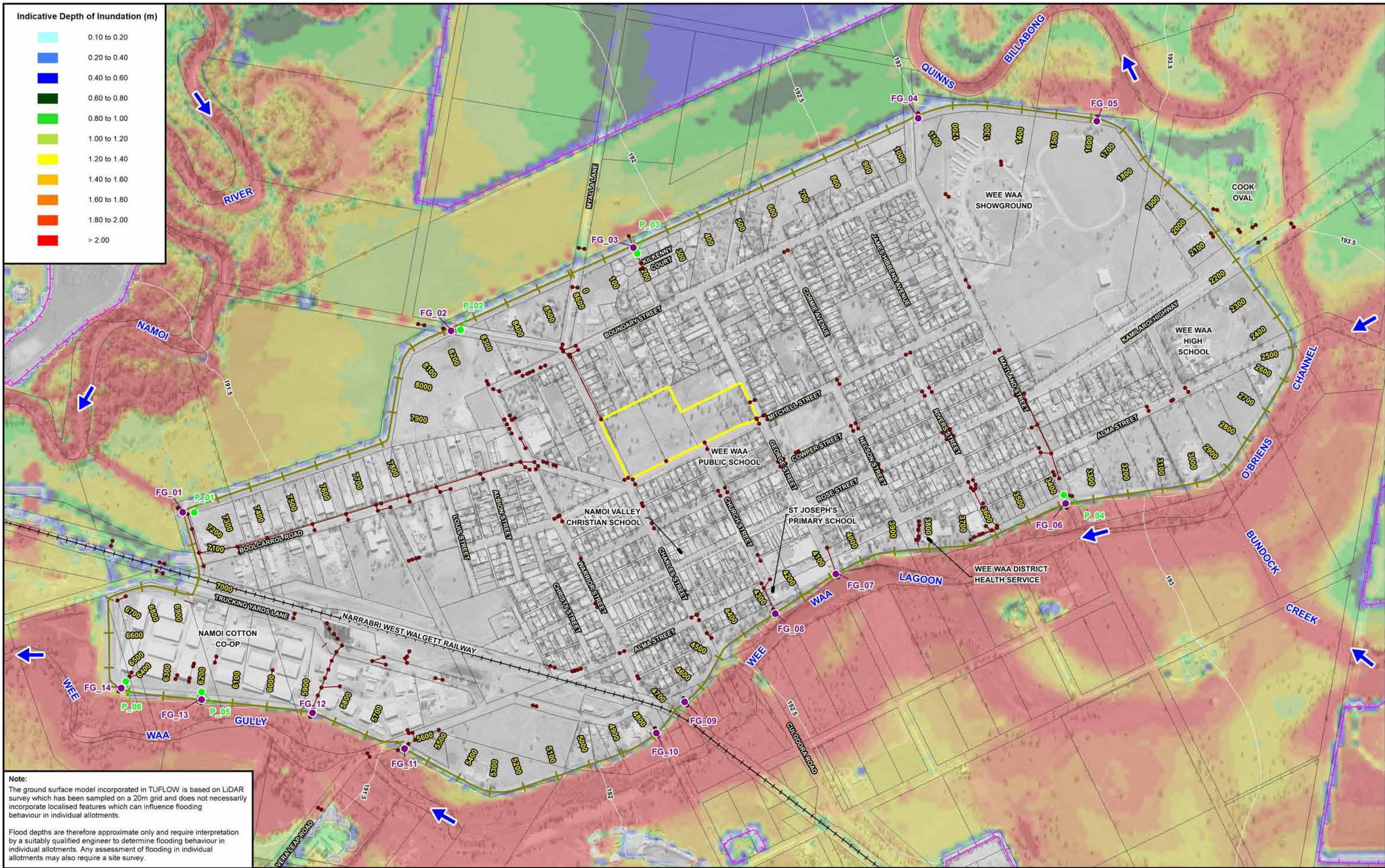
- LEGEND**
- Two-Dimensional Model Boundary
  - Water Surface Elevation Contours (m AHD)
  - WaterNSW Stream Gauge
  - Existing Town Levee Centre Line
  - Existing Rural Levees on Namoi River Floodplain
  - Construction Site Boundary

**WEE WAA HIGH SCHOOL  
 CONSTRUCTION FLOOD EMERGENCY RESPONSE SUB-PLAN**

INDICATIVE EXTENT AND DEPTH OF INUNDATION EXTERNAL TO TOWN LEVEE  
 PRE-PROPOSAL AND FMW CONDITIONS - 1% AEP

Figure 5  
 (Sheet 1 of 2)

