



# Main City and North Wagga Levee Upgrade Project



**North Wagga  
Community Information Session**



Welcome



# Presentation outline

What is the levee upgrade project?

What work has happened to date?

Where are we now?

Questions

How will the proposed upgrade impact on me?

Questions

How do I review the documents?

Questions

How can I share my views?

How can I get further information about my property?

Questions



**Brad Jeffrey**

**Levee Upgrade Project Manager**



# What is the levee upgrade project?

- Increasing the height of the Main City Levee to provide protection against a 1 in 100 year river height
  - Currently 1 in 60
- Increasing the height of the North Wagga Levee to provide protection against a 1 in 20 year river height
  - Currently 1 in 17



# Flood heights and history

Occurance	Year	Height	
1 in 100 Yr	-	11.30m	
1 in 60 Yr	1974	10.75m	
1 in 40 Yr	2012	10.56m	
1 in 17 Yr	2010	9.70m	
1 in 10 Yr	1956	9.58m	Major Flood Above 9.6m
1 in 8 Yr	1976	9.40m	
1 in 5 Yr	1978	8.92m	Moderate Flood Above 9.0m
1 in 4 Yr	1993	8.80m	Minor Flood Above 7.3m

No Change



# History of the Levees

## North Wagga Levees

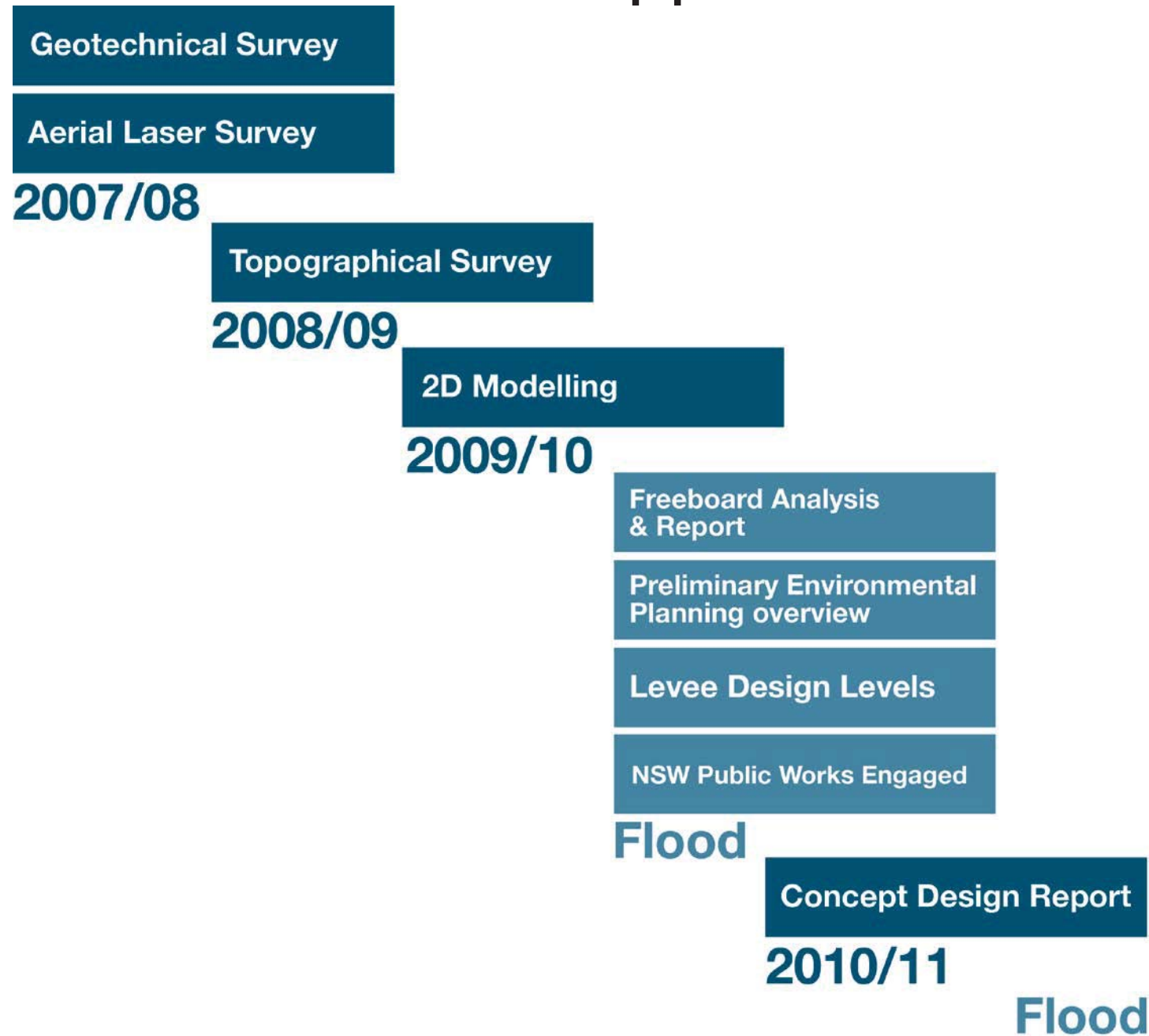
- Temporary levees built since 1930's
- Levee formalized in 1990 to what was then thought to be a 1 in 20 yr level of protection

## Main City Levee

- Following the 1956 floods, planning started
- Levee constructed in 1960
- Levee height increased following 1974 flood



# What work has happened to date?





# What work will follow this?

## Now - March 2013

Review of Environmental Factors

Community Engagement Plan

## March 2013 - March 2014

Detailed Design

## 2014 - ongoing

Construction

Ongoing lobbying to the State & Federal Governments  
and grant applications to existing programs



# Project Funding

The estimate for the upgrade of the levees, based upon the concept designs is **\$18.8M.**

**Main City Levee = \$11.3 Million**

**North Wagga Levees = \$7.5 Million**

This estimate will be refined as part of the detailed design process.



# **Review of Environmental Factors**

Reuben Robinson  
GHD



# Environmental issues

- Biodiversity (flora and fauna)
- Soils and water quality
- River flow and flooding
- Land use and property
- Noise and vibration
- Air quality
- Visual impacts



# Environmental issues (cont)

- Aboriginal and European heritage
- Traffic and access
- Social and economic impacts
- Waste management



# QUESTIONS

- What is the levee upgrade project?
- What work has happened to date?
- Where are we now?





