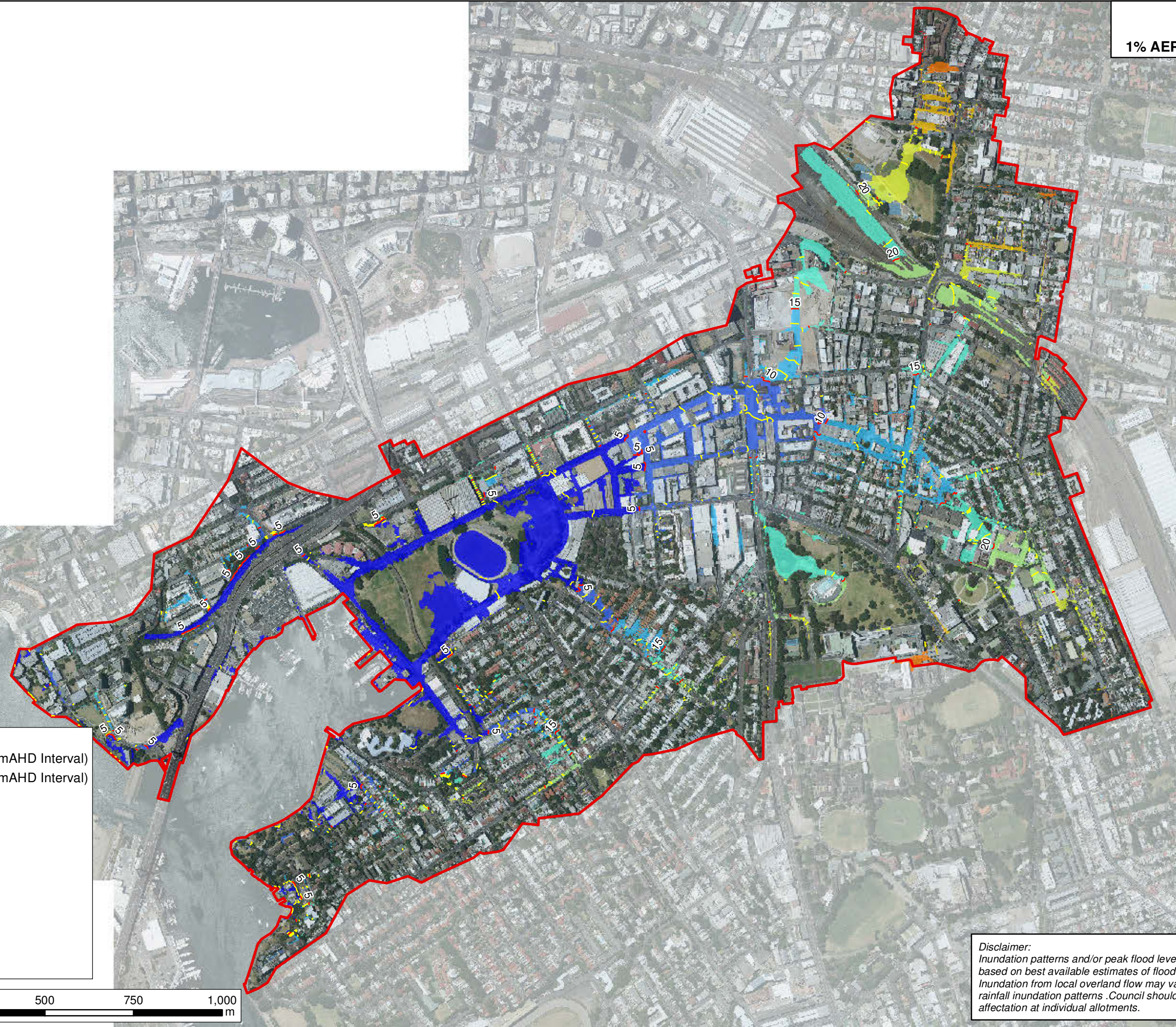
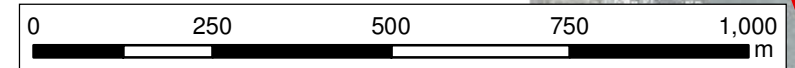