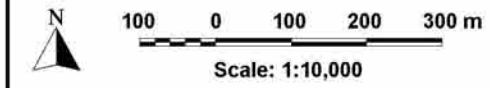




**Indicative Depth of Inundation (m)**

Light Blue	0.10 to 0.20
Blue	0.20 to 0.40
Dark Blue	0.40 to 0.60
Green	0.60 to 0.80
Light Green	0.80 to 1.00
Yellow-Green	1.00 to 1.20
Yellow	1.20 to 1.40
Orange	1.40 to 1.60
Red-Orange	1.60 to 1.80
Red	1.80 to 2.00
Dark Red	> 2.00

**Note:**  
 The ground surface model incorporated in TUFLOW is based on LIDAR survey which has been sampled on a 20m 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.



- Existing Town Levee Centre Line and Chainage
- Construction Site Boundary
- Existing Flood Gate Location and Identifier
- Existing Pump Location and Identifier

- LEGEND**
- Modelled Stormwater Network
  - Water Surface Elevation Contours (m AHD)
  - Existing Rural Levees on Namoi River Floodplain

**WEE WAA HIGH SCHOOL  
 CONSTRUCTION FLOOD EMERGENCY RESPONSE SUB-PLAN**

INDICATIVE EXTENT AND DEPTH OF INUNDATION EXTERNAL TO TOWN LEVEE  
 PRE-PROPOSAL AND FMW CONDITIONS - 1% AEP





**WEE WAA HIGH SCHOOL  
CONSTRUCTION FLOOD EMERGENCY RESPONSE SUB-PLAN**

Figure 6

FLOOD HAZARD VULNERABILITY CATEGORISATION EXTERNAL TO TOWN LEVEE  
PRE-PROPOSAL AND FMW CONDITIONS - 1% AEP



**APPENDIX A - FLOOD ACTIONS CHECKLIST**

Before a flood				
Trigger for action	Site status	Action	Responsible	What is needed
Always	At any time	All staff and contractors will be made aware during staff inductions of the possibility of flooding and the procedures to be followed if a flood were to occur.	Site Manager	Hard and soft copies of emergency contact details  Staff induction
		A fully charged and functional mobile phone will be kept in the site office whenever the site is occupied	Site Manager	Mobile phone, internet connection
		A computer with internet access and at least two hours independent power supply will be kept on site whenever the site is occupied	Site Manager	Computer or tablet with SIM card, charger and internet access
		An emergency contact sheet will be kept on site	Site Manager	Hard and soft copy of emergency contact details
		Management will maintain an emergency kit including a portable radio and torch with spare batteries and a first aid kit on site	Site Manager	Emergency kit
		The weather forecast and warnings will be checked each morning when the site opens	Site Manager	Internet access



When a flood is possible				
Trigger for action	Site status	Action	Responsible	What is needed
Bureau of Meteorology issues a severe weather warning possibly including a severe thunderstorm warning or flash flood warning for Wee Waa area  OR  Bureau of Meteorology issues a Flood Warning for the Namoi River,  OR  Flood water is observed approaching the site	Active	Monitor forecasts, severe weather warnings, weather radar, and water levels at the Glencoe Gauge and water levels on site at least every hour to monitor approaching floodwaters	Site Manager	Internet access



During a flood				
Trigger for action	Site status	Action	Responsible	What is needed
Bureau of Meteorology issues a Major Flood Warning for the Namoi River	Active	Contact all staff and contractors including those not on site and inform them that Wee Waa will be isolated. Staff on site should follow the directions of the local NSW SES. Staff outside of Wee Waa should not attempt to come to site until advised that flooding has subsided.	Site Manager	Mobile phone
Flood water is observed approaching the site	Active	Contact all staff and contractors including those not on site to advise that the local streets are flooding and not to come to the site until advised that flooding has subsided.	Site Manager	Mobile phone
		Evacuate and secure the site.	Site Manager	
		Start the sump pump at the trash rack and monitor it every hour.	Site Manager	