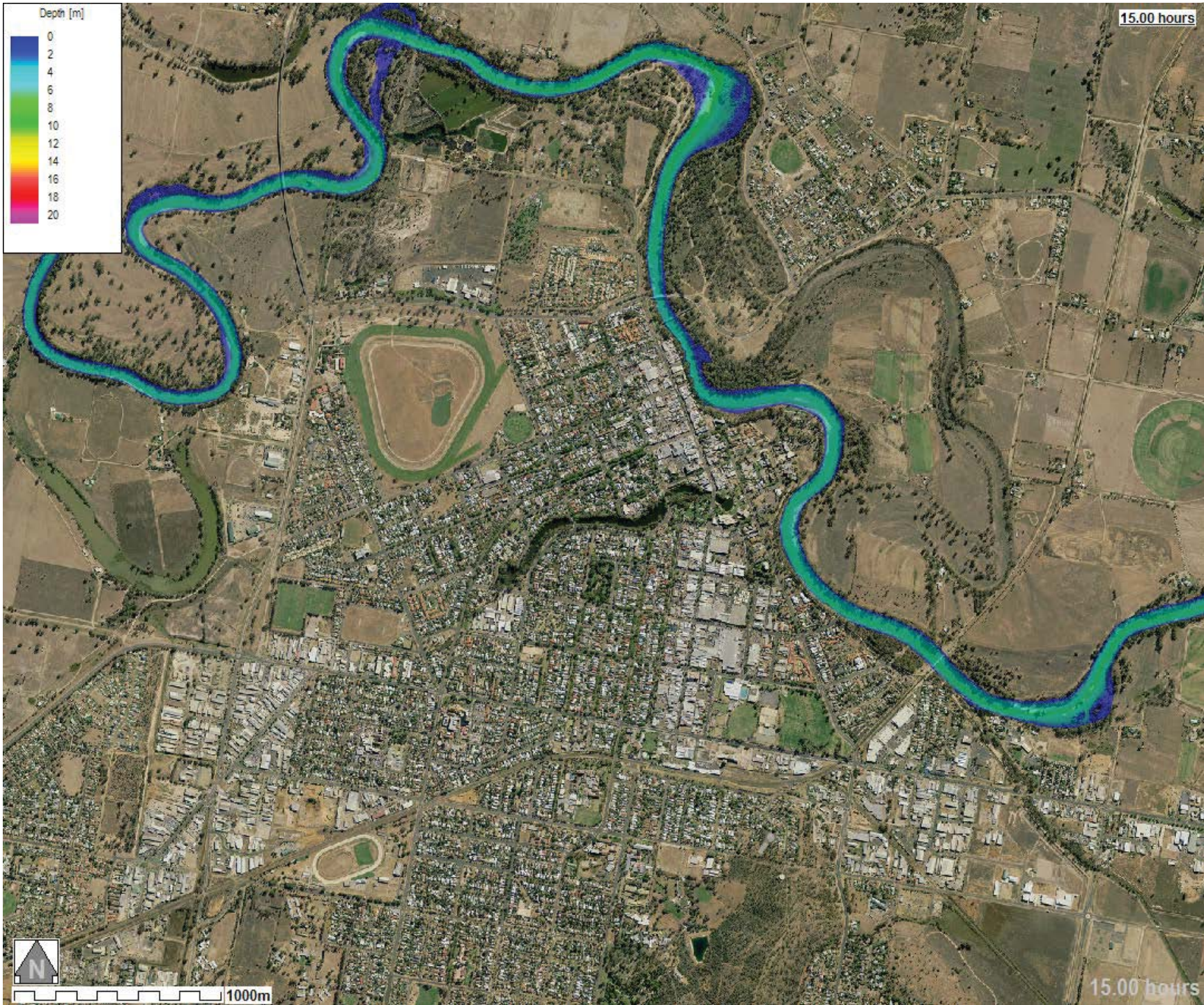
WAGGA WAGGA CITY COUNCIL  
MURRUMBIDGEE RIVER MODEL CONVERSION PROJECT  
FINAL REPORT



SEPTEMBER 2010

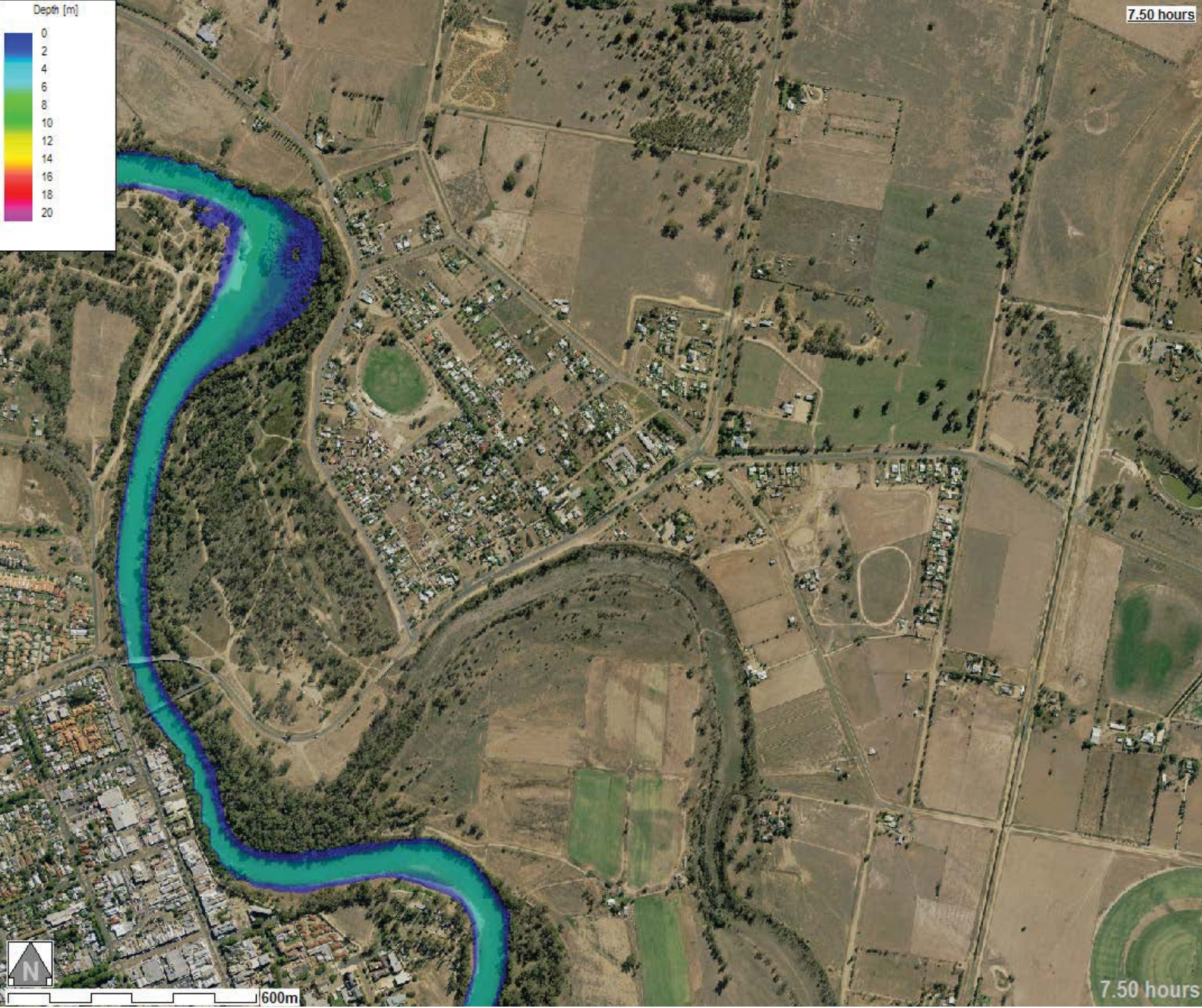
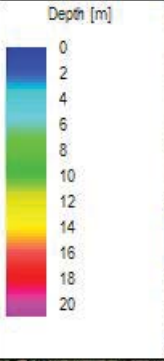
# What is Flood Modelling?







