FIGURE 29
OPTION FM - CP03
5% AEP EVENT FLOOD IMPACT

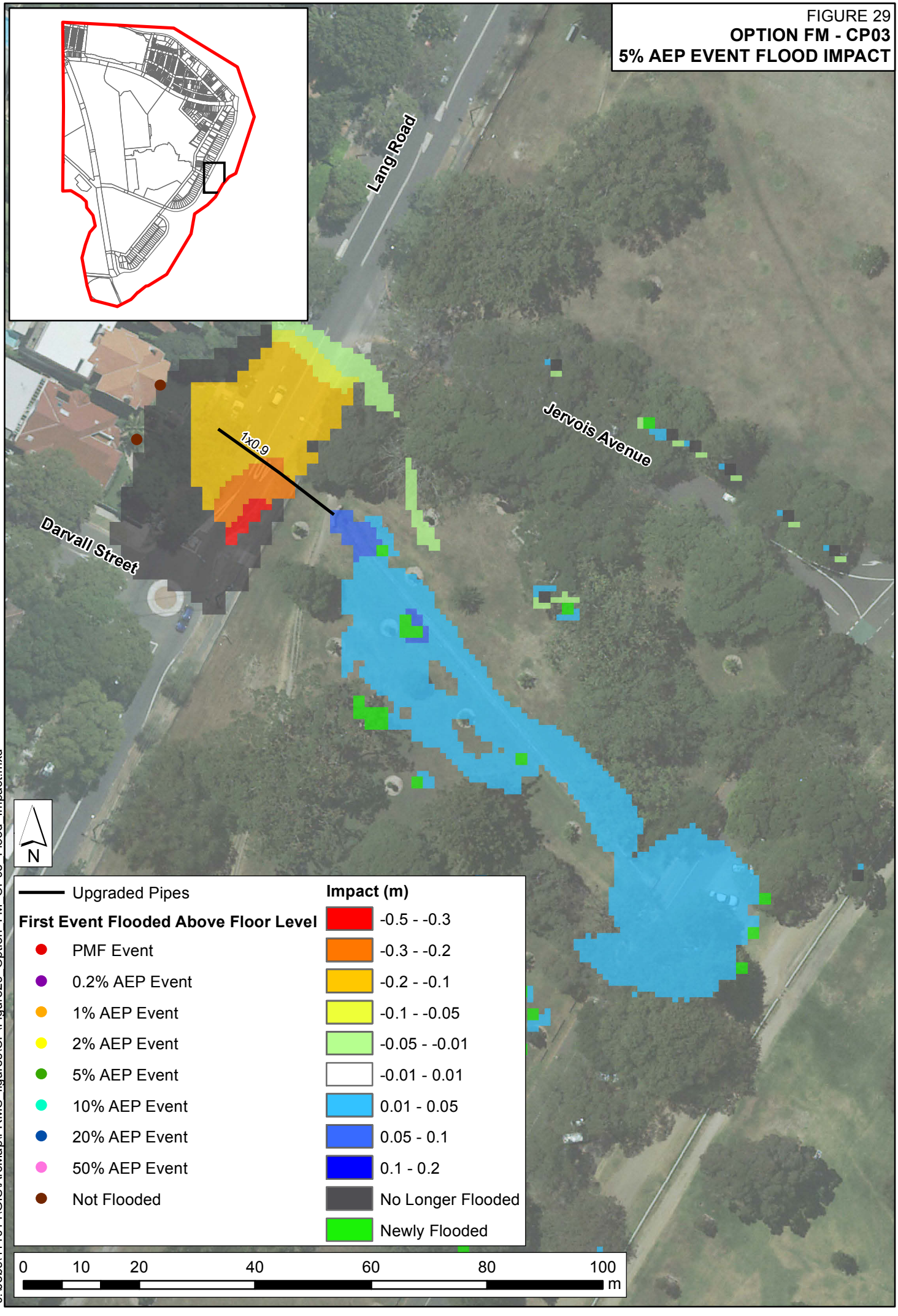

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FIGURE 30
DRIVER AVENUE HOTSPOT
1% AEP EVENT

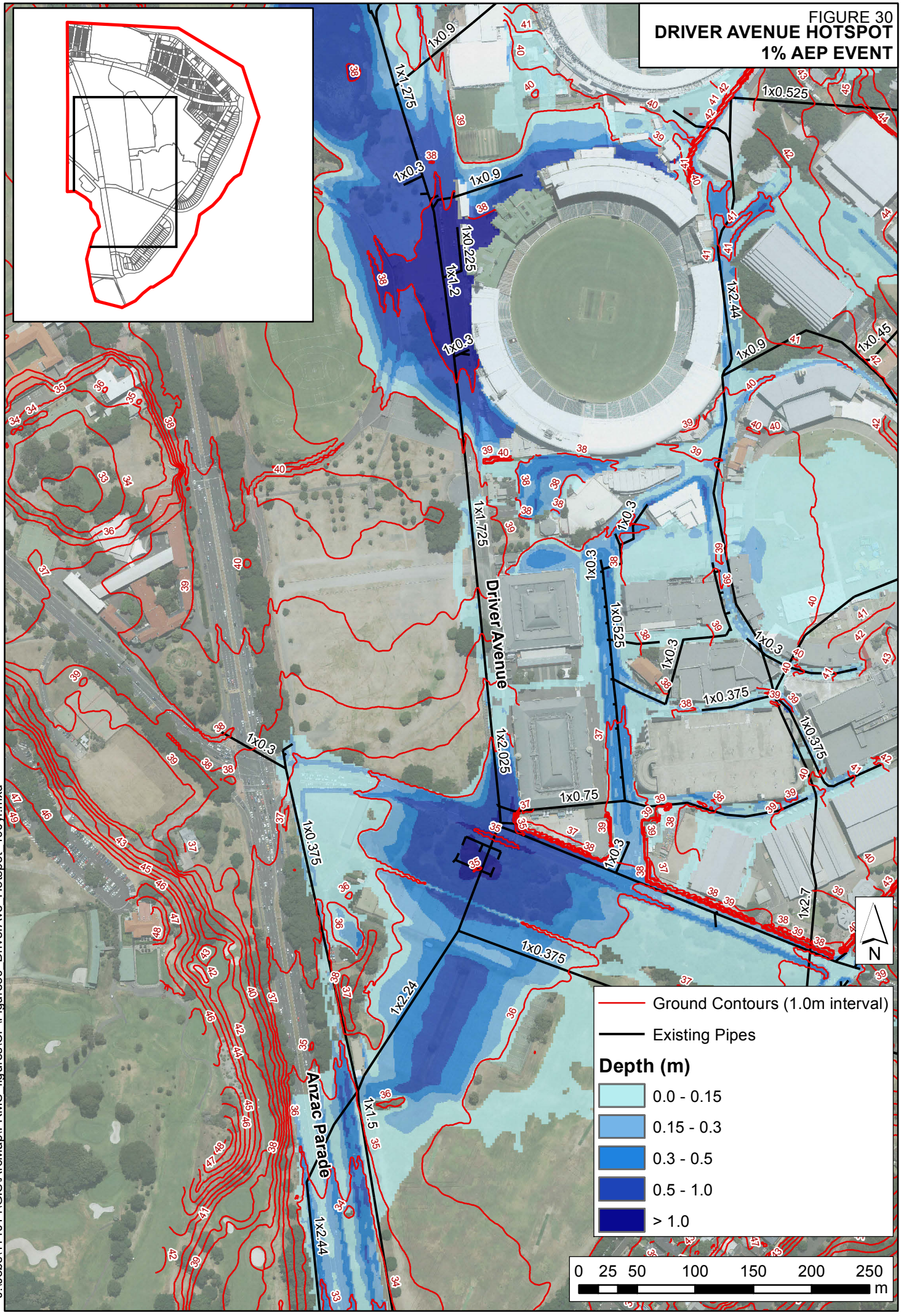

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FIGURE 31
OPTION FM - CP04
10% AEP EVENT FLOOD IMPACT