FIGURE 21
PEAK FLOOD LEVEL
1% AEP DESIGN FLOOD EVENT

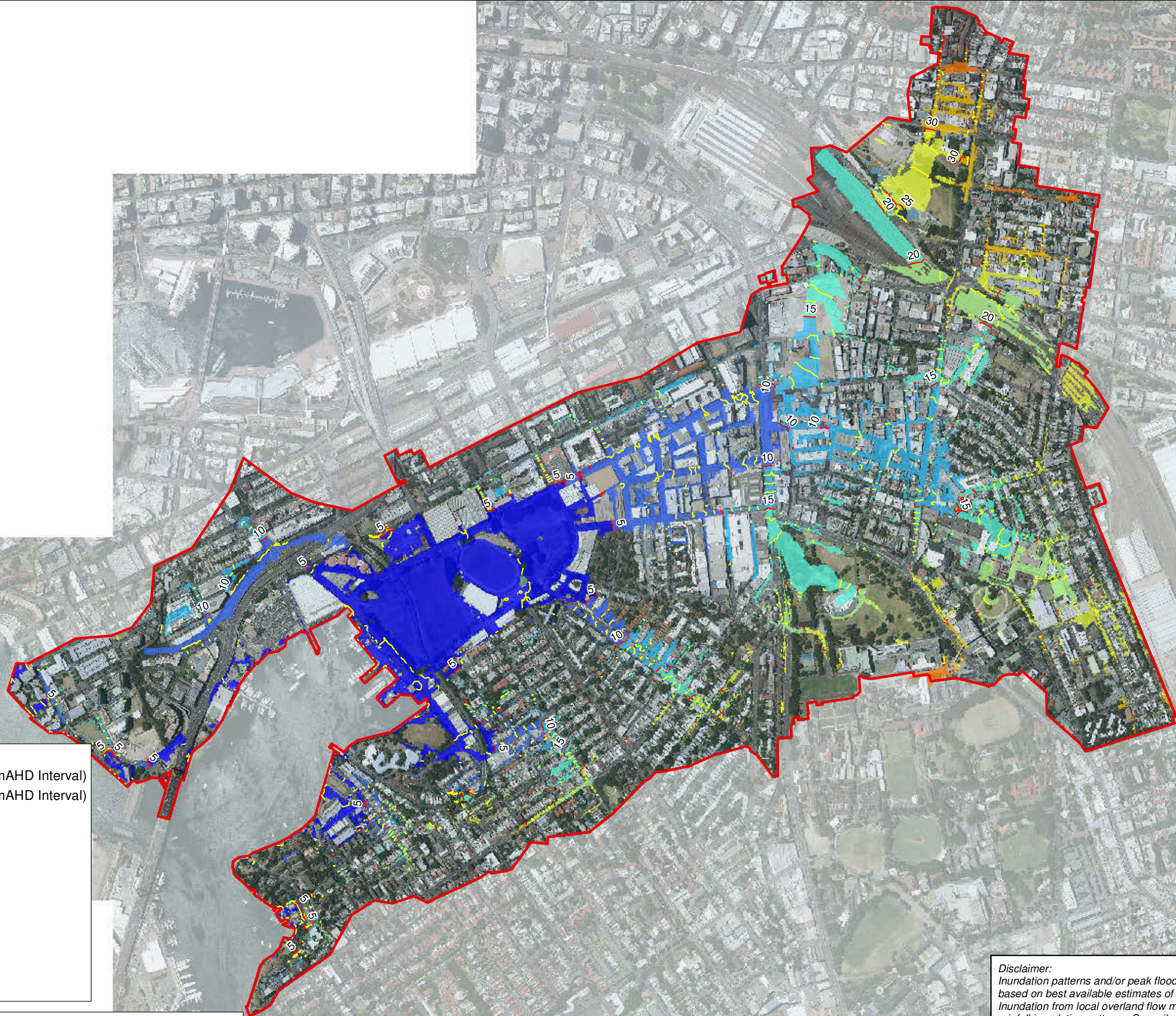


- Study Area
 - Major Contours (5m AHD Interval)
 - Minor Contours (1m AHD Interval)
- Height (m AHD)**
- < 5
 - 5 - 10
 - 10 - 15
 - 15 - 20
 - 20 - 25
 - 25 - 30
 - 30 - 35
 - > 40

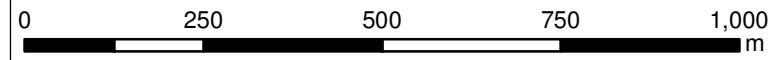


Disclaimer:
 Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour within the Catchment. Inundation from local overland flow may vary slightly to the displayed design rainfall inundation patterns. Council should be consulted to confirm flood affectation at individual allotments.