7.50 hours



600m

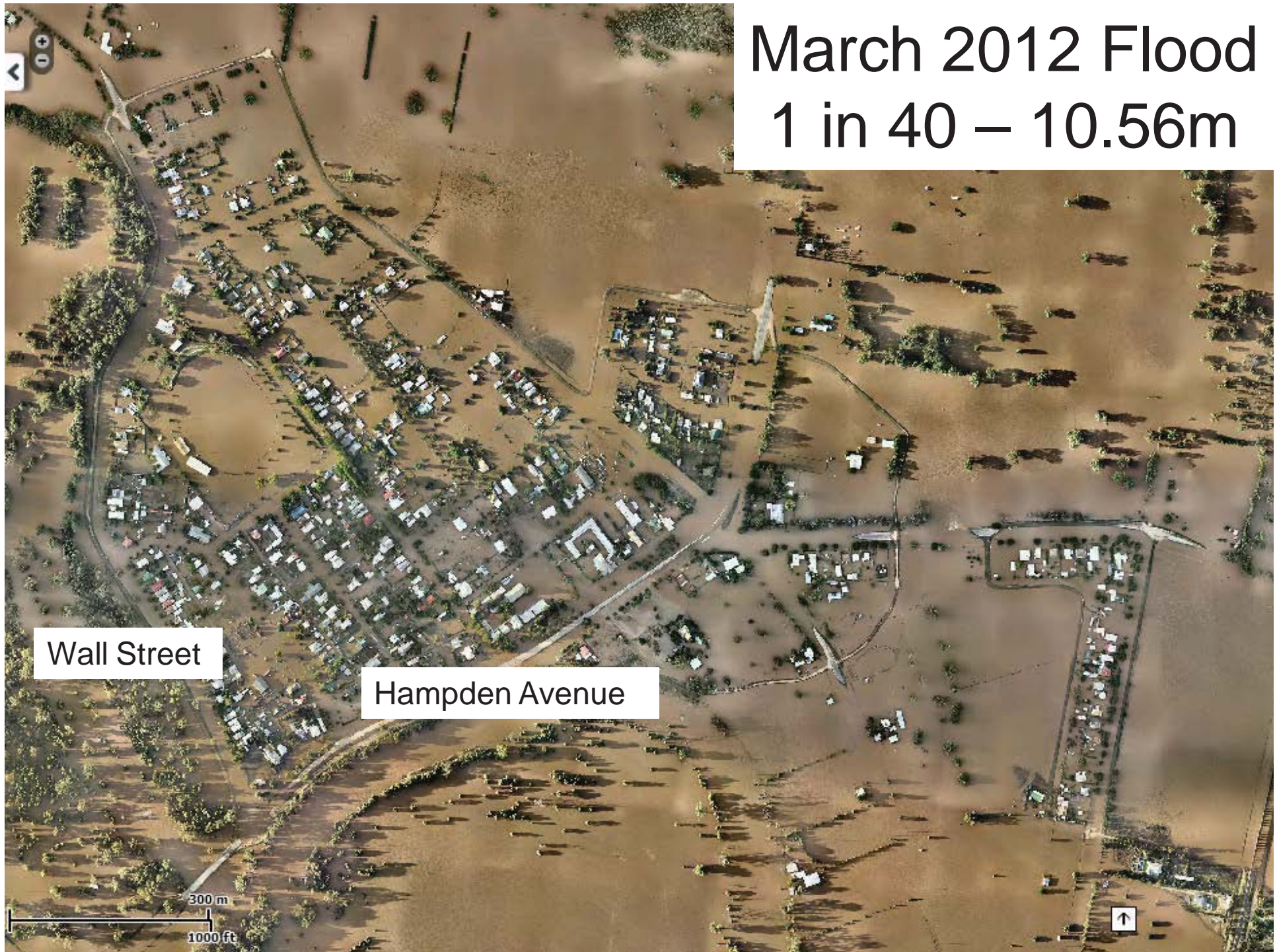
7.50 hours



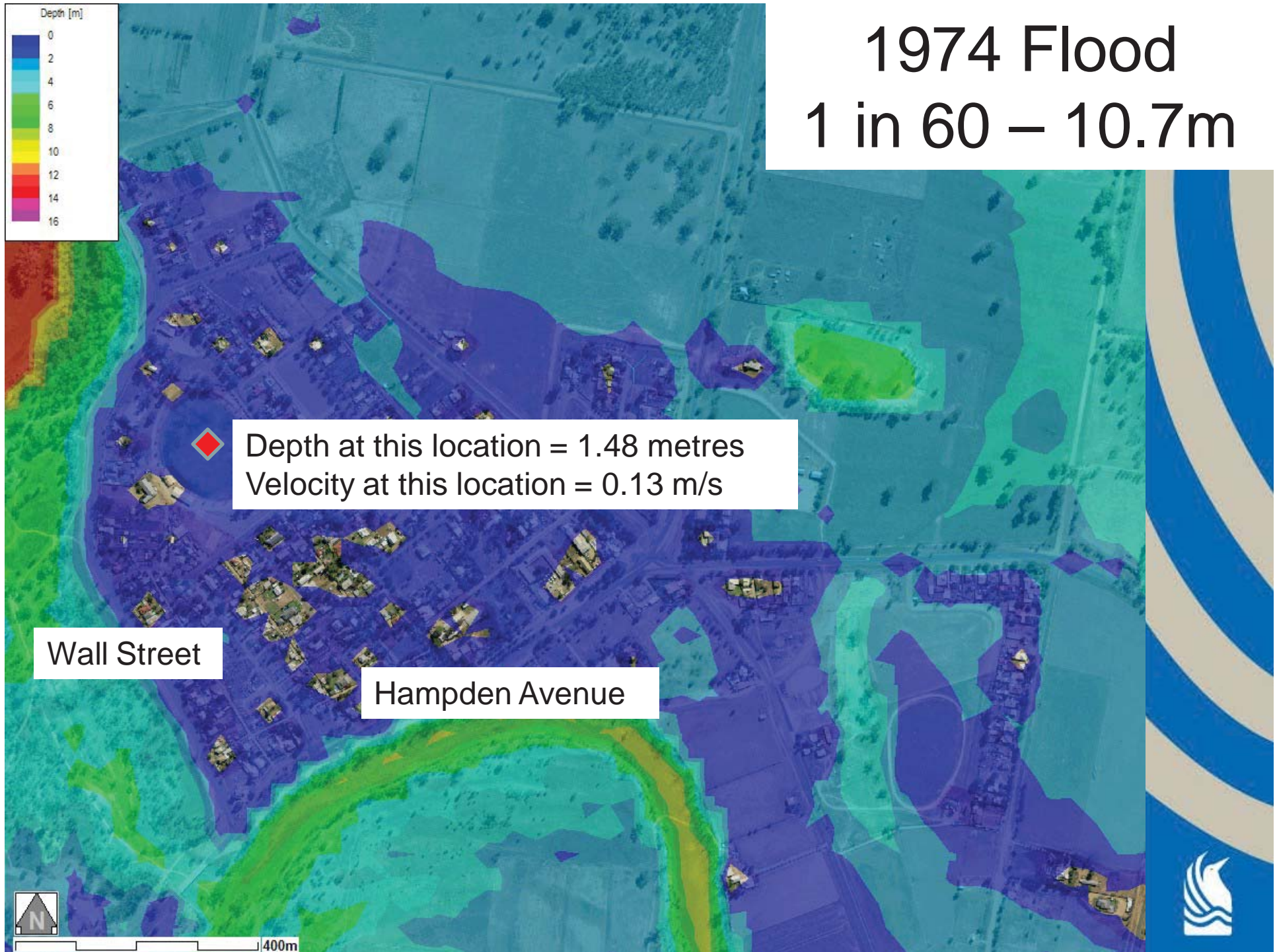
What impact will an upgraded levee have on North Wagga?