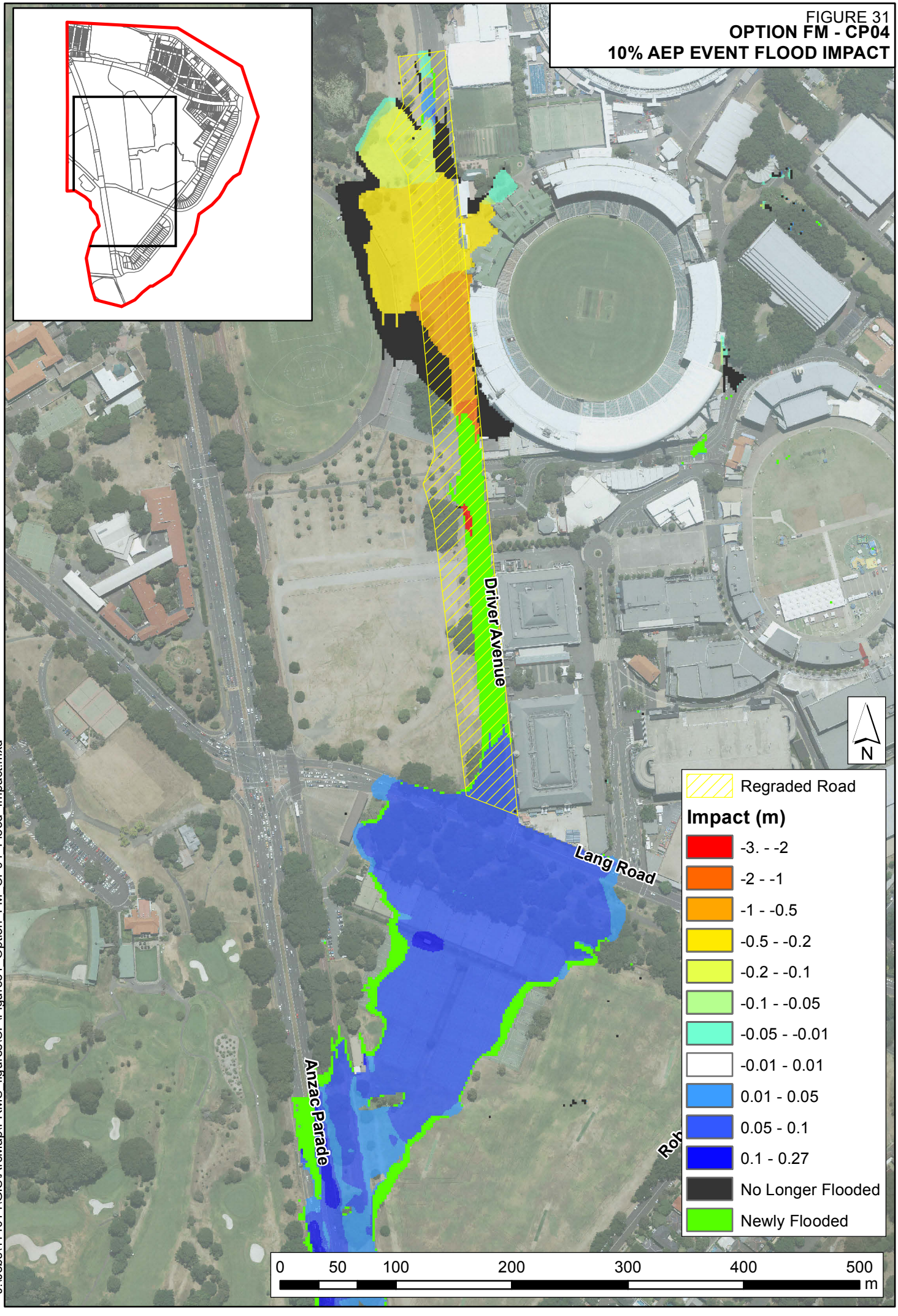

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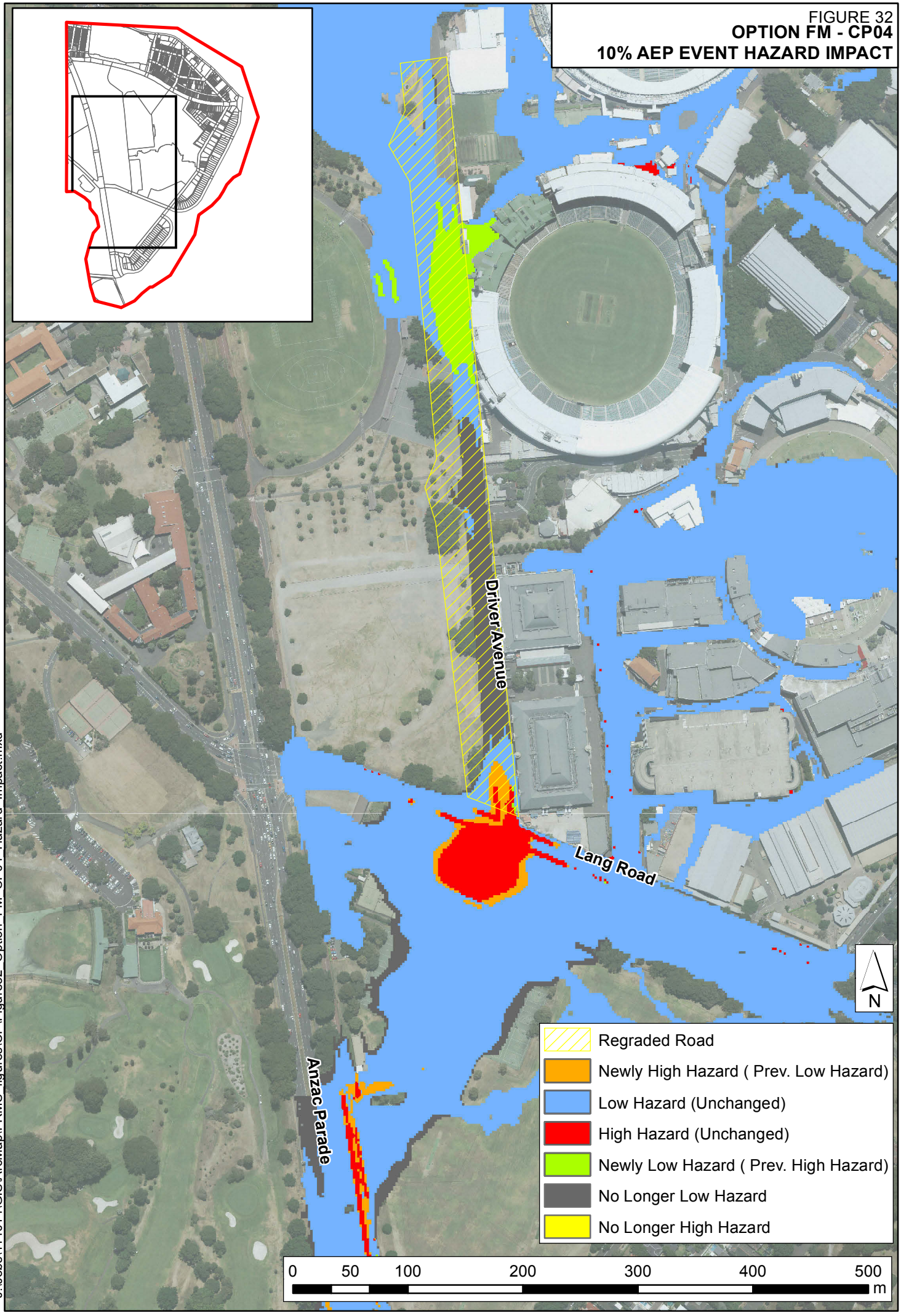
FIGURE 32
OPTION FM - CP04
10% AEP EVENT HAZARD IMPACT



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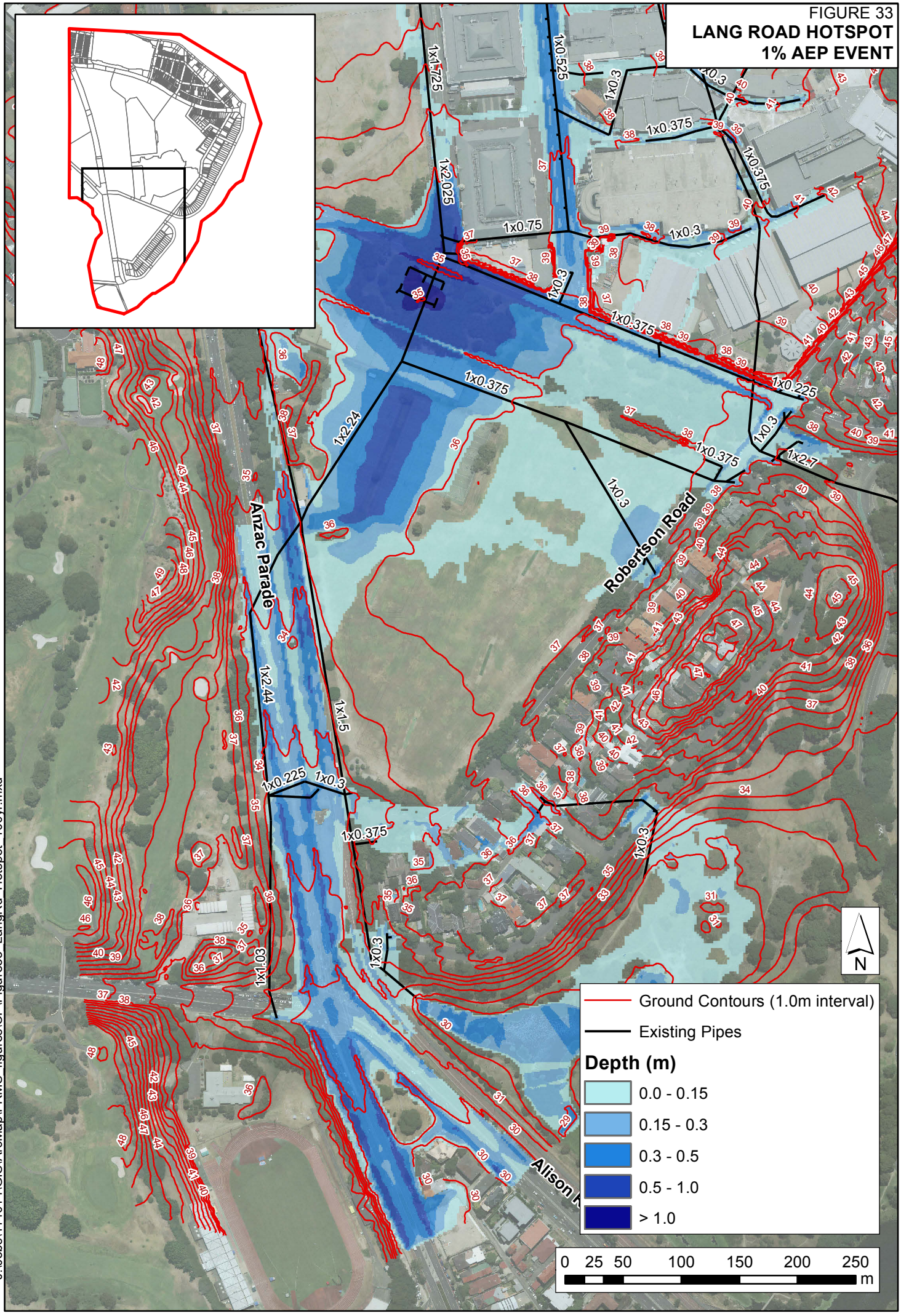
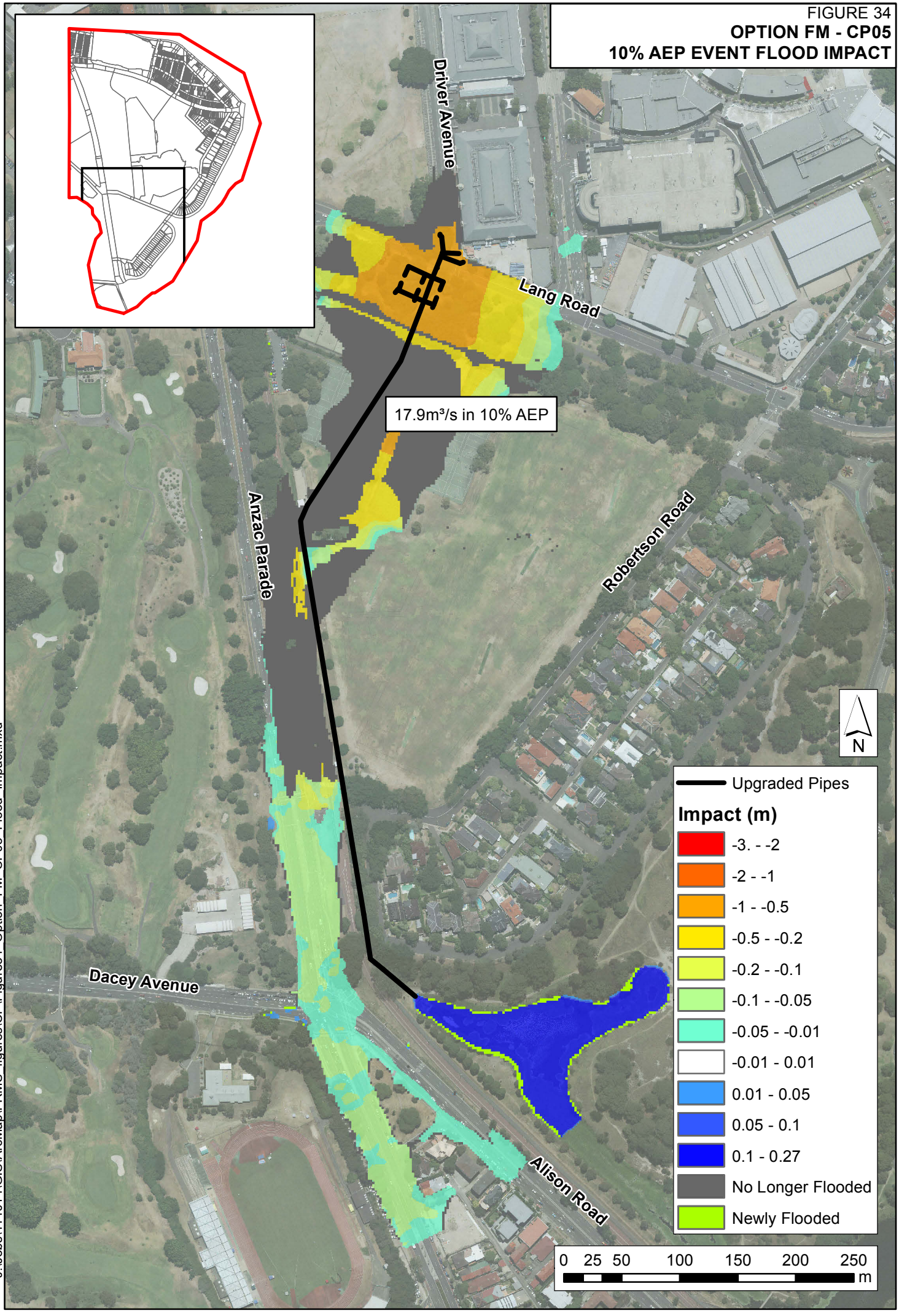