After a flood				
Trigger for action	Site status	Action	Responsible	What is needed
<p>For Namoi River flooding the Bureau of Meteorology advises river levels will recede below the major river level AND emergency services advise roads to Wee Waa are open and safe for traffic</p> <p>For local catchment flooding floodwaters have receded in the surrounding streets</p> <p>OR</p> <p>When emergency services give the all-clear to return to the site</p>	Closed	Notify all staff and contractors that the local flood threat has passed and that main roads are open but that other roads may be affected by flooding or debris and they must not drive or walk through floodwaters	Site Manager	Mobile phone
		No staff will be allowed to return to site until floodwaters have subsided and the emergency services have given the all clear to return	Site Manager	
		All flood affected parts of the site will be inspected by the Site Manager and declared safe prior to staff and contractors being given the all-clear to return	Site Manager	
		A hazard assessment will be undertaken for the clean-up, safe work methods statements will be prepared and personal protective equipment supplied consistent with the known hazards which can be associated with floods: <ul style="list-style-type: none"> <li>- Slips, trips and falls</li> <li>- Sharp debris</li> <li>- Venomous animals</li> <li>- Contaminated water and sediments</li> </ul>	Site Manager	
		Following the re-commencement of site activities, a de-brief will be held with key	Site Manager	



		<p>management staff and may involve Council flood staff. The flood event and response, including the use of this Plan and any emergency procedures will be reviewed.</p>		
		<p>Changes may be made to the Plan and the requirements for future emergency response should the review identify any improvements which may be made</p>	<p>Site Manager</p>	



## **APPENDIX B – FLOOD EMERGENCY MESSAGES**

### **General Information included in the site induction**

The construction site is on a local floodplain and as a consequence can be flooded. Access to the site can be cut when local flooding occurs and if flooded, the site will be evacuated. Local catchment flooding nearby the site may only last for a few hours.

More broadly, Wee Waa can become isolated when the Namoi River is in flood. When Wee Waa is isolated you should not attempt to either come to Wee Waa or leave Wee Waa until the Site Manager, informed by the NSW SES, contacts you and informs you it is safe to come to site.

The site has a comprehensive emergency response plan to deal with all possible emergency situations including flooding.

If a flood affects the site, we will implement our flood emergency response plan to ensure the safety of everyone. We will advise staff and contractors not to try and access the site as it is never safer to drive or walk through floodwaters.

### **Situation: The site is closed due to local flooding**

**SMS:** There is currently flooding in the vicinity of our site. Site will be closed today. Please do not come to work today. Please confirm receipt by responding YES

Staff who do not respond should be followed up with a telephone call

### **Situation: Bureau of Meteorology issues a major flood warning**

**SMS:** The Bureau of Meteorology has issued a Major Flood Warning for the Namoi River. All major roads to Wee Waa are cut by floodwaters and closed to traffic. If you are outside Wee Waa do not attempt to come to site. If you are in Wee Waa please follow the advice of the NSW SES. Never drive or walk through floodwaters. Please confirm receipt by responding YES

Staff who do not respond should be followed up with a telephone call

### **Situation: After a flood. Flooding has receded and it is safe to return to site**

**SMS:** It is now safe to return to site. Please check your local conditions and remember that it's never safe to drive through floodwaters,



**APPENDIX C – FLOOD EMERGENCY ITEMS**

Item	Date Checked
Fully charged mobile phone with internet access capabilities	
A computer with internet access and at least two hours independent power supply	
A computer printer	
Soft copies of up-to-date staff and parent/carer contact lists (these can be printed at the start of a flood emergency)	
Flood Emergency Kit - a plastic container clearly marked including <ul style="list-style-type: none"><li>• Printed copy of the latest version of this Construction FERP</li><li>• Two battery operated torches with in-date batteries in each and a set of in-date spare batteries for each</li><li>• A battery-operated portable radio to listen to ABC radio (100.7 AM) for flood and other warning broadcasts. This must have in-date batteries and a set of in-date spare</li></ul>	



## APPENDIX D - EMERGENCY CONTACT LISTS

**Note:** This Emergency Contacts List needs to be completed and maintained by management

Name	Organisation	Role	Contact
	Emergency Services	Fire/ambulance/police	000
	Local Police	Emergency help	000 Direct Police line: 131 444
	State Emergency Service	Emergency Help	132 500
	Bureau of Meteorology	Weather and Flood Warnings	1300 659 218
	Wee Waa Hospital	Medical	02 6795 0400
		Telecommunications	TBA
		Waste Disposal	TBA



# **Built**

## **APPENDIX J - External Lighting Compliance Certificate**



14 October 2022



TAMWORTH | NEWCASTLE | MID NORTH COAST | NORTHWEST

Carter & Osborne Holdings PTY LTD | ABN. 29 622 458 344  
3 Wallmore Rd TAMWORTH NSW 2340 | Lic No. 232482C  
P. 02 6765 4158 | E. office@carterosborne.com.au

## DESIGN STATEMENT

Carter & Osborne Electrical formally endorse the attached nominate design statement below provide by Electrical Projects Australia.