FIGURE 22
PEAK FLOOD LEVEL
PMF EVENT

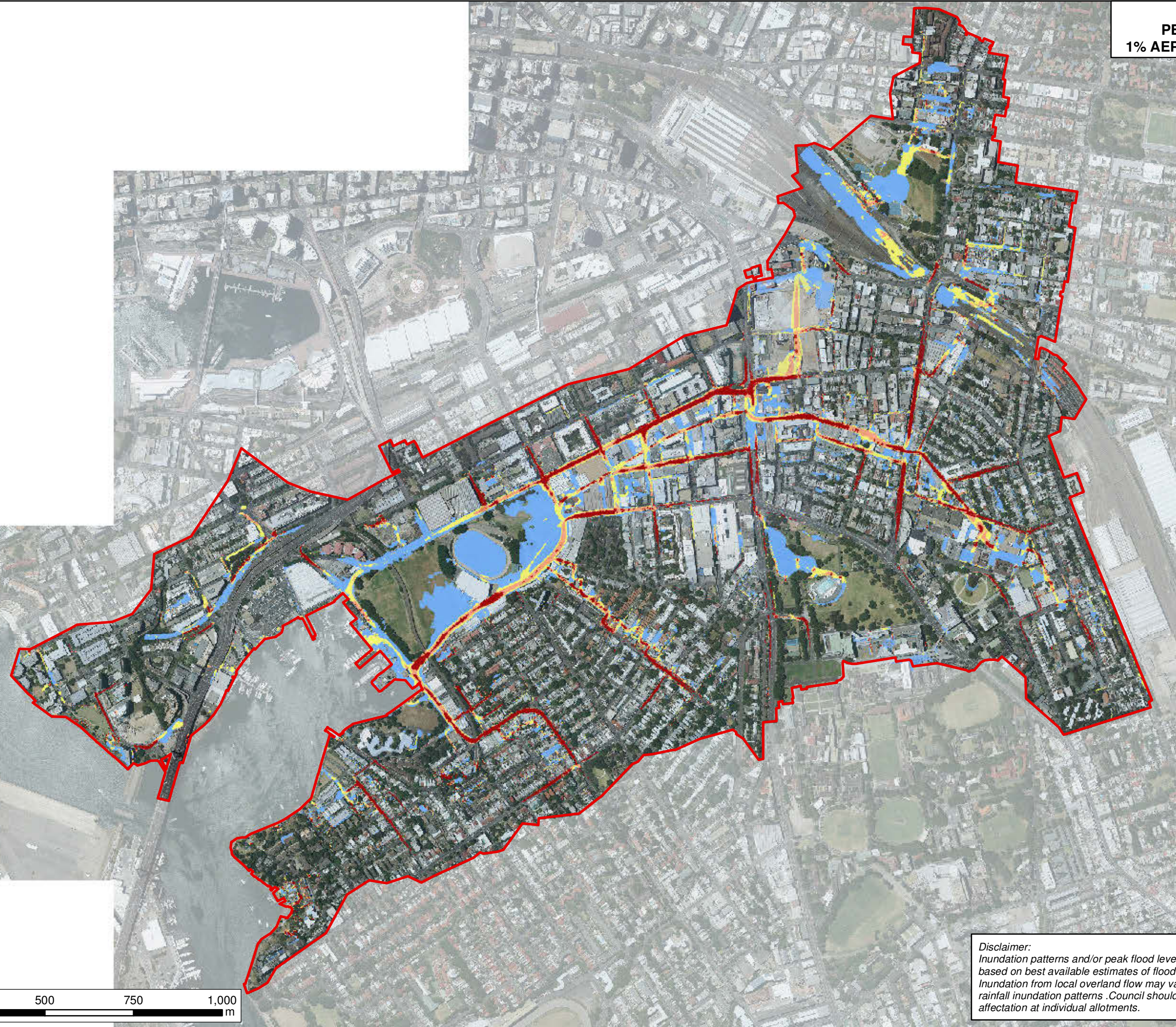


- ▭ Study Area
- Major Contours (5m AHD Interval)
- Minor Contours (1m AHD Interval)
- Height (m AHD)**
- ▭ < 5
- ▭ 5 - 10
- ▭ 10 - 15
- ▭ 15 - 20
- ▭ 20 - 25
- ▭ 25 - 30
- ▭ 30 - 35
- ▭ > 40

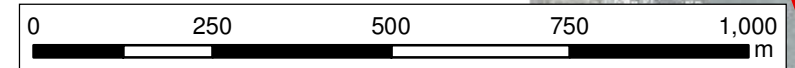


Disclaimer:
Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour within the Catchment. Inundation from local overland flow may vary slightly to the displayed design rainfall inundation patterns. Council should be consulted to confirm flood affectation at individual allotments.