FIGURE 33
LANG ROAD HOTSPOT
1% AEP EVENT
Anzac Parade
Robertson Road
Alison
Ground Contours (1.0m interval)
Existing Pipes
Depth (m)
0.0 - 0.15
0.15 - 0.3
0.3 - 0.5
0.5 - 1.0
> 1.0
N
0 25 50 100 150 200 250
m
J:\Jobs\114014\GIS\ArcMap\FRMS_figures\CP\Figure33_LangRd_Hotspot_100yr.mxd

FIGURE 34
OPTION FM - CP05
10% AEP EVENT FLOOD IMPACT



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Appendix A

APPENDIX A: GLOSSARY

Taken from the Floodplain Development Manual (April 2005 edition)

acid sulfate soils	Are sediments which contain sulfidic mineral pyrite which may become extremely acid following disturbance or drainage as sulfur compounds react when exposed to oxygen to form sulfuric acid. More detailed explanation and definition can be found in the NSW Government Acid Sulfate Soil Manual published by Acid Sulfate Soil Management Advisory Committee.
Annual Exceedance Probability (AEP)	The chance of a flood of a given or larger size occurring in any one year, usually expressed as a percentage. For example, if a peak flood discharge of 500 m^3/s has an AEP of 5%, it means that there is a 5% chance (that is one-in-20 chance) of a 500 m^3/s or larger event occurring in any one year (see ARI).
Australian Height Datum (AHD)	A common national surface level datum approximately corresponding to mean sea level.
Average Annual Damage (AAD)	Depending on its size (or severity), each flood will cause a different amount of flood damage to a flood prone area. AAD is the average damage per year that would occur in a nominated development situation from flooding over a very long period of time.
Average Recurrence Interval (ARI)	The long term average number of years between the occurrence of a flood as big as, or larger than, the selected event. For example, floods with a discharge as great as, or greater than, the 20 year ARI flood event will occur on average once every 20 years. ARI is another way of expressing the likelihood of occurrence of a flood event.
caravan and moveable home parks	Caravans and moveable dwellings are being increasingly used for long-term and permanent accommodation purposes. Standards relating to their siting, design, construction and management can be found in the Regulations under the LG Act.
catchment	The land area draining through the main stream, as well as tributary streams, to a particular site. It always relates to an area above a specific location.
consent authority	The Council, government agency or person having the function to determine a development application for land use under the EP&A Act. The consent authority is most often the Council, however legislation or an EPI may specify a Minister or public authority (other than a Council), or the Director General of DIPNR, as having the function to determine an application.
development	Is defined in Part 4 of the Environmental Planning and Assessment Act (EP&A Act). **infill development:** refers to the development of vacant blocks of land that are generally surrounded by developed properties and is permissible under the current zoning of the land. Conditions such as minimum floor levels may be imposed on infill development. **new development:** refers to development of a completely different nature to that associated with the former land use. For example, the urban subdivision of an area previously used for rural purposes. New developments involve rezoning and typically require major extensions of existing urban services, such as roads, water supply, sewerage and electric power.

	redevelopment: refers to rebuilding in an area. For example, as urban areas age, it may become necessary to demolish and reconstruct buildings on a relatively large scale. Redevelopment generally does not require either rezoning or major extensions to urban services.
disaster plan (DISPLAN)	A step by step sequence of previously agreed roles, responsibilities, functions, actions and management arrangements for the conduct of a single or series of connected emergency operations, with the object of ensuring the coordinated response by all agencies having responsibilities and functions in emergencies.
discharge	The rate of flow of water measured in terms of volume per unit time, for example, cubic metres per second (m^3/s). Discharge is different from the speed or velocity of flow, which is a measure of how fast the water is moving for example, metres per second (m/s).
ecologically sustainable development (ESD)	Using, conserving and enhancing natural resources so that ecological processes, on which life depends, are maintained, and the total quality of life, now and in the future, can be maintained or increased. A more detailed definition is included in the Local Government Act 1993. The use of sustainability and sustainable in this manual relate to ESD.
effective warning time	The time available after receiving advice of an impending flood and before the floodwaters prevent appropriate flood response actions being undertaken. The effective warning time is typically used to move farm equipment, move stock, raise furniture, evacuate people and transport their possessions.
emergency management	A range of measures to manage risks to communities and the environment. In the flood context it may include measures to prevent, prepare for, respond to and recover from flooding.
flash flooding	Flooding which is sudden and unexpected. It is often caused by sudden local or nearby heavy rainfall. Often defined as flooding which peaks within six hours of the causative rain.
flood	Relatively high stream flow which overtops the natural or artificial banks in any part of a stream, river, estuary, lake or dam, and/or local overland flooding associated with major drainage before entering a watercourse, and/or coastal inundation resulting from super-elevated sea levels and/or waves overtopping coastline defences excluding tsunami.
flood awareness	Flood awareness is an appreciation of the likely effects of flooding and a knowledge of the relevant flood warning, response and evacuation procedures.
flood education	Flood education seeks to provide information to raise awareness of the flood problem so as to enable individuals to understand how to manage themselves and their property in response to flood warnings and in a flood event. It invokes a state of flood readiness.
flood fringe areas	The remaining area of flood prone land after floodway and flood storage areas have been defined.
flood liable land	Is synonymous with flood prone land (i.e. land susceptible to flooding by the probable maximum flood (PMF) event). Note that the term flood liable land covers the whole of the floodplain, not just that part below the flood planning level (see flood planning area).
flood mitigation standard	

	The average recurrence interval of the flood, selected as part of the floodplain risk management process that forms the basis for physical works to modify the impacts of flooding.
floodplain	Area of land which is subject to inundation by floods up to and including the probable maximum flood event, that is, flood prone land.
floodplain risk management options	The measures that might be feasible for the management of a particular area of the floodplain. Preparation of a floodplain risk management plan requires a detailed evaluation of floodplain risk management options.
floodplain risk management plan	A management plan developed in accordance with the principles and guidelines in this manual. Usually includes both written and diagrammetic information describing how particular areas of flood prone land are to be used and managed to achieve defined objectives.
flood plan (local)	A sub-plan of a disaster plan that deals specifically with flooding. They can exist at State, Division and local levels. Local flood plans are prepared under the leadership of the State Emergency Service.
flood planning area	The area of land below the flood planning level and thus subject to flood related development controls. The concept of flood planning area generally supersedes the Aflood liable land@ concept in the 1986 Manual.
Flood Planning Levels (FPLs)	FPL=s are the combinations of flood levels (derived from significant historical flood events or floods of specific AEPs) and freeboards selected for floodplain risk management purposes, as determined in management studies and incorporated in management plans. FPLs supersede the Astandard flood event@ in the 1986 manual.
flood proofing	A combination of measures incorporated in the design, construction and alteration of individual buildings or structures subject to flooding, to reduce or eliminate flood damages.
flood prone land	Is land susceptible to flooding by the Probable Maximum Flood (PMF) event. Flood prone land is synonymous with flood liable land.
flood readiness	Flood readiness is an ability to react within the effective warning time.
flood risk	Potential danger to personal safety and potential damage to property resulting from flooding. The degree of risk varies with circumstances across the full range of floods. Flood risk in this manual is divided into 3 types, existing, future and continuing risks. They are described below. **existing flood risk:** the risk a community is exposed to as a result of its location on the floodplain. **future flood risk:** the risk a community may be exposed to as a result of new development on the floodplain. **continuing flood risk:** the risk a community is exposed to after floodplain risk management measures have been implemented. For a town protected by levees, the continuing flood risk is the consequences of the levees being overtopped. For an area without any floodplain risk management measures, the continuing flood risk is simply the existence of its flood exposure.
flood storage areas	Those parts of the floodplain that are important for the temporary storage of floodwaters during the passage of a flood. The extent and behaviour of flood

	storage areas may change with flood severity, and loss of flood storage can increase the severity of flood impacts by reducing natural flood attenuation. Hence, it is necessary to investigate a range of flood sizes before defining flood storage areas.
floodway areas	Those areas of the floodplain where a significant discharge of water occurs during floods. They are often aligned with naturally defined channels. Floodways are areas that, even if only partially blocked, would cause a significant redistribution of flood flows, or a significant increase in flood levels.
freeboard	Freeboard provides reasonable certainty that the risk exposure selected in deciding on a particular flood chosen as the basis for the FPL is actually provided. It is a factor of safety typically used in relation to the setting of floor levels, levee crest levels, etc. Freeboard is included in the flood planning level.
habitable room	**in a residential situation:** a living or working area, such as a lounge room, dining room, rumpus room, kitchen, bedroom or workroom. **in an industrial or commercial situation:** an area used for offices or to store valuable possessions susceptible to flood damage in the event of a flood.
hazard	A source of potential harm or a situation with a potential to cause loss. In relation to this manual the hazard is flooding which has the potential to cause damage to the community. Definitions of high and low hazard categories are provided in the Manual.
hydraulics	Term given to the study of water flow in waterways; in particular, the evaluation of flow parameters such as water level and velocity.
hydrograph	A graph which shows how the discharge or stage/flood level at any particular location varies with time during a flood.
hydrology	Term given to the study of the rainfall and runoff process; in particular, the evaluation of peak flows, flow volumes and the derivation of hydrographs for a range of floods.
local overland flooding	Inundation by local runoff rather than overbank discharge from a stream, river, estuary, lake or dam.
local drainage	Are smaller scale problems in urban areas. They are outside the definition of major drainage in this glossary.
mainstream flooding	Inundation of normally dry land occurring when water overflows the natural or artificial banks of a stream, river, estuary, lake or dam.

major drainage	Councils have discretion in determining whether urban drainage problems are associated with major or local drainage. For the purpose of this manual major drainage involves:
	$ the floodplains of original watercourses (which may now be piped, channelised or diverted), or sloping areas where overland flows develop along alternative paths once system capacity is exceeded; and/or
	
	$ water depths generally in excess of 0.3 m (in the major system design storm as defined in the current version of Australian Rainfall and Runoff). These conditions may result in danger to personal safety and property damage to both premises and vehicles; and/or

- major overland flow paths through developed areas outside of defined drainage reserves; and/or
- the potential to affect a number of buildings along the major flow path.

mathematical/computer models

The mathematical representation of the physical processes involved in runoff generation and stream flow. These models are often run on computers due to the complexity of the mathematical relationships between runoff, stream flow and the distribution of flows across the floodplain.

merit approach

The merit approach weighs social, economic, ecological and cultural impacts of land use options for different flood prone areas together with flood damage, hazard and behaviour implications, and environmental protection and well being of the State=s rivers and floodplains.