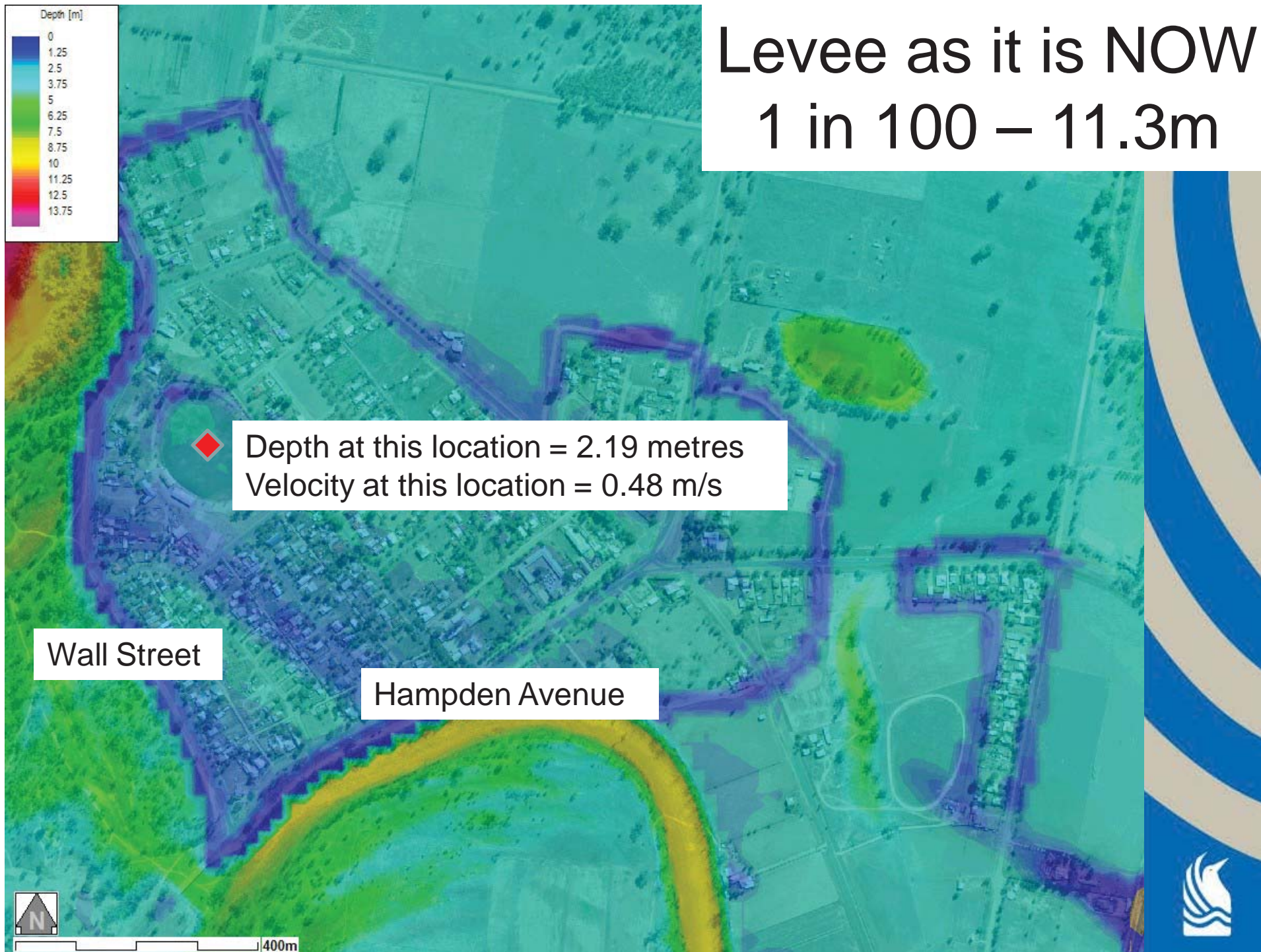
# March 2012 Flood 1 in 40 – 10.56m



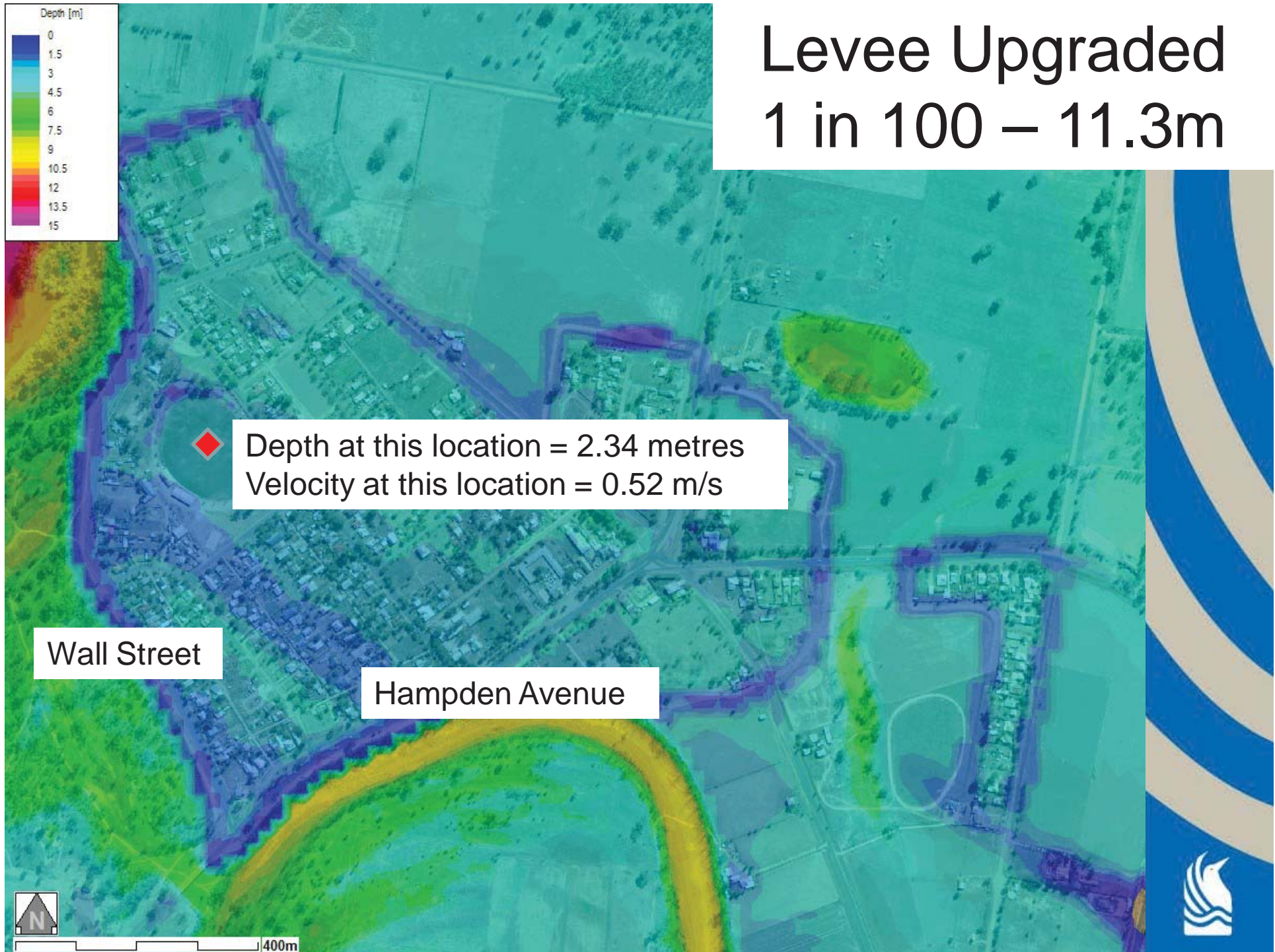
# 1974 Flood 1 in 60 – 10.7m



# Levee as it is NOW 1 in 100 – 11.3m

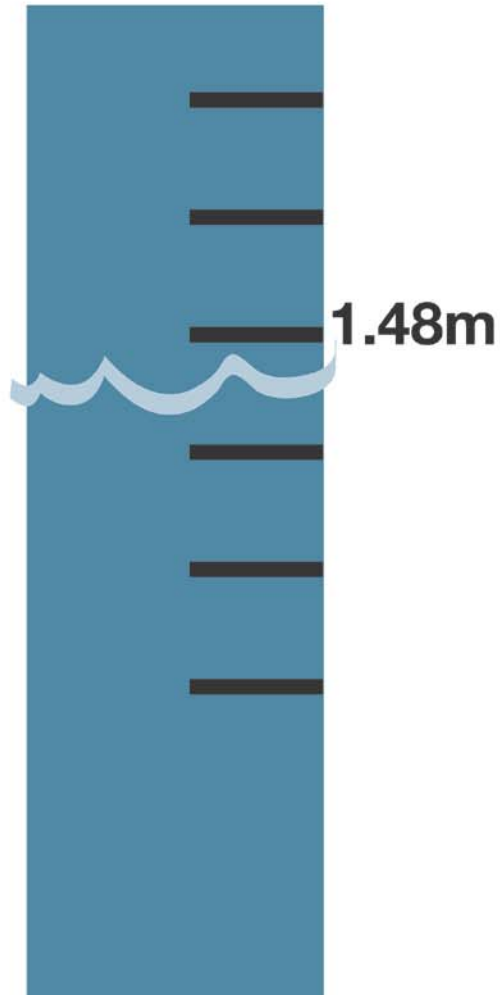


# Levee Upgraded 1 in 100 – 11.3m

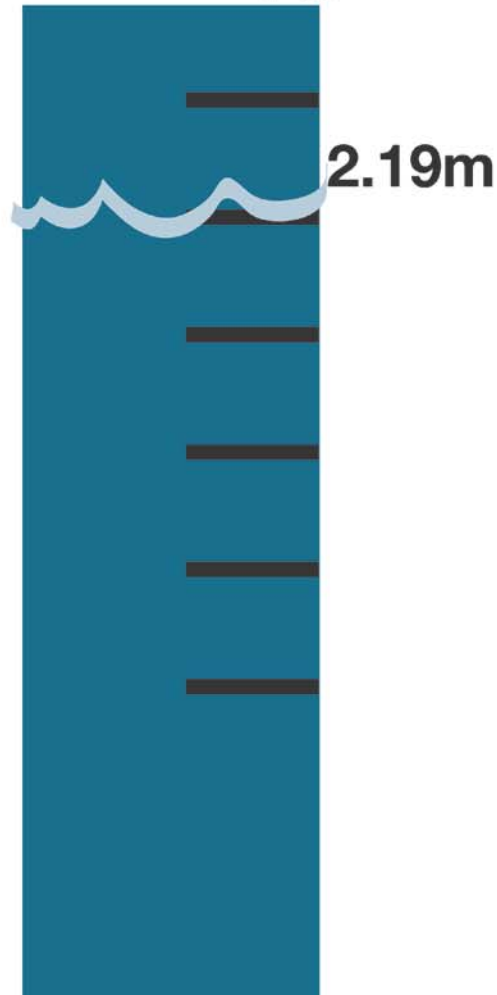