Titled: DESIGN STATEMENT SSDA CERTIFICATE ELECTRICAL SERVICES

Dated – 13<sup>th</sup> October 2022

A handwritten signature in black ink, appearing to read 'Scott Day', is written over a horizontal line.

Scott Day  
Senior Project Manager



Thursday, 13<sup>th</sup> October 2022

Carter & Osborne Electrical  
3 Wallamore Road  
TAMWORTH NSW 2340

**Re: DESIGN STATEMENT SSDA CERTIFICATE  
ELECTRICAL SERVICES**

Project Address: 105 – 107 Mitchell Street, Wee Waa NSW 2388

Project Name: Wee Waa High School

---

Pursuant to the provisions of Environmental Planning and Assessment Act 1979 (NSW) in respect of the above project –

I, Mathew Campbell,  
of Electrical Projects Australia  
at 386, Maitland Road, Newcastle

hereby certify that;

- I am a practicing electrical engineer.
- My relevant qualifications are: B.Eng Electrical
- The electrical elements of the building are designed in accordance with;
  - SSDA Condition B18
  - AS/NZS 1158.3.1-2005 & AS/NZS 1158.3.1-2020 Pedestrian Area (Category P) Lighting,
  - AS4282-2019 Control of Effects of Obtrusive lighting
  - State Significant Development Application (SSDA) 21854025
  - Appendix FF - Lighting Strategy Report – Marline Building Services
  - NSW Dark Sky Planning Guideline 2016

Signed:



13/10/2022

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**On behalf of Electrical Projects Australia**



**Built**

**APPENDIX K - Site Investigation  
Executive Summary**





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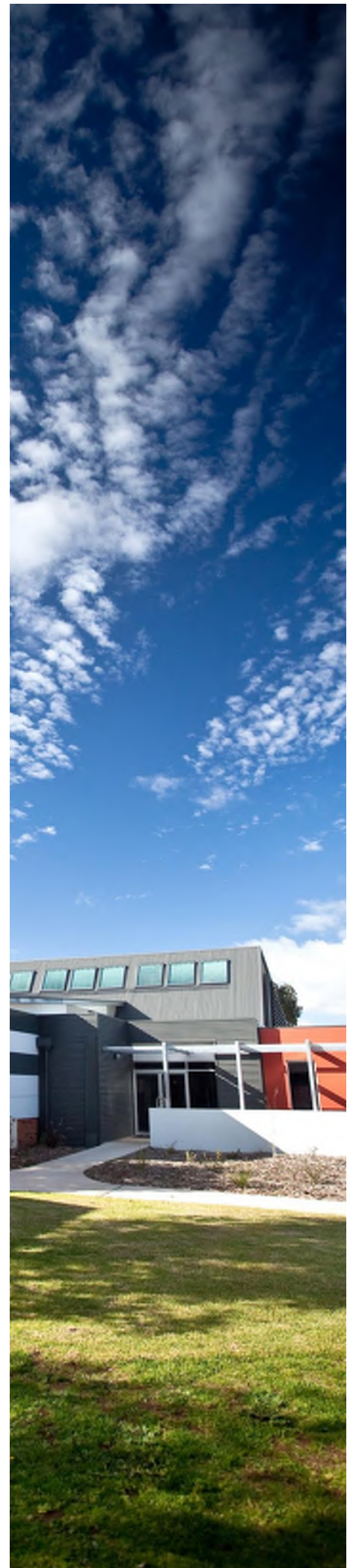
# Detailed Site Investigation

Wee Waa High School  
105-107 Mitchell Street  
Wee Waa NSW

(Our Reference:35754 ER02)

© Barnson Pty Ltd 2021. Confidential.

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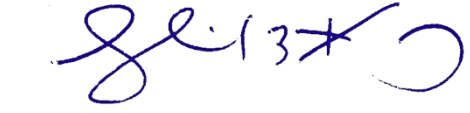


## Disclaimer

This report has been prepared solely for NSW Department of Education in accordance with the scope provided by the client and for the purpose(s) as outlined throughout this report.