The merit approach operates at two levels. At the strategic level it allows for the consideration of social, economic, ecological, cultural and flooding issues to determine strategies for the management of future flood risk which are formulated into Council plans, policy and EPIs. At a site specific level, it involves consideration of the best way of conditioning development allowable under the floodplain risk management plan, local floodplain risk management policy and EPIs.

minor, moderate and major flooding

Both the State Emergency Service and the Bureau of Meteorology use the following definitions in flood warnings to give a general indication of the types of problems expected with a flood:

minor flooding: causes inconvenience such as closing of minor roads and the submergence of low level bridges. The lower limit of this class of flooding on the reference gauge is the initial flood level at which landholders and townspeople begin to be flooded.

moderate flooding: low-lying areas are inundated requiring removal of stock and/or evacuation of some houses. Main traffic routes may be covered.

major flooding: appreciable urban areas are flooded and/or extensive rural areas are flooded. Properties, villages and towns can be isolated.

modification measures

Measures that modify either the flood, the property or the response to flooding. Examples are indicated in Table 2.1 with further discussion in the Manual.

peak discharge

The maximum discharge occurring during a flood event.

Probable Maximum Flood (PMF)

The PMF is the largest flood that could conceivably occur at a particular location, usually estimated from probable maximum precipitation, and where applicable, snow melt, coupled with the worst flood producing catchment conditions. Generally, it is not physically or economically possible to provide complete protection against this event. The PMF defines the extent of flood prone land, that is, the floodplain. The extent, nature and potential consequences of flooding associated with a range of events rarer than the flood used for designing mitigation works and controlling development, up to and including the PMF event should be addressed in a floodplain risk management study.

Probable Maximum Precipitation (PMP)

The PMP is the greatest depth of precipitation for a given duration meteorologically possible over a given size storm area at a particular location at a particular time of the year, with no allowance made for long-term climatic trends (World Meteorological Organisation, 1986). It is the primary input to PMF estimation.

probability	A statistical measure of the expected chance of flooding (see AEP).
risk	Chance of something happening that will have an impact. It is measured in terms of consequences and likelihood. In the context of the manual it is the likelihood of consequences arising from the interaction of floods, communities and the environment.
runoff	The amount of rainfall which actually ends up as streamflow, also known as rainfall excess.
stage	Equivalent to Awater level@. Both are measured with reference to a specified datum.
stage hydrograph	A graph that shows how the water level at a particular location changes with time during a flood. It must be referenced to a particular datum.
survey plan	A plan prepared by a registered surveyor.
water surface profile	A graph showing the flood stage at any given location along a watercourse at a particular time.
wind fetch	The horizontal distance in the direction of wind over which wind waves are generated.

Appendix B

Centennial Park Catchment Floodplain Risk Management Study and Plan

June 2014

CITY OF SYDNEY 2030

Sydney2030/Green/Global/Connected

The City of Sydney is preparing a Floodplain Risk Management Study and Plan for the Centennial Park catchment area and we would like your help.

The study will tell us about the type of flood mitigation solutions feasible for the catchment and help us plan for and manage any flood risks.

Good management of flood risks can help reduce damage and improve social and economic opportunities.

city of villages

To access the questionnaire online visit

cityofsydney.nsw.gov.au/floodplain-management

The City of Sydney has engaged WMAwater to assist with the preparation of the Centennial Park Floodplain Risk Management Study and Plan.

The Centennial Park Flood Study was completed by WMAwater in July 2013, giving the City of Sydney a better understanding of the nature of flooding in your area. The next step in the NSW Government Flood Management Process is the preparation of a Floodplain Risk Management Study and Plan. The purpose of this study and plan is to identify and recommend appropriate actions to manage flood risks in the Centennial Park area.

This brochure is an introduction to the Floodplain Risk Management Study and Plan and its objectives.

Stages of the NSW Government Floodplain Management Proces

1. Formation of a Committee – complete
2. Data Collection – complete
3. Flood Study – complete
4. **Floodplain Risk Management Study**
5. **Floodplain Risk Management Plan**
6. Implementation of Plan.

Study area and flooding issues

The Centennial Park study area includes parts of Centennial Park, Moore Park and Paddington.

Much of the flooding in this catchment occurs due to natural depressions and low points. In the past, flooding has caused property damage and posed a hazard to people and property located near drainage areas. The Floodplain Risk Management Study and Plan currently being undertaken is to manage these flood risks.

Have your say

We want your comments about previous flood experiences and potential mitigation options.

The local knowledge of residents and business operators, including your personal experiences of flooding is a valuable source of information.

The information you provide in the accompanying questionnaire will help the City of Sydney determine how to manage the floods in your area.

For more information about this project, please contact the City of Sydney or WMAwater via the details provided.

Floodplain risk management options

The following list of floodplain risk management options are examples of the type of strategies that could be considered to minimise risk and reduce the impact of flooding in the catchment. These options will be investigated in more detail during the preparation of the Management Study and Plan. The general categories of these options are:

Flood modification options.
Examples include:

- Construction of detention/retarding basins to reduce the peak flow downstream;
- Upgrading of drainage systems, upgrade of existing pipes or construction of new pipes; and
- Regrading of roads to provide better overland flowpaths.

Property modification options and planning control.
Examples include:

- Building and development controls; and
- Flood-proofing measures, such as flood barriers.

Response modification options.
Examples include:

- Revision of the Local Disaster Plan;
- Public awareness and education – locality-based flooding information for residents;
- Public awareness and education – flooding information for schools;
- Flood depth markers at major (flood-affected) road crossings;
- Continuation of existing public awareness and education campaigns; and
- Data collection strategies for future floods.

For more information please contact:

WMAwater
Steve Gray
Phone 02 9299 2855
Fax: 02 9262 6208
gray@wmawater.com.au

City of Sydney
Shah Alam
Phone: 02 9288 5925
salam@cityofsydney.nsw.gov.au

Sydney2030/Green/Global/Connected

Local Resident/Land Owner Survey

The City of Sydney is carrying out a Floodplain Risk Management Study and Plan for the Centennial Park catchment. Please return your completed questionnaire in the reply-paid envelope by 20 July 2014. Or complete the questionnaire online at www.cityofsydney.nsw.gov.au/floodplain-management.

1

Please provide the following details as we may contact you to discuss some of the information you have provided us. This is optional.

Name: .....

Address: .....

Contact phone number:.....

Email: .....

2

What is the best way to contact you?

☐ Letter (post) ☐ Email ☐ Phone

3

How many people regularly live/work on this property?

.....

.....

.....

4

How many of the permanent residents/workers are in age group below:

☐ 0–4 years ☐ 5–14 years ☐ 15–64 years ☐ 65+ years

5

What is the main language spoken at this address?

☐ English

☐ Other (please specify) .....

6

Is your property (please tick)

☐ Owner occupied ☐ Occupied by a tenant ☐ Business

☐ Other (please specify) .....

7

What type of structure is your property/business? (please tick)

☐ Freestanding house.....

☐ Apartment.....

☐ Dual occupancy.....

☐ Industrial.....

☐ Commercial.....

8

How long have you lived, worked at, and/or owned this property?

Years .....

Months .....

9

Have you ever experienced flooding since living and/or working in the Centennial Park catchment? (please tick relevant boxes)

☐ Yes, floodwaters entered my house/business

☐ Yes, floodwaters entered my yard/surrounds of my business

☐ Yes, the road was flooded and I couldn't get to my car

☐ Yes, other parts of my neighbourhood were flooded

☐ No, I haven't experienced flooding

10

Do you have any materials or photos you can provide to evidence the flooding you experienced? If yes, when did this flood occur?

☐ No

☐ Yes – the flooding occurred on: .....

.....

11

As a local resident who may have witnessed flooding/drainage problems, you may have your own ideas about how to reduce flood risks. Which of the following do you prefer (1=most preferred, 5=least preferred)?

Proposed option	Preference
Retarding or detention basins (these temporarily hold water and reduce peak flood flows) — Suggested location/other comments:	1 2 3 4 5
Improved flood flow paths — Suggested location/other comments:	1 2 3 4 5
Pit and pipe upgrades — Suggested location/other comments:	1 2 3 4 5
Levee banks or flood walls — Suggested location/other comments:	1 2 3 4 5
Strategic planning and flood related development controls — Suggested location/other comments:	1 2 3 4 5
Education of the community, providing greater awareness of potential hazards — Suggested location/other comments:	1 2 3 4 5
Flood forecasting, flood warnings, evacuation planning and emergency response measures — Suggested location/other comments:	1 2 3 4 5

Other (please specify any options you think are suitable): .....

.....

.....

.....

If you have any further comments that relate to the Centennial Park Flood Management Study and Plan, please write them in the space below. Feel free to attach additional pages if necessary.

.....

.....

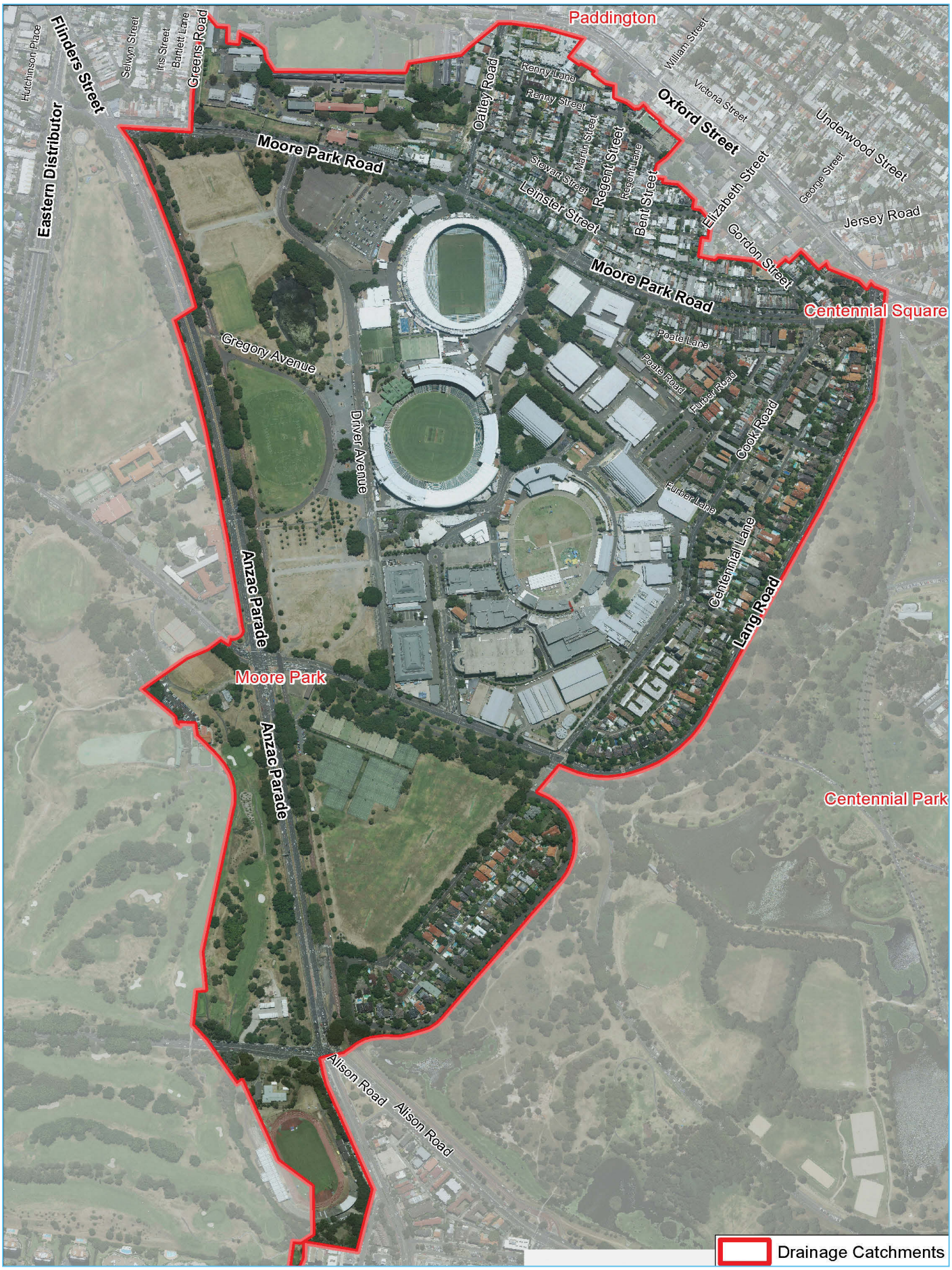
.....