# North Wagga height differences

**1974**



**1 in 100  
Before Upgrade**



**1 in 100  
After Upgrade**



# North Wagga

an approximate increase  
of

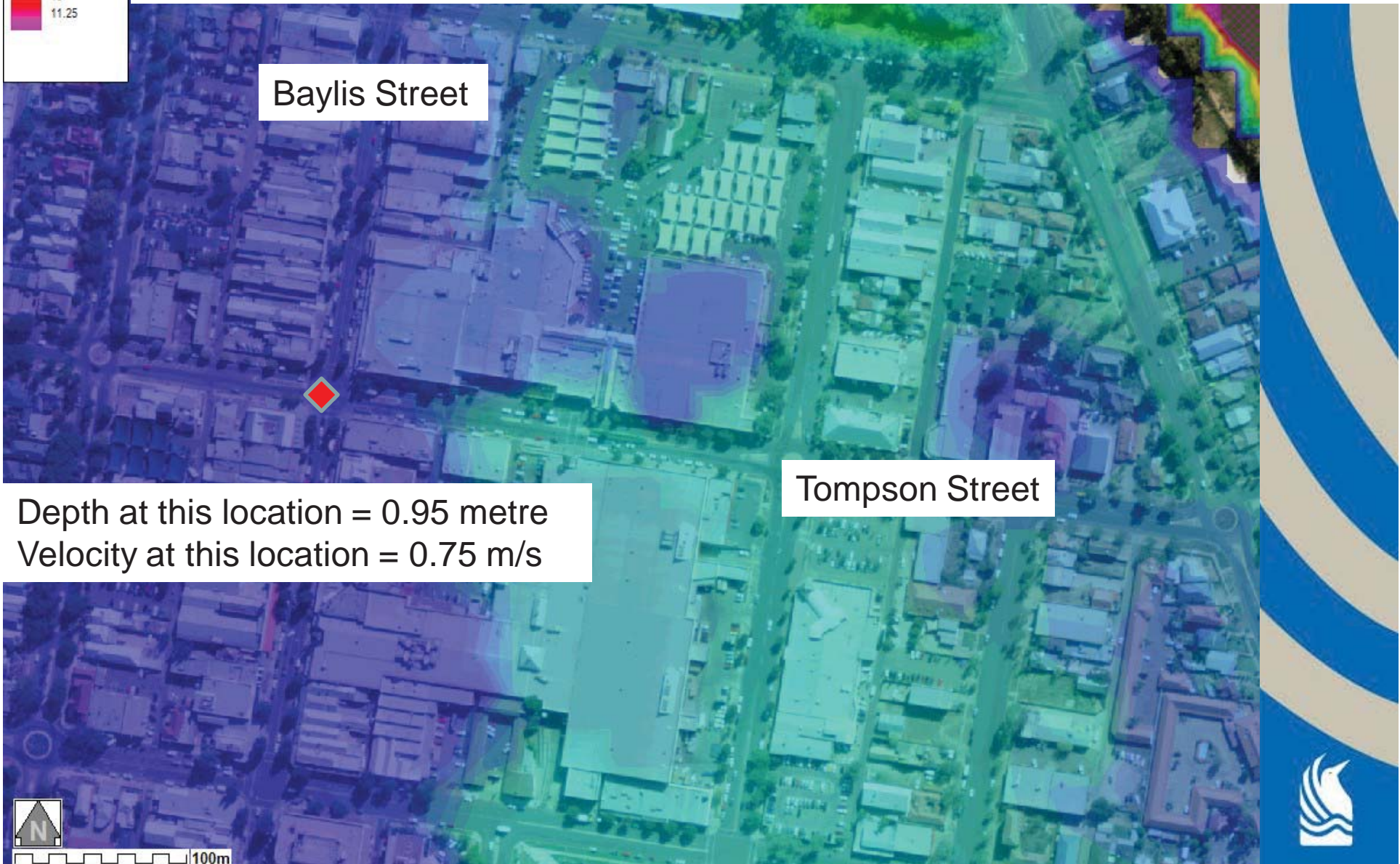
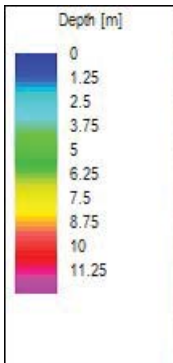
0.15 metre