FIGURE 23
PEAK FLOOD VELOCITIES
1% AEP DESIGN FLOOD EVENT

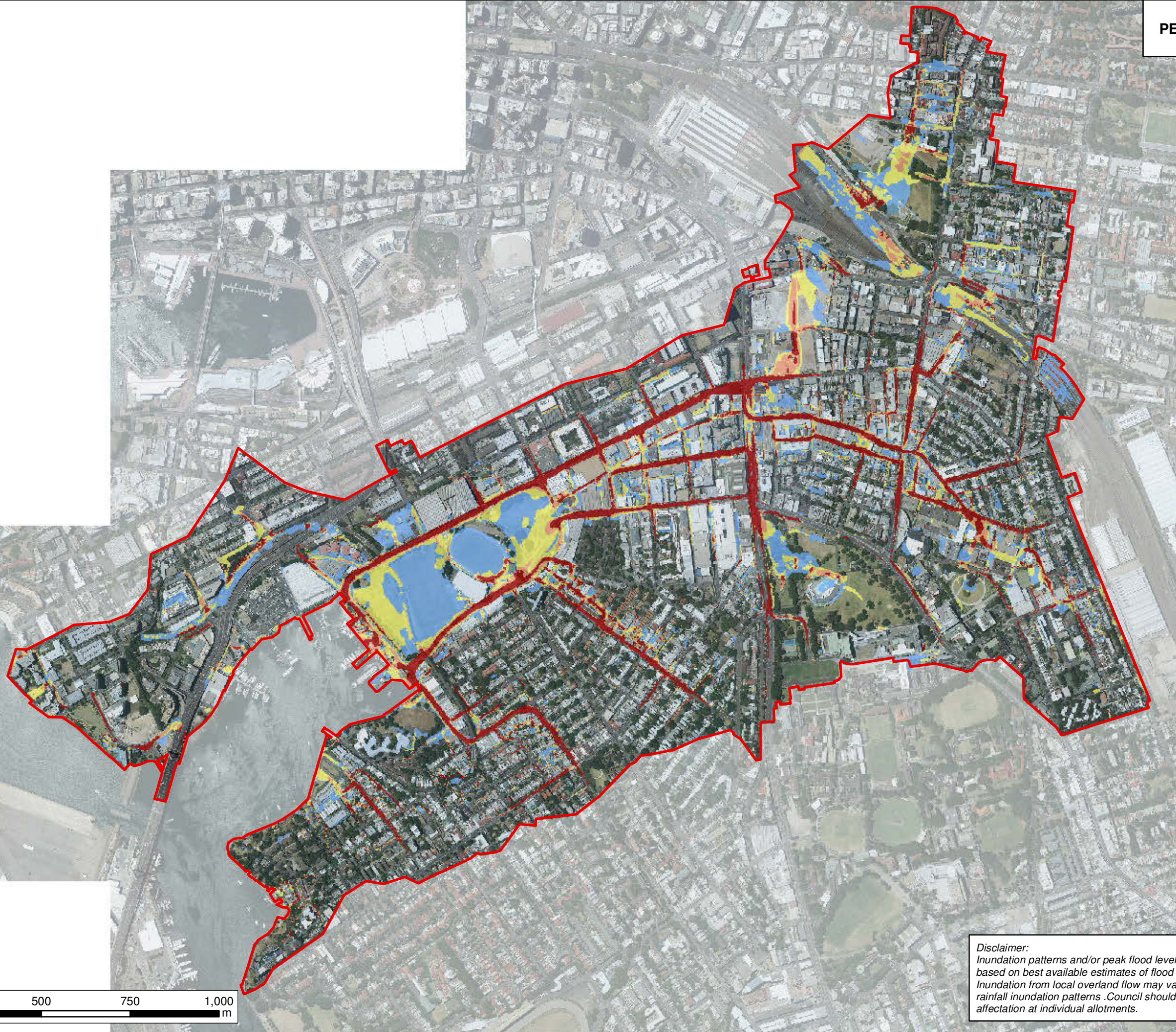







- Study Area
- Velocity (m/s)
- 0 - 0.5
- 0.5 - 1
- 1 - 1.5
- > 1.5

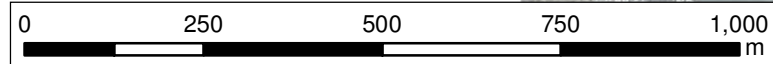


Disclaimer:
Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour within the Catchment. Inundation from local overland flow may vary slightly to the displayed design rainfall inundation patterns. Council should be consulted to confirm flood affectation at individual allotments.