Glossary

Levee bank/flood wall – an embankment or wall, usually constructed from earth or concrete, built along the banks of a watercourse to help prevent overflow of its waters.

Retarding/detention basin – depression in the land surface that captures and holds stormwater runoff allowing it to slowly drain out of the basin into the adjoining natural drainage line or creek.

Privacy notice: The information supplied will be used by the City of Sydney and its consultants to consider flooding matters within the local government area. Personal information will remain confidential, however responses may be accessed by third parties through the Government Information (Public Access) Act 2009.


Paddington
Centennial Square
Centennial Park
Moore Park
Moore Park Road
Oxford Street
Flinders Street
Eastern Distributor
Greens Road
Bartlett Lane
Iris Street
Selwyn Street
Hutchinson Place
Oatley Road
Renny Lane
Renny Street
Martin Street
Regent Street
Regent Lane
Stewart Street
Leinster Street
Bent Street
Elizabeth Street
William Street
Victoria Street
Underwood Street
George Street
Jersey Road
Gordon Street
Poate Lane
Poate Road
Furber Road
Furber Lane
Cook Road
Centennial Lane
Lang Road
Gregory Avenue
Driver Avenue
Anzac Parade
Anzac Parade
Alison Road
Alison Road
Drainage Catchments

Appendix C

Table C1: Cost Estimate - Option FM-CP01 - Poate Road Pipe Upgrade					
Item No.	Description of Work	Quantity	Unit	Rate	CP01
1	General Construction Costs				
1.1	Site establishment, security fencing, facilities and disestablishment	1	item	0	0
1.2	Provision of sediment and erosion control	1	item	0	0
1.3	Construction setout and survey	1	item	0	0
1.4	Work as executed survey and documentation	1	item	0	0
1.5	Geotechnical supervision, testing and certification	1	item	0	0
	SUBTOTAL (Assumed as 15% of works cost)				$ 158,240
2	Demolition and Clearing				
2.1	Clearing and grubbing	0	sq. m	11	0
2.2	Strip topsoil and stockpile for re-use (assuming 150mm depth)	0	cu. m	27	0
2.3	Dispose of excess topsoil (nominal 10% allowance)	0	cu. m	65	0
2.4	Pull up and dispose existing road surface	2,120	sq. m	38	80,127
	SUBTOTAL				$ 80,127
4	Installation of Drainage				
4.6	Supply, excavate, bed, lay, joint, backfill and provide connections 1.5m dia. Pipe	212	lin. m	2,430	515,101
4.49	Install new drainage/junction pit (assumed 1 pit per 50m of pipe)	4	each	4,320	17,280
4.51	Adjustment of existing services (nominal allowance) (assumed 10% of drainage installation cost)				58,562
	SUBTOTAL				$ 585,619
7	Footpath and Road Surfaces				
7.1	Reinstate disturbed road pavement, including demolition and disposal of additional material to provide good jointing	2,120	sq. m	130	274,720
	SUBTOTAL				$ 274,720
9	Traffic Management				
9.1	Control of traffic during works (nominal allowance) (assumed $500 per lin.m)	212	lin. m	540	114,467
	SUBTOTAL				$ 114,467
	CONSTRUCTION SUBTOTAL				$ 1,213,173
11	Contingencies				$ -
11.1	50% construction cost				$ 606,586
	CONSTRUCTION TOTAL, exc. GST				$ 1,819,759
	GST				$ 181,976
	CONSTRUCTION TOTAL, inc. GST				$ 2,001,735
	CONSTRUCTION TOTAL, rounded				$ 2,001,700
11	MAINTENANCE				
11.1	Maintenance of mitigation option		item		$ 2,120

Table C2: Cost Estimate - Option FM-CP02 - Stewart Street and Leinster Pipe Upgrade					
Item No.	Description of Work	Quantity	Unit	Rate	CP02
1	General Construction Costs				
1.1	Site establishment, security fencing, facilities and disestablishment	1	item	0	0
1.2	Provision of sediment and erosion control	1	item	0	0
1.3	Construction setout and survey	1	item	0	0
1.4	Work as executed survey and documentation	1	item	0	0
1.5	Geotechnical supervision, testing and certification	1	item	0	0
	SUBTOTAL (Assumed as 15% of works cost)				$ 700,654
2	Demolition and Clearing				
2.1	Clearing and grubbing	0	sq. m	11	0
2.2	Strip topsoil and stockpile for re-use (assuming 150mm depth)	0	cu. m	27	0
2.3	Dispose of excess topsoil (nominal 10% allowance)	0	cu. m	65	0
2.4	Pull up and dispose existing road surface	3,582	sq. m	38	135,408
	SUBTOTAL				$ 135,408
4	Installation of Drainage				
4.5	Supply, excavate, bed, lay, joint, backfill and provide connections 1.2m dia. Pipe	107	lin. m	1,782	190,515
4.6	Supply, excavate, bed, lay, joint, backfill and provide connections 1.5m dia. Pipe	40	lin. m	2,430	97,234
4.12	Supply, excavate, bed, lay, joint, backfill and provide connections 2.4m dia. Pipe	47	lin. m	4,536	215,229
4.36	Supply, excavate, bed, lay, joint, backfill and provide connections 2x3.0m dia. Pipe	164	lin. m	7,776	1,274,093
4.49	Install new drainage/junction pit (assumed 1 pit per 5m of pipe)	72	each	4,320	311,040
4.51	Adjustment of existing services (nominal allowance) (assumed 90% of drainage installation cost)				3,323,931
	SUBTOTAL				$ 3,877,920
7	Footpath and Road Surfaces				
7.1	Reinstate disturbed road pavement, including demolition and disposal of additional material to provide good jointing	3,582	sq. m	130	464,257
	SUBTOTAL				$ 464,257
9	Traffic Management				
9.1	Control of traffic during works (nominal allowance) (assumed $500 per lin.m)	358	lin. m	540	193,441
	SUBTOTAL				$ 193,441
	CONSTRUCTION SUBTOTAL				$ 5,371,680
11	Contingencies				$ -
11.1	50% construction cost				$ 2,685,840
	CONSTRUCTION TOTAL, exc. GST				$ 8,057,520
	GST				$ 805,752
	CONSTRUCTION TOTAL, inc. GST				$ 8,863,272
	CONSTRUCTION TOTAL, rounded				$ 8,863,300
11	MAINTENANCE				
11.1	Maintenance of mitigation option		item		$ 3,582

Table C3: Cost Estimate - Option FM-CP03 - Lang Road North Pipe Upgrade						
Item No.	Description of Work	Quantity	Unit	Rate	CP03	
1	General Construction Costs					
1.1	Site establishment, security fencing, facilities and disestablishment	1	item	0		0
1.2	Provision of sediment and erosion control	1	item	0		0
1.3	Construction setout and survey	1	item	0		0
1.4	Work as executed survey and documentation	1	item	0		0
1.5	Geotechnical supervision, testing and certification	1	item	0		0
	SUBTOTAL (Assumed as 15% of works cost)				$	8,577
2	Demolition and Clearing					
2.1	Clearing and grubbing	0	sq. m	11		0
2.2	Strip topsoil and stockpile for re-use (assuming 150mm depth)	0	cu. m	27		0
2.3	Dispose of excess topsoil (nominal 10% allowance)	0	cu. m	65		0
2.4	Pull up and dispose existing road surface	50	sq. m	38		1,879
	SUBTOTAL				$	1,879
4	Installation of Drainage					
4.3	Supply, excavate, bed, lay, joint, backfill and provide connections 0.9m dia. Pipe	25	lin. m	1,296		32,215
4.49	Install new drainage/junction pit (assumed 1 pit per 50m of pipe)	0	each	4,320		0
4.51	Adjustment of existing services (nominal allowance) (assumed 10% of drainage installation cost)					3,544
	SUBTOTAL				$	35,437
7	Footpath and Road Surfaces					
7.1	Reinstate disturbed road pavement, including demolition and disposal of additional material to provide good jointing	50	sq. m	130		6,443
	SUBTOTAL				$	6,443
9	Traffic Management					
9.1	Control of traffic during works (nominal allowance) (assumed $500 per lin.m)	25	lin. m	540		13,423
	SUBTOTAL				$	13,423
	CONSTRUCTION SUBTOTAL				$	65,759
11	Contingencies				$	-
11.1	50% construction cost				$	32,879
	CONSTRUCTION TOTAL, exc. GST				$	98,638
	GST				$	9,864
	CONSTRUCTION TOTAL, inc. GST				$	108,502
	CONSTRUCTION TOTAL, rounded				$	108,500
11	MAINTENANCE					
11.1	Maintenance of mitigation option		item		$	249

Table C4: Cost Estimate - Option FM-CP04 - Driver Avenue road Upgrade					
Item No.	**Description of Work**	**Quantity**	**Unit**	**Rate**	**CP04**
1	**General Construction Costs**				
1.1	**Site establishment, security fencing, facilities and disestablishment**	1	item	0	0
1.2	**Provision of sediment and erosion control**	1	item	0	0
1.3	**Construction setout and survey**	1	item	0	0
1.4	**Work as executed survey and documentation**	1	item	0	0
1.5	**Geotechnical supervision, testing and certification**	1	item	0	0
	SUBTOTAL (Assumed as 15% of works cost)				**$ 456,062**
2	**Demolition and Clearing**				
2.1	**Clearing and grubbing**	0	sq. m	11	0
2.2	**Strip topsoil and stockpile for re-use (assuming 150mm depth)**	0	cu. m	27	0
2.3	**Dispose of excess topsoil (nominal 10% allowance)**	0	cu. m	65	0
2.4	**Pull up and dispose existing road surface**	15,640	sq. m	38	591,192
	SUBTOTAL				**$ 591,192**
7	**Footpath and Road Surfaces**				
7.1	**Reinstate disturbed road pavement, including demolition and disposal of additional material to provide good jointing**	15,640	sq. m	130	2,026,944
	SUBTOTAL				**$ 2,026,944**
9	**Traffic Management**				
9.1	**Control of traffic during works (nominal allowance) (assumed $500 per lin.m)**	782	lin. m	540	422,280
	SUBTOTAL				**$ 422,280**
	CONSTRUCTION SUBTOTAL				**$ 3,496,478**
11	**Contingencies**				**$ -**
11.1	**50% construction cost**				**$ 1,748,239**
	CONSTRUCTION TOTAL, exc. GST				**$ 5,244,718**
	GST				**$ 524,472**
	CONSTRUCTION TOTAL, inc. GST				**$ 5,769,189**
	CONSTRUCTION TOTAL, rounded				**$ 5,769,200**
11	**MAINTENANCE**				
11.1	**Maintenance of mitigation option**		item		**$ -**