in a 1 in 100 yr flood

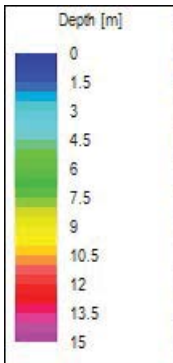




# Wagga Wagga CBD Before the upgrade 1 in 100 – 11.3m

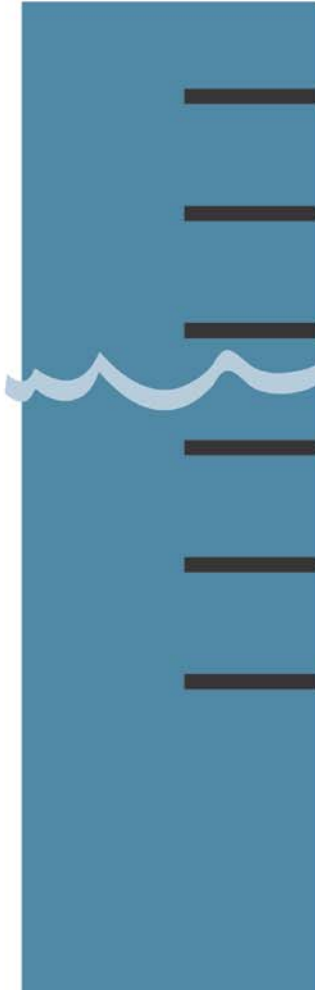


# Wagga Wagga CBD After the upgrade 1 in 100 – 11.3m



# QUESTIONS

**1974**



1.48m

**1 in 100  
Before Upgrade**



2.19m

**1 in 100  
After Upgrade**

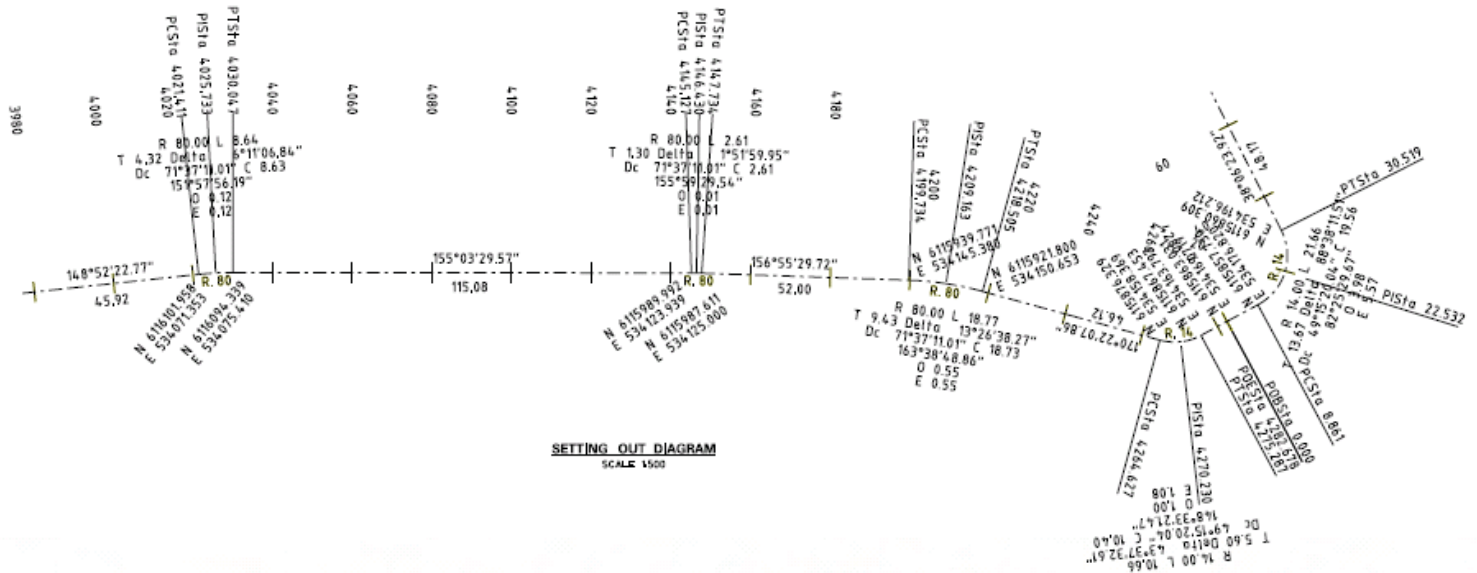


2.34m



# How do I interpret the documents?





SETTING OUT DIAGRAM  
SCALE 1:500



ROUTE PLAN  
SCALE 1:500

2	PLANNING REVIEW AND CONSULTATION DATA SHEET	OK	18/01/11
3	DESIGN FOR REVIEW	OK	23/01/11
4	DESIGN FOR CONSTRUCTION	OK	23/01/11
10	DETAILS OF AMENDMENTS	APPROV	01/12/11