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<b>Project Name:</b>	Detailed Site Investigation - Wee Waa High School, 105-107 Mitchell Street, Wee Waa, NSW
<b>Client:</b>	NSW Department of Education
<b>Project No.</b>	35754
<b>Report Reference</b>	35754 ER02
<b>Date:</b>	28/09/2021
<b>Revision:</b>	Final

<b>Prepared by:</b>	<b>Reviewed by:</b>
	
Nardus Potgieter MSc(Chem) Environmental Scientist	Jim Sarantzouklis MAIBS MEHA RPIA Director



## EXECUTIVE SUMMARY

Barnson was engaged by the NSW Department of Education to carry out a detailed contaminated site investigation in support of the proposed Wee Waa High School development, at 105-107 Mitchell Street, Wee Waa, NSW.

The detailed investigation was undertaken in order to confirm and further investigate the findings of a preliminary site contamination investigation of the property carried out in April 2021, which identified asbestos containing materials as well as elevated levels of heavy metals and poly-aromatic hydrocarbons (PAHs) in samples of surface soil collected from the site. The preliminary site contamination investigation report identified concentrations of lead and zinc that exceeded health-risk and ecological screening values in samples of soil collected in a specific (hot spot) area of the Subject Site. The detailed investigation therefore focussed on the hot spot which is located in the northern portion of Lot 124 DP 757125, and referred to as the Primary Investigation Area.

A review of the available historical information (including contaminated sites databases and aerial photographs) and the findings of the preliminary site investigation concluded that the potential for significant environmental contamination to be present at the site to be low.

A site inspection, supplemented with confirmatory sampling and analysis, was conducted to identify the source of the contamination, determine the average concentrations of lead and zinc in the study area and identify and delineate any hot spot areas. Results of the chemical analysis of the surface soil samples confirm the findings of the preliminary site investigation, finding measurable concentrations of heavy metals, and hydrocarbon compounds and identifying concentrations of lead (Pb) and zinc exceeded the screening levels used in the assessment.

A source-pathway-receptor analysis and refinement of the existing conceptual site model (CSM) indicated the most likely sources of the observed contamination to be lead based paint and galvanised metal that formed part of structures that previously occupied the area or demolition waste that was subsequently disposed of at the site.

The main routes of exposure to these contaminants are through inhalation and ingestion. Surface soil is the only media likely to be contaminated with lead and secondary pathways that have the potential to expose humans to the contaminants include ingestion of contaminated garden crops and animal products. Exposure to elevated concentrations of zinc was assessed as presenting no risk to the health of humans visiting the area. The risks associated with the elevated zinc concentrations relate mainly to impacts to aquatic species and it is reasoned that the location and physical properties of the Investigation Area limit any possibility of risk to the ecology.

The most likely receptors identified for the Primary Investigation Area are visitors to the Subject Site, including students, teachers and parents. Evaluation of the potential for sensitive receptors to be exposed to contaminated soil at the Investigation Area concludes that exposure is possible but does not pose an immediate health risk as exposure to the contaminated soil can be appropriately managed. However, lowering the concentration of hazardous contaminants present in the soil is preferable as the dispersion of the contamination to uncontaminated areas of the Subject Site or even off-site is a concern.

Based on the findings of the further site investigation it is concluded that the Subject Site is suitable for the proposed development, but that use of the area where contamination was detected is subject to removal of fibre cement fragments present in the area and the



implementation of a procedure to either lower the concentration of or lower the likelihood of exposure (i.e. application of soil cover) to the lead (Pb) present in the identified area of the Site.

The following recommendations are made in this regard:

- It is recommended that access to the contaminated area be restricted and that procedures be put in place to prevent the dispersion of contaminated soil to other areas of the Subject Site.
- Based on the findings of the further site investigation it is concluded that the Subject Site is suitable for the proposed development, as there are no contaminants present at the site which are likely to present an immediate risk of impact to the health of humans or the environment from the proposed activities.
- Development of the Investigation Area as part of a playing field is subject to the removal of fibre cement fragments from the surface of the site.
- It is recommended that a Remediation Action Plan (RAP) be developed to inform the removal of the fibre cement fragments from the surface of the site and provide recommendations for the appropriate application of fill as barrier over the contaminated soil.
- It is further recommended that Preliminary Long-term Environmental Management Plan (LEMP) be developed to provide recommendations for the long-term management of the containment.
- A Construction Environmental Management Plan (CEMP) is recommended to be prepared prior to any earth works being commenced. The purpose of the CEMP is for the management of contaminated soil as well as for the management of any excavated soils (which could include contaminated soils) and should include procedures for the classification of the soils as well as for the implementation of sediment and erosion controls for stockpiling of excavated soils.



# **Built**

## **APPENDIX L - Site Layout Plan**