Table C5: Cost Estimate - Option FM-CP05 - Lang Road Pipe Upgrade					
Item No.	Description of Work	Quantity	Unit	Rate	CP05
1	General Construction Costs				
1.1	Site establishment, security fencing, facilities and disestablishment	1	item	0	0
1.2	Provision of sediment and erosion control	1	item	0	0
1.3	Construction setout and survey	1	item	0	0
1.4	Work as executed survey and documentation	1	item	0	0
1.5	Geotechnical supervision, testing and certification	1	item	0	0
	SUBTOTAL (Assumed as 15% of works cost)				$ 1,911,148
2	Demolition and Clearing				
2.1	Clearing and grubbing	866	sq. m	11	9,353
2.2	Strip topsoil and stockpile for re-use (assuming 150mm depth)	130	cu. m	27	3,507
2.3	Dispose of excess topsoil (nominal 10% allowance)	13	cu. m	65	842
2.4	Pull up and dispose existing road surface	1,732	sq. m	38	65,473
	SUBTOTAL				$ 79,175
4	Installation of Drainage				
4.13	Supply, excavate, bed, lay, joint, backfill and provide connections twin 2.4m dia. Pipe	155	lin. m	6,804	1,052,127
4.16	Supply, excavate, bed, lay, joint, backfill and provide connections twin 2.7m dia. Pipe	433	lin. m	7,290	3,160,157
4.29	Supply, excavate, bed, lay, joint, backfill and provide connections 2.4m x 1.5m culvert	1	lin. m	4,320	5,334
4.42	Supply, excavate, bed, lay, joint, backfill and provide connections twin 3.6m x 3.6m culvert	277	lin. m	21,384	5,916,545
4.49	Install new drainage/junction pit (assumed 1 pit per 5m of pipe)	173	each	4,320	747,360
4.51	Adjustment of existing services (nominal allowance) (assumed 10% of drainage installation cost)				1,196,967
	SUBTOTAL				$ 11,969,674
7	Footpath and Road Surfaces				
7.1	Reinstate disturbed road pavement, including demolition and disposal of additional material to provide good jointing	1,732	sq. m	130	224,478
	SUBTOTAL				$ 224,478
9	Traffic Management				
9.1	Control of traffic during works (nominal allowance) (assumed $500 per lin.m)	866	lin. m	540	467,662
	SUBTOTAL				$ 467,662
	CONSTRUCTION SUBTOTAL				$ 14,652,137
11	Contingencies				$ -
11.1	50% construction cost				$ 7,326,069
	CONSTRUCTION TOTAL, exc. GST				$ 21,978,206

	GST				**$ 2,197,821**
	CONSTRUCTION TOTAL, inc. GST				**$ 24,176,026**
	CONSTRUCTION TOTAL, rounded				**$ 24,176,000**
11	**MAINTENANCE**				
11.1	**Maintenance of mitigation option**		item		**$ 8,660**

Appendix D

Table D1: Residential Tangible Damages - Option FM - CP02

Event	No. Properties Affected (Flooded below floor)	No. Properties Flooded Above Floor Level	Total Damages for Event	Ave. Damage Per Flood Affected Property
PMF	86	53	$ 3,337,400	$ 38,800
1.0%	76	17	$ 1,230,800	$ 16,200
2.0%	72	13	$ 1,028,200	$ 14,300
5.0%	69	12	$ 591,400	$ 13,800
10.0%	64	10	$ 831,800	$ 13,000
20.0%	57	5	$ 512,200	$ 9,000
50.0%	49	2	$ 290,400	$ 5,900
Average Annual Damages (AAD)			**$ 368,600**	**$ 4,300**

Table D2: Commercial Tangible Damages - Option FM - CP02

Event	No. Properties Affected (Flooded below floor)	No. Properties Flooded Above Floor Level	Total Damages for Event	Ave. Damage Per Flood Affected Property
PMF	4	0	$ 8,100	$ 2,000
1.0%	3	0	$ 5,300	$ 1,800
2.0%	3	0	$ 5,100	$ 1,700
5.0%	2	0	$ 4,900	$ 2,400
10.0%	2	0	$ 4,700	$ 2,300
20.0%	2	0	$ 4,500	$ 2,300
50.0%	2	0	$ 4,300	$ 2,100
Average Annual Damages (AAD)			**$ 3,400**	**$ 800**

Table D3: Combined Tangible Damages - Option FM - CP02

Event	No. Properties Affected (Flooded below floor)	No. Properties Flooded Above Floor Level	Total Damages for Event	Ave. Damage Per Flood Affected Property
PMF	90	53	$ 3,345,500	$ 37,200
1%	79	17	$ 1,236,100	$ 15,600
2%	75	13	$ 1,033,300	$ 13,800
5%	71	12	$ 596,300	$ 13,500
10%	66	10	$ 836,500	$ 12,700
20%	59	5	$ 516,700	$ 8,800
50%	51	2	$ 294,700	$ 5,800
Average Annual Damages (AAD)			**$ 371,900**	**$ 4,100**

Appendix E

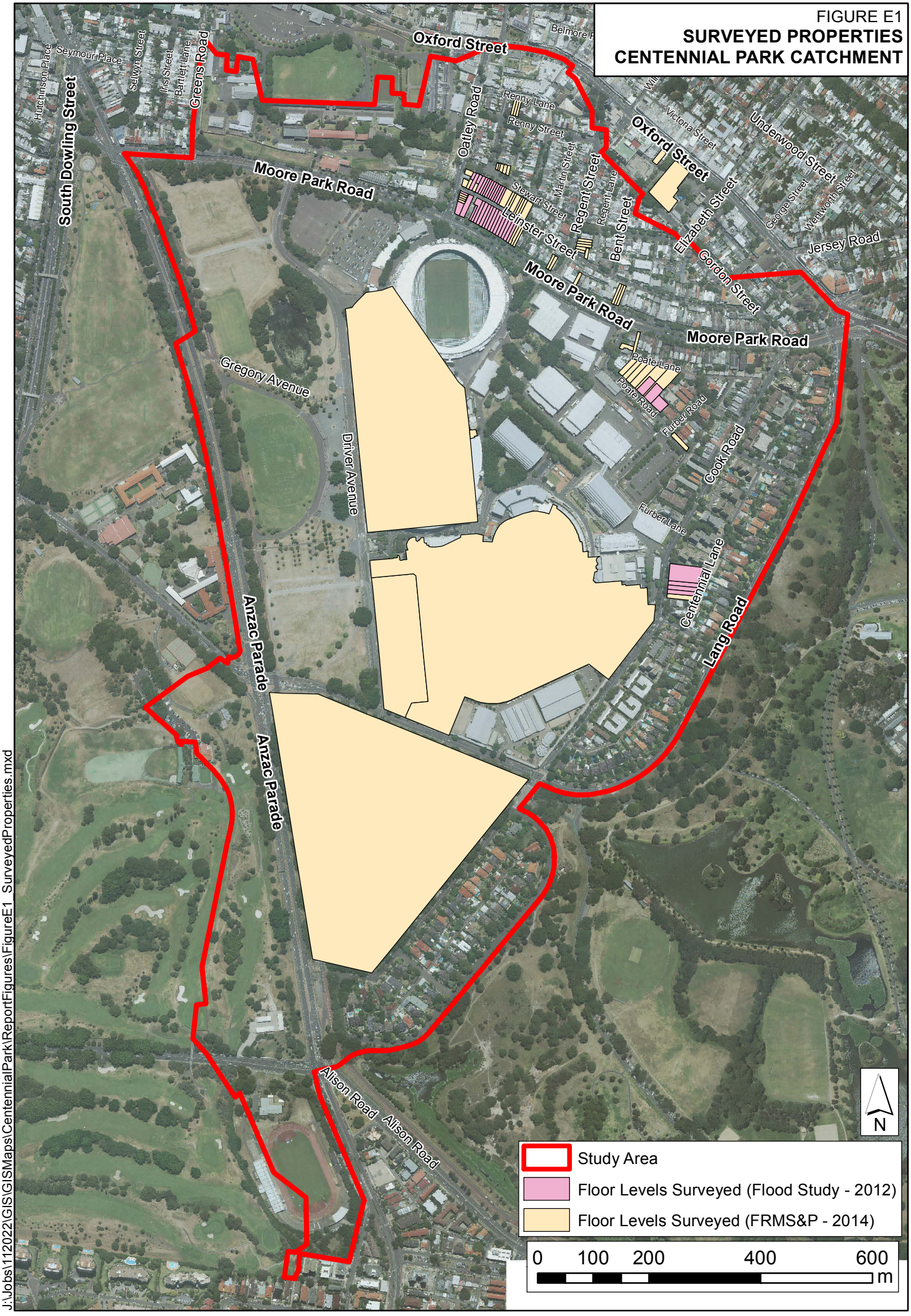


FIGURE E1
SURVEYED PROPERTIES
CENTENNIAL PARK CATCHMENT
Oxford Street
Moore Park Road
South Dowling Street
Greens Road
Oatley Road
Renny Lane
Renny Street
Victoria Street
Underwood Street
Elizabeth Street
George Street
Wentworth Street
Jersey Road
Cordon Street
Stewart Street
Martin Street
Regent Street
Regent Lane
Bent Street
Leinster Street
Poate Lane
Poate Road
Furber Road
Cook Road
Furber Lane
Centennial Lane
Lang Road
Gregory Avenue
Driver Avenue
Anzac Parade
Alison Road
Hutchinson Place
Seymour Place
Selwyn Street
Iris Street
Bartlett Lane
Study Area
Floor Levels Surveyed (Flood Study - 2012)
Floor Levels Surveyed (FRMS&P - 2014)
N
0 100 200 400 600
m
J:\Jobs\112022\GIS\GISMaps\CentennialPark\ReportFigures\FigureE1_SurveyedProperties.mxd

Floor Level Survey (undertaken in 2012 as part of the Centennial Park Flood Study)