**NOT FOR CONSTRUCTION**

**CONCEPT DESIGN**

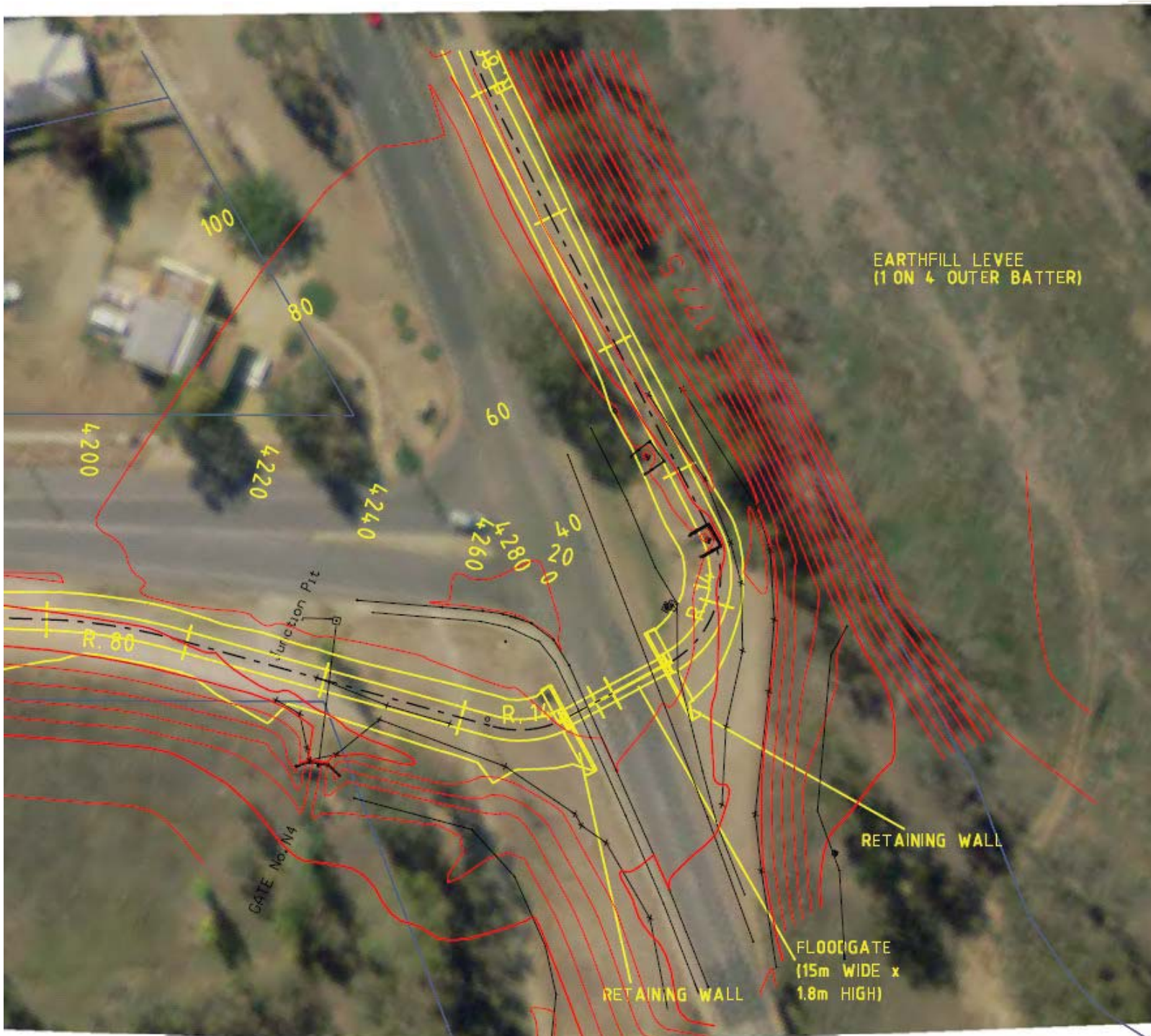
MICHAEL COULTY-TROTTER  
Department of Planning and Services  
NEW WATER SOLUTIONS  
DAMS AND CIVIL TECHNOLOGIES  
LEVEL 11 MIVELL BUILDING  
2-7A RAMSAY PLACE  
STREET 3000  
PHONE (02) 93727000 FAX (02) 93727022

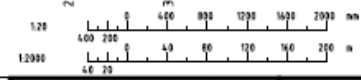
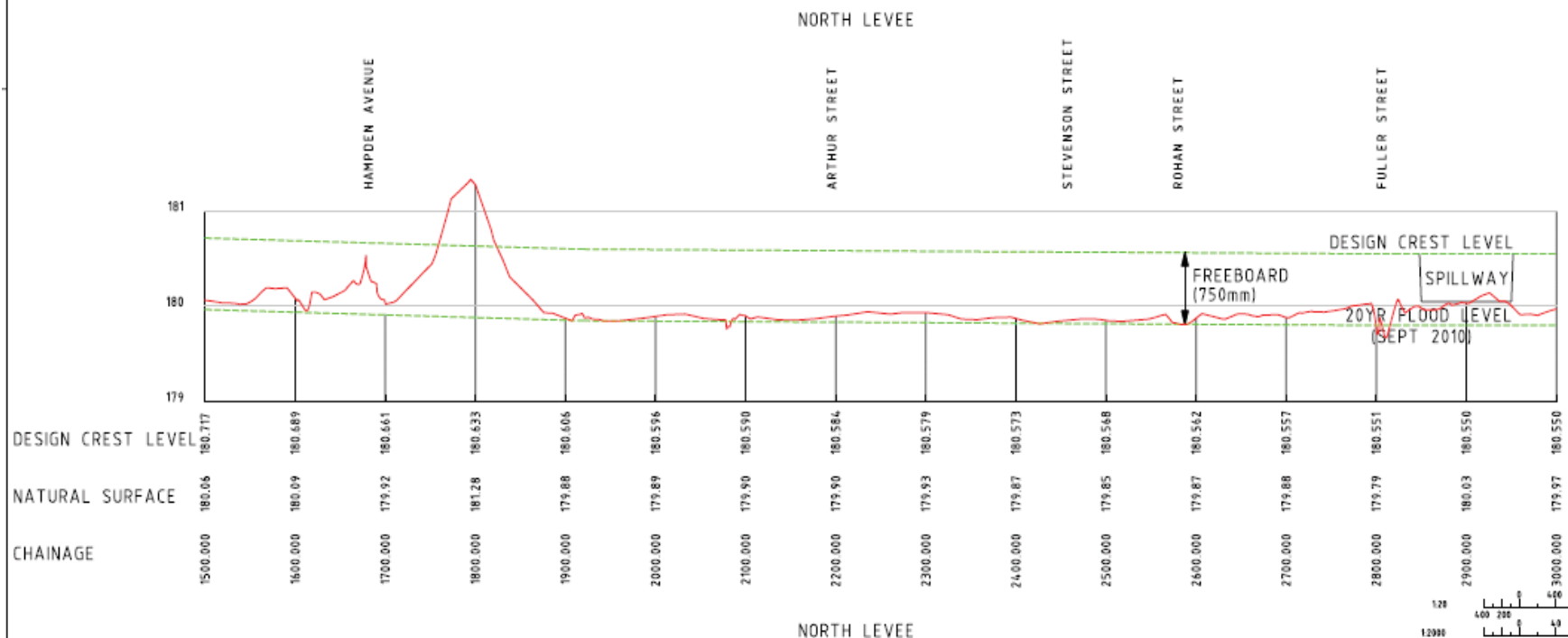
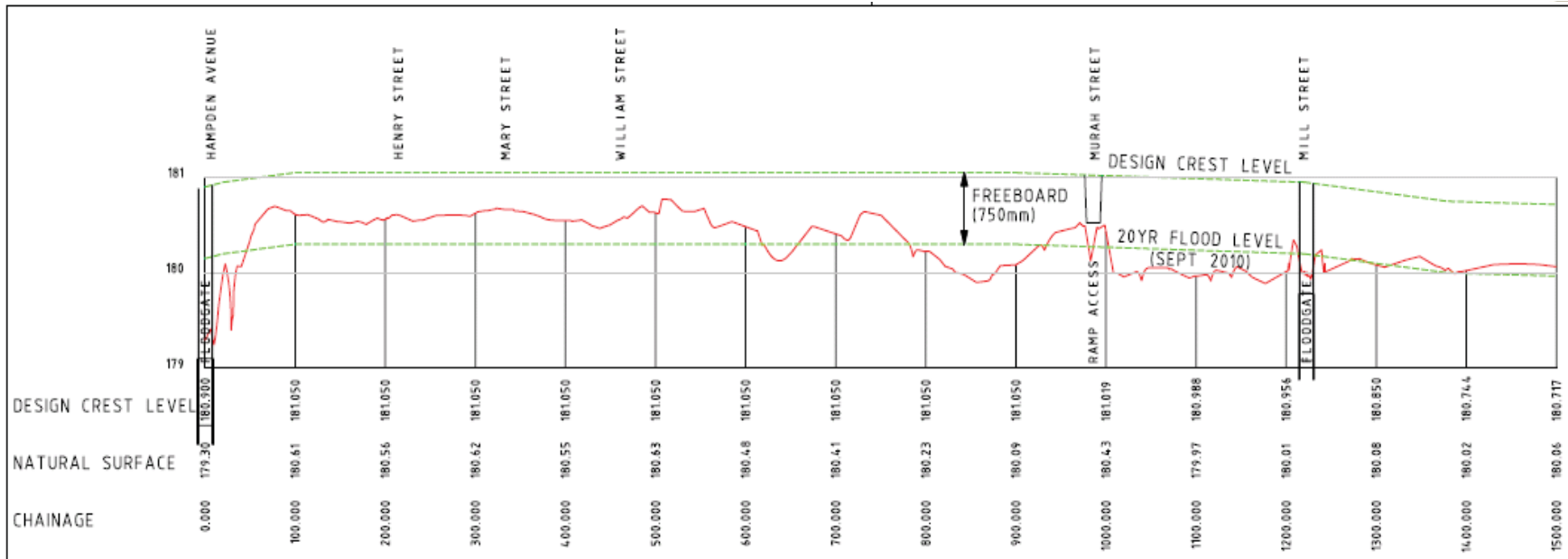
DESIGNED BY	APPROVED BY
BY: J. BOSSON	DATE: 18/01/2011
DATE: 18/01/2011	DATE: 18/01/2011
DATE: 18/01/2011	DATE: 18/01/2011