FIGURE 24
PEAK FLOOD VELOCITIES
PMF EVENT



-  Study Area
- Velocity (m/s)**
-  0 - 0.5
-  0.5 - 1
-  1 - 1.5
-  > 1.5



Disclaimer:
Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour within the Catchment. Inundation from local overland flow may vary slightly to the displayed design rainfall inundation patterns. Council should be consulted to confirm flood affectation at individual allotments.

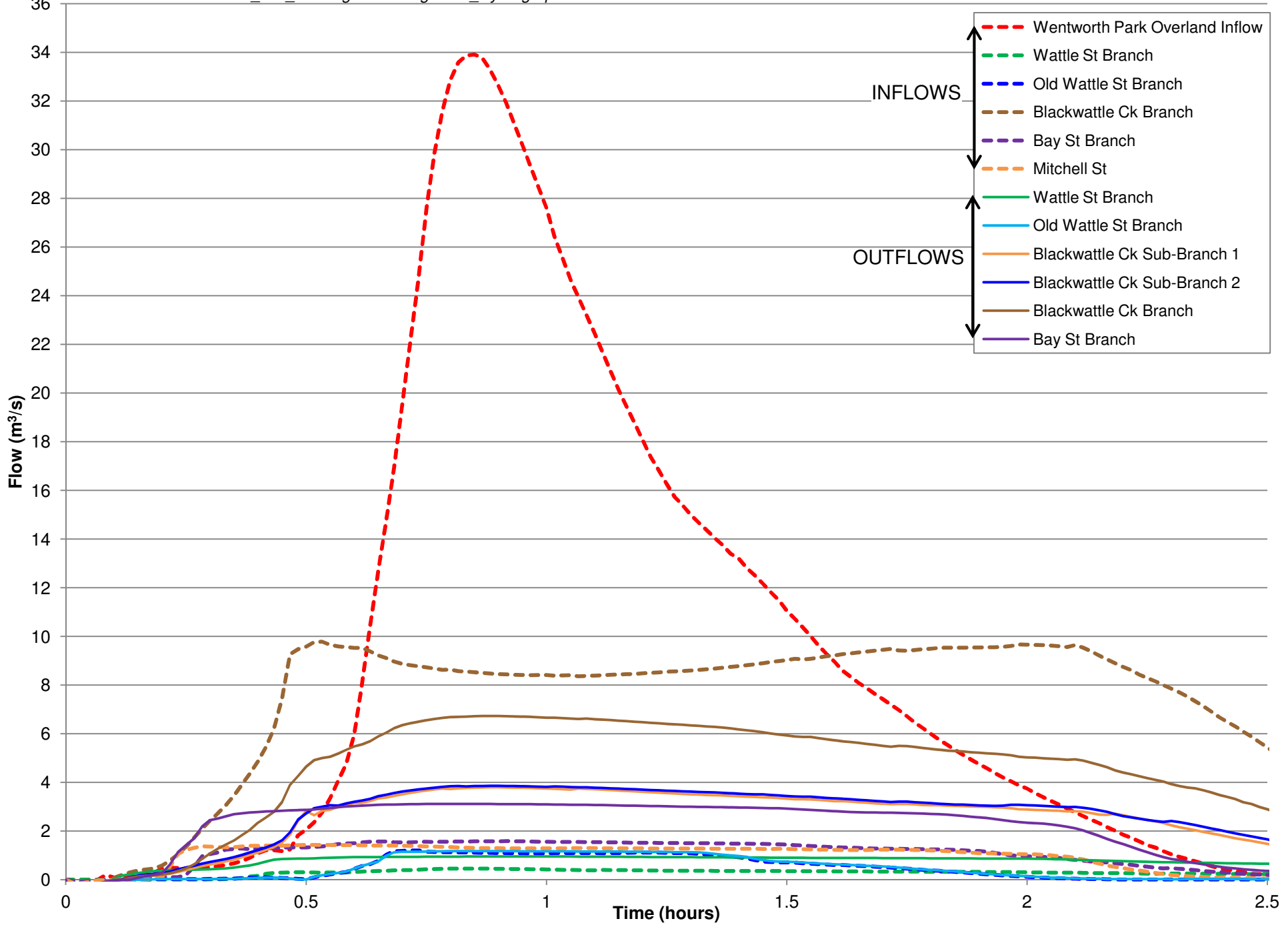
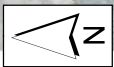