No.	Street	Suburb	GIS TAG	UnitNo	LandUse	Size	Storeys	HabitableG	FloorType	WallType	Condition	GardenCon	Easting	Northing	BasementCP	LowestFL	FrontSL	WeirLevel	CourtyardSL	StreetEntry	BusinessName	PhotoRef
35	Robertson Road	CENTENNIAL PARK NSW 2021	183182	N/A	R	S	1	Y	2	1	2	3	335806	6247531	N/A	36.47	36.32	N/A	N/A	N/A	N/A	35 Robertson Road, Centennial Park.jpg
64	Lang Road	CENTENNIAL PARK NSW 2021	180131	N/A	R	S	2	Y	2	1	2	2	336364.2	6248128	N/A	48.8	47.3	N/A	N/A	N/A	N/A	64 Lang Road, Centennial Park.jpg
62	Lang Road	CENTENNIAL PARK NSW 2021	180130	N/A	R	S	2	Y	2	1	2	2	336373.5	6248132.2	N/A	47.86	47.46	N/A	N/A	N/A	N/A	62 Lang Road, Centennial Park.jpg
97	Cook Road	CENTENNIAL PARK NSW 2021	177005	N/A	R	S	2	Y	2	1	2	2	336294.9	6248194.2	N/A	49.27	48.41	N/A	N/A	N/A	N/A	97 Cook Road, Centennial Park.jpg
95	Cook Road	CENTENNIAL PARK NSW 2021	177004	N/A	R	S	2	Y	2	1	2	2	336301.6	62448202	N/A	48.89	48.08	N/A	N/A	N/A	N/A	95 Cook Road, Centennial Park.jpg
93	Cook Road	CENTENNIAL PARK NSW 2021	177003	N/A	R	S	2	Y	2	1	2	2	336307	6248214	N/A	48.89	48.02	N/A	N/A	N/A	N/A	93 Cook Road, Centennial Park.jpg
85-91	Cook Road	CENTENNIAL PARK NSW 2021	177002	N/A	R	M	3 + Basement	Y	1	1	2	2	336300.8	6248230.5	46.87	49.77	48.37	48.06*	N/A	N/A	N/A	85-91 Cook Road, Centennial Park - A & B.jpg
23	Poate Road	CENTENNIAL PARK NSW 2021	182401	N/A	R	M	3	Y	2	1	2	1	336283.7	6248514.7	N/A	53.69	52.68	N/A	N/A	N/A	N/A	23 Poate Road, Centennial Park.jpg
21	Poate Road	CENTENNIAL PARK NSW 2021	182400	N/A	R	M	3	Y	2	1	2	1	336270.8	6248526.4	N/A	53.1	52.49	N/A	N/A	N/A	N/A	21 Poate Road, Centennial Park.jpg
19A	Poate Road	CENTENNIAL PARK NSW 2021	182403	N/A	R	M	3	Y	2	1	2	1	336257.8	6248553.2	N/A	53.21	52.24	N/A	N/A	N/A	N/A	19A Poate Road, Centennial Park.jpg
17	Poate Road	CENTENNIAL PARK NSW 2021	182398	N/A	R	M	3	Y	2	1	2	1	336247.6	6248568	N/A	52.98	52.07	N/A	N/A	N/A	N/A	17 Poate Road, Centennial Park.jpg
7A	Poate Road	CENTENNIAL PARK NSW 2021	249751	N/A	R	S	3	Y	1	1	3	N/A	336203.2	6248596.9	N/A	51.4	52.51	53.11*	N/A	54.16	N/A	7A Poate Road, Centennial Park.jpg
7	Poate Road	CENTENNIAL PARK NSW 2021	249750	N/A	R	S	3	Y	1	1	3	N/A	336199.3	6248600	N/A	51.4	51.83	53.11*	N/A	54.16	N/A	7 Poate Road, Centennial Park.jpg
5A	Poate Road	CENTENNIAL PARK NSW 2021	249749	N/A	R	S	3	Y	1	1	3	N/A	336194.7	6248603.8	N/A	51.4	51.82	53.11*	N/A	54.16	N/A	5A Poate Road, Centennial Park.jpg
5	Poate Road	CENTENNIAL PARK NSW 2021	249748	N/A	R	S	3	Y	1	1	3	N/A	336190.7	6248608.3	N/A	51.4	51.84	53.11*	N/A	54.16	N/A	5 Poate Road, Centennial Park.jpg
272	Moore Park Road	PADDINGTON NSW 2021	202172	N/A	R	S	3	Y	2	1	2	2	336005	6248828.9	N/A	47.76	49.29	49.42	N/A	N/A	N/A	272 Moore Park Road, Paddington.jpg
270	Moore Park Road	PADDINGTON NSW 2021	181254	N/A	R	S	3	Y	2	1	2	2	336001.1	6248831	N/A	47.76	49.29	49.42	N/A	N/A	N/A	270 Moore Park Road, Paddington.jpg
264	Moore Park Road	PADDINGTON NSW 2021	181253	N/A	R	S	3	Y	2	1	2	2	335996.8	6248834.9	N/A	47.79	48.96	49.16	N/A	N/A	N/A	264 Moore Park Road, Paddington.jpg
262	Moore Park Road	PADDINGTON NSW 2021	181252	N/A	R	S	3	Y	2	1	2	2	335992	6248837.2	N/A	47.79	48.96	49.14	N/A	N/A	N/A	262 Moore Park Road, Paddington.jpg
260	Moore Park Road	PADDINGTON NSW 2021	181251	N/A	R	S	3	Y	2	1	2	2	335987.2	6248840.4	N/A	47.53	48.63	48.83	N/A	N/A	N/A	260 Moore Park Road, Paddington.jpg
258	Moore Park Road	PADDINGTON NSW 2021	181250	N/A	R	S	3	Y	2	1	2	2	335982.1	6248842.7	N/A	47.53	48.63	48.83	N/A	N/A	N/A	258 Moore Park Road, Paddington.jpg
256	Moore Park Road	PADDINGTON NSW 2021	181249	N/A	R	S	3	Y	2	1	2	2	335977.4	6248846.7	N/A	47.16	48.24	48.42	N/A	N/A	N/A	256 Moore Park Road, Paddington.jpg
254	Moore Park Road	PADDINGTON NSW 2021	181248	N/A	R	S	3	Y	2	1	2	2	335972.2	6248849.4	N/A	47.16	48.24	48.42	N/A	N/A	N/A	254 Moore Park Road, Paddington.jpg
252A	Moore Park Road	PADDINGTON NSW 2021	181333	N/A	R	S	3	Y	2	1	3	3	335969.7	6248858.2	N/A	47.03	47.79	N/A	N/A	48.08	N/A	252A Moore Park Road, Paddington.jpg
252	Moore Park Road	PADDINGTON NSW 2021	181247	N/A	R	S	3	Y	2	1	3	3	335967	6248859.3	N/A	47	47.79	N/A	N/A	48.01	N/A	252 Moore Park Road, Paddington.jpg
250	Moore Park Road	PADDINGTON NSW 2021	202401	N/A	R	S	3	Y	2	1	2	2	335958.4	6248857.6	N/A	46.92	47.57	47.74	N/A	N/A	N/A	250 Moore Park Road, Paddington.jpg
248	Moore Park Road	PADDINGTON NSW 2021	181245	N/A	R	S	3	Y	2	1	2	2	335953.5	6248859.9	N/A	46.92	47.57	47.74	N/A	N/A	N/A	248 Moore Park Road, Paddington.jpg
242	Moore Park Road	PADDINGTON NSW 2021	181242	N/A	R	S	2	Y	2	1	2	2	335938	6248864.9	N/A	47.29	46.99	N/A	N/A	N/A	N/A	242 Moore Park Road, Paddington.jpg
246	Moore Park Road	PADDINGTON NSW 2021	181244	N/A	R	S	3	Y	2	1	2	2	335947.8	6248862.6	N/A	46.92	47.2	47.76	N/A	N/A	N/A	246 Moore Park Road, Paddington.jpg
240	Moore Park Road	PADDINGTON NSW 2021	181241	N/A	R	S	2	Y	2	1	2	2	335934.4	6248866.5	N/A	47.3	46.99	N/A	N/A	N/A	N/A	240 Moore Park Road, Paddington.jpg
232	Moore Park Road	PADDINGTON NSW 2021	203210	N/A	R	S	3	Y	2	1	2	2	335916.1	6248873.4	N/A	46.92	46.57	N/A	N/A	N/A	N/A	232 Moore Park Road, Paddington.jpg
238	Moore Park Road	PADDINGTON NSW 2021	181240	N/A	R	S	2	Y	2	1	2	N/A	335930.6	6248870.6	N/A	47.1	46.82	N/A	N/A	N/A	N/A	238 Moore Park Road, Paddington.jpg
234	Moore Park Road	PADDINGTON NSW 2021	181239	N/A	R	S	2	Y	2	1	2	N/A	335921.2	6248874.2	N/A	46.91	46.53	N/A	N/A	N/A	N/A	234 Moore Park Road, Paddington.jpg
236	Moore Park Road	PADDINGTON NSW 2021	181239	N/A	R	S	2	Y	2	1	2	N/A	335925.5	6248872.2	N/A	46.92	46.63	N/A	N/A	N/A	N/A	236 Moore Park Road, Paddington.jpg
244	Moore Park Road	PADDINGTON NSW 2021	181243	N/A	R	S	2	Y	2	1	2	N/A	335941.7	6248863.2	N/A	47.29	47.1	N/A	N/A	N/A	N/A	244 Moore Park Road, Paddington.jpg
29	Stewart Street	PADDINGTON NSW 2021	184324	N/A	R	S	2	Y	2	1	3	N/A	336002	6248920.5	N/A	49.81	49.72	N/A	N/A	N/A	N/A	29 Stewart Street, Paddington.jpg
27	Stewart Street	PADDINGTON NSW 2021	184323	N/A	R	S	2	Y	2	1	3	N/A	335998.5	6248922.4	N/A	49.65	49.34	N/A	N/A	N/A	N/A	27 Stewart Street, Paddington.jpg
25	Stewart Street	PADDINGTON NSW 2021	184321	N/A	R	S	2	Y	2	1	3	N/A	335994.5	6248924.7	N/A	49.64	49.34	N/A	N/A	N/A	N/A	25 Stewart Street, Paddington.jpg
51	Oatley Road	PADDINGTON NSW 2021	181694	N/A	R	S	2	Y	2	1	2	N/A	335920.4	6248915.7	N/A	47.53	47.44	N/A	N/A	N/A	N/A	51 Oatley Road, Paddington.jpg
23	Stewart Street	PADDINGTON NSW 2021	184319	N/A	R	S	2	Y	2	1	2	N/A	335990.4	6248927.1	N/A	48.63	49.02	N/A	N/A	49.23	N/A	23 Stewart Street, Paddington.jpg
21	Stewart Street	PADDINGTON NSW 2021	184317	N/A	R	S	2	Y	2	1	2	N/A	335986.9	6248928.9	N/A	48.64	49.02	N/A	N/A	49.24	N/A	21 Stewart Street, Paddington.jpg
19	Stewart Street	PADDINGTON NSW 2021	184315	N/A	R	S	2	Y	2	1	2	N/A	335983.1	6248931.1	N/A	48.65	48.92	N/A	N/A	49.25	N/A	19 Stewart Street, Paddington.jpg
17	Stewart Street	PADDINGTON NSW 2021	184314	N/A	R	S	2	Y	2	1	2	N/A	335979.1	6248933.1	N/A	48.64	48.92	N/A	N/A	49.24	N/A	17 Stewart Street, Paddington.jpg
15	Stewart Street	PADDINGTON NSW 2021	184313	N/A	R	S	2	Y	2	1	2	N/A	335974.6	6248933.3	N/A	49.13	48.95	N/A	N/A	49.43	N/A	15 Stewart Street, Paddington.jpg
13	Stewart Street	PADDINGTON NSW 2021	184312	N/A	R	S	2	Y	2	1	2	N/A	335971	6248935.2	N/A	49.13	48.95	N/A	N/A	49.43	N/A	13 Stewart Street, Paddington.jpg
11	Stewart Street	PADDINGTON NSW 2021	184311	N/A	R	S	2	Y	2	1	2	N/A	335967.1	6248937.4	N/A	49.1	49.09	N/A	N/A	49.4	N/A	11 Stewart Street, Paddington.jpg
9	Stewart Street	PADDINGTON NSW 2021	184310	N/A	R	S	3	Y	2	1	2	N/A	335962.8	6248939.7	N/A	48.88	49.22	N/A	N/A	49.56	N/A	9 Stewart Street, Paddington.jpg
5	Stewart Street	PADDINGTON NSW 2021	202223	N/A	R	S	2	Y	2	1	2	N/A	335951.4	6248944.5	N/A	49.66	49.49	N/A	N/A	N/A	N/A	5 Stewart Street, Paddington.jpg
7	Stewart Street	PADDINGTON NSW 2021	184309	N/A	R	S	2	Y	2	1	2	N/A	335957.4	6248942.4	N/A	49.46	49.31	N/A	N/A	N/A	N/A	7 Stewart Street, Paddington.jpg
3	Stewart Street	PADDINGTON NSW 2021	184307	N/A	R	S	2	Y	2	1	2	N/A	335945.8	6248947.5	N/A	49.81	49.57	N/A	N/A	N/A	N/A	3 Stewart Street, Paddington.jpg
391-393	Oxford Street	PADDINGTON NSW 2021	181991	N/A	C	S	2	N	1	1	2	N/A	336285	6248986	N/A	63.84	63.77	N/A	N/A	N/A	Vacant	391-393 Oxford Street, Paddington - B.jpg
391-393	Oxford Street	PADDINGTON NSW 2021	181991	N/A	C	S	2	N	1	1	2	N/A	336288.4	6248982	N/A	63.76	63.63	N/A	N/A	N/A	Crate Bar & Pizz	391-393 Oxford Street, Paddington - A.jpg
387-389	Oxford Street	PADDINGTON NSW 2021	181990	N/A	C	S	2	N	1	1	2	N/A	336276.8	6248991.5	N/A	63.85	63.84	N/A	N/A	N/A	Vacant	387-389 Oxford Street, Paddington.jpg
387-389	Oxford Street	PADDINGTON NSW 2021	181990	N/A	C	S	2	N	1	1	2	N/A	336280.7	6248988.3	N/A	63.8	63.79	N/A	N/A	N/A	Vacant	387-389 Oxford Street, Paddington.jpg
385	Oxford Street	PADDINGTON NSW 2021	181989	N/A	C	S	2	N	1	1	2	N/A	336272.5	6248994.4	N/A	64.17	63.91	N/A	N/A	N/A	Shoe store	385 Oxford Street, Paddington.jpg