City of Wagga Wagga

<b>WAGGA WAGGA LEVEE UPGRADE FLOOD PROTECTION</b>		PROJECT NO.	11-121
NORTH WAGGA WAGGA LEVEE PLAN AND SETTING OUT DIAGRAM		REVISION	2
CH. 4000.0 TO CH. 4282.578			





1	PROPOSED DETAILS AND/OR SPILLWAY ADDED	J.E.	17/11/11
2	SHADE FOR REVIEW	J.E.	17/11/11
3	SHADE FOR WORKING	J.E.	17/11/11
4	DETAILS OF AMENDMENTS	ISSUED	DATE

**NOT FOR CONSTRUCTION**

**CONCEPT DESIGN**

MICHAEL CRUTTS-TROTTER  
 Department of Sewer and Services  
 NSW WATER SOLUTIONS  
 DAMS AND CIVIL TECHNOLOGIES  
 LEVEL 10 MARILL BUILDING  
 7-24 RAWSON PLACE  
 STONEY RIDGE  
 PHONE: (02) 93727000 FAX: (02) 93727022

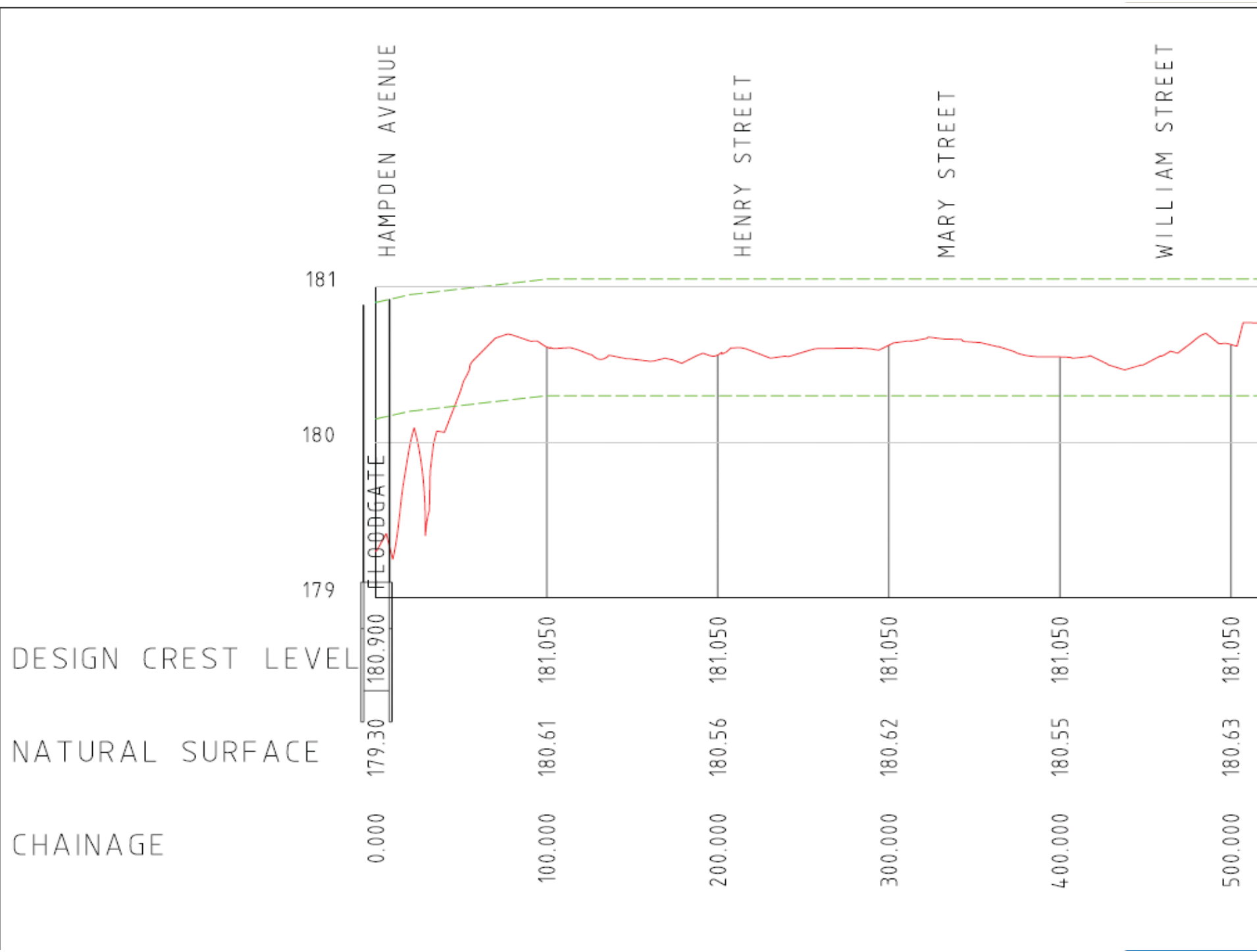
DESIGNED BY	J. JENNIS
DRAWN BY	PL. BARR AND DR. TOSCANI
CHECKED BY	J. JENNIS



**WAGGA WAGGA LEVEE UPGRADE FLOOD PROTECTION**

**NORTH LEVEE LONGITUDINAL SECTION CHL 0.0 TO CH. 3000.0**

PROJECT NO: 11-128  
 REVISION 2







# QUESTIONS

Reading the designs



# How do I get further information and assistance?



[www.wagga.nsw.gov.au/floodfutures](http://www.wagga.nsw.gov.au/floodfutures)



1300 292 442



[leveeupgrade@wagga.nsw.gov.au](mailto:leveeupgrade@wagga.nsw.gov.au)



# How can I share my views?



[www.wagga.nsw.gov.au/floodfutures](http://www.wagga.nsw.gov.au/floodfutures)



PO Box 20 Wagga Wagga



[leveeupgrade@wagga.nsw.gov.au](mailto:leveeupgrade@wagga.nsw.gov.au)