Floor Level Survey (undertaken in 2014 as part of Centennial Park Floodplain Risk Management Study)

									RESIDENTIAL BUILDINGS					
Parcel Tag as on Council cadastre (LIC_TAG)	Photo name	Number of buildings	Street Number	Street Name	Sub-Area	Easting (m)	Northing (m)	Indicative Ground Level (mAHD)	Lowest Habitable Floor Level (mAHD)	Number of Storeys	Do people live on the Ground Floor (Y or N)	House Size - Small (S), Medium (M), Large (L)	Floor Construction Pier (P) or Slab (S) Other - describe	Wall Construction Brick stone or rendered (B), Clad (C) , Mixed (M)
203884	Stewart St/1.JPG	1	1	Stewart St	Centennial Park	335935.657	6248953.384	49.744	49.824	2	Y	S	S	B
184316	Stewart St/20.JPG	1	20	Stewart St	Centennial Park	335983.997	6248952.84	49.531	49.888	1	Y	S	P	C
184318	Stewart St/22.JPG	1	22	Stewart St	Centennial Park	335989.18	6248949.984	49.402	49.804	1	Y	S	P	C
184320	Stewart St/24.JPG	1	24	Stewart St	Centennial Park	335996.537	6248945.495	49.432	50.125	1	Y	S	P	C
184322	Stewart St/26.JPG	1	26	Stewart St	Centennial Park	336001.187	6248943.02	49.632	50.31	2	Y	S	P	B
184326	Stewart St/31-33.JPG	1	31-33	Stewart St	Centennial Park	336007.121	6248917.266	49.968	49.816	1	N	S	S	B
184329	Stewart St/35.JPG	1	35	Stewart St	Centennial Park	336016.948	624812.174	50.374	50.594	2	Y	S	S	B
184331	Stewart St/37.JPG	1	37	Stewart St	Centennial Park	336021.431	6248909.528	50.591	50.927	2	Y	S	S	B
622749	Stewart St/39.JPG	1	39	Stewart St	Centennial Park	336025.186	6248907.176	50.805	51.085	2	Y	S	S	B
622749	Stewart St/41.JPG	1	41	Stewart St	Centennial Park	336029.106	6248904.958	51.017	51.491	2	Y	S	S	B
184337	Stewart St/43.JPG	1	43	Stewart St	Centennial Park	336032.624	6248902.708	51.212	51.491	2	Y	S	S	B
184339	Stewart St/45.JPG	1	45	Stewart St	Centennial Park	336035.225	628901.166	51.36	51.824	2	Y	S	S	B
184341	Stewart St/47.JPG	1	47	Stewart St	Centennial Park	336040.188	6248898.402	51.475	51.842	2	Y	S	S	B
184343	Stewart St/49-51.JPG	1	49-51	Stewart St	Centennial Park	336046.912	6248890.23	51.564	51.861	2	Y	S	S	B
181285	Moore Park Road/344.JPG	1	344	Moore Park Road	Centennial Park	336206.143	6248706.666	57.157	58.863	2	Y	M	P	B
202763	Moore Park Road/276.JPG	1	276	Moore Park Road	Centennial Park	336013.971	6248821.544	48.267	47.025	3	Y	L	P	B
181189	Moore Park Road/3.JPG	1	3	Moore Park Road	Centennial Park	336241.447	6248661.854	58.346	58.534	2	Y	M	P	B
181268	Moore Park Road/304.JPG	1	304	Moore Park Road	Centennial Park	336079.078	6248777.893	52.42	53.449	2	Y	M	P	B
181271	Moore Park Road/314.JPG	1	314	Moore Park Road	Centennial Park	336125.784	6248743.827	54.429	55.53	2	Y	M	P	B
202301	Moore Park Road/306.JPG	1	306	Moore Park Road	Centennial Park	336079.201	624877.626	52.556	53.462	2	Y	M	P	B
181284	Moore Park Road/342.JPG	1	342	Moore Park Road	Centennial Park	336204.609	6248714.36	56.974	60.478	2	Y	M	P	B
181283	Moore Park Road/340.JPG	1	340	Moore Park Road	Centennial Park	336196.188	6248715.586	56.816	60.148	2	Y	M	P	B
623812	Moore Park Road/274.JPG	1	274	Moore Park Road	Centennial Park	336005.184	6248820.995	48.267	47.025	2	Y	M	P	B
623813	Moore Park	1	274a	Moore Park Road	Centennial Park	336009.662	6248818.177	48.267	47.025	2	Y	M	P	B
202049	Cook Road/99.JPG	1	99	Cook Road	Centennial Park	336291.059	6248189.306	48.308	49.241	2	Y	L	S	B
178937	Furber Road/1.JPG	1	1	Furber Road	Centennial Park	336295.895	6248476.796	52.601	54.017	2	Y	L	S	B
180242	Leinster Street/2.JPG	1	2	Leinster Street	Centennial Park	335930.564	6248919.253	47.379	48.571	2	Y	S	S	B
180243	Leinster Street/4.JPG	1	4	Leinster Street	Centennial Park	335942.14	6248914.093	47.183	48.533	2	Y	S	S	B
180244	Leinster Street/8.JPG	1	8	Leinster Street	Centennial Park	336141.239	6248794.898	60.17	60.625	2	Y	S	S	B
181693	Oatley Road/49.JPG	1	49	Oatley Road	Centennial Park	335922.044	6248930.815	48.075	48.488	2	Y	S	M	B
181695	Oatley Road/53.JPG	1	53	Oatley Road	Centennial Park	335916.369	6248909.715	47.265	47.488	2	Y	S	S	B
181696	Oatley Road/55.JPG	1	55	Oatley Road	Centennial Park	335916.321	6248906.458	47.223	47.533	2	Y	S	S	B
181697	Oatley Road/57.JPG	1	57	Oatley Road	Centennial Park	335917.546	6248901	47.066	47.185	2	Y	S	S	B
181698	Oatley Road/59.JPG	1	59	Oatley Road	Centennial Park	335914.427	62488998.3	47.018	47.188	2	Y	S	S	B
182395	Poate Road/11.JPG	1	11	Poate Road	Centennial Park	336216.43	6248583.164	51.87	52.071	2	Y	S	S	B
182396	Poate Road/13.JPG	1	13	Poate Road	Centennial Park	336224.376	6248574.596	52.024	55.156	2	Y	S	S	B
182397	Poate Road/15.JPG	1	15	Poate Road	Centennial Park	336234.697	6248566.087	52.048	55.959	3	N	S	S	B
182390	Poate Road/1.JPG	1	1	Poate Road	Centennial Park	336207.57	6248633.26	54.893	56.252	2	Y	S	S	B
182394	Poate Road/9.JPG	1	9	Poate Road	Centennial Park	336207.787	6248587.377	51.874	52.071	3	Y	S	S	B
182399	Poate Road/19.JPG	1	19	Poate Road	Centennial Park	336253.558	6248549.116	52.068	53.437	3	Y	S	S	B
182402	Poate Road/17a.JPG	1	17a	Poate Road	Centennial Park	336241.421	6248561.348	52.021	53.063	3	Y	S	S	B
182688	Regent Street/74.JPG	1	74	Regent Street	Centennial Park	336130.62	6248830.375	56.983	58.918	2	Y	S	S	B
182692	Regent Street/82.JPG	1	82	Regent Street	Centennial Park	336125.128	6248808.363	56.29	58.779	2	Y	S	S	B
182691	Regent Street/80.JPG	1	80	Regent Street	Centennial Park	336125.128	6248808.362	56.428	58.779	2	Y	S	S	B
182689	Regent Street/76.JPG	1	76	Regent Street	Centennial Park	336127.059	6248816.109	56.898	58.529	2	Y	S	S	B
182690	Regent Street/78.JPG	1	78	Regent Street	Centennial Park	336127.057	6248816.109	56.506	58.41409	2	Y	S	S	B
174030	Alexander Street/30.JPG	1	30	Alexander Street	Centennial Park	335983.997	6248952.84	49.968	49.902	2	Y	S	S	B
244602	Driver Avenue/40.JPG	1	40	Driver Avenue	Centennial Park	335725.701	6248594.625	39.922	40.939	3	N	L	S	M
249932	Driver Avenue/1.JPG	1	1	Driver Avenue	Centennial Park	335801.531	6248226.687	39.812	42.519	1	N	L	S	M
257024	Lang Road/116.JPG	1	116	Lang Road	Centennial Park	335801.531	6248226.687	39.812	42.519	1	N	L	S	M
202386	Anzac Parade/4.JPG	1	4	Anzac Parade	Centennial Park	335646.7	6247544.314	35.19	35.19	0	N			
202153	Renny Street/22.JPG	1	22	Renny Street	Centennial Park	336014.728	6249050.443	56.509	57.808	2	Y	S	S	B
202152	Renny Street/20.JPG	1	20	Renny Street	Centennial Park	336014.728	6249050.443	56.509	57.808	2	Y	S	S	B
182718	Renny Street/18JPG	1	18	Renny Street	Centennial Park	336014.728	6249050.443	56.509	57.808	2	Y	S	S	B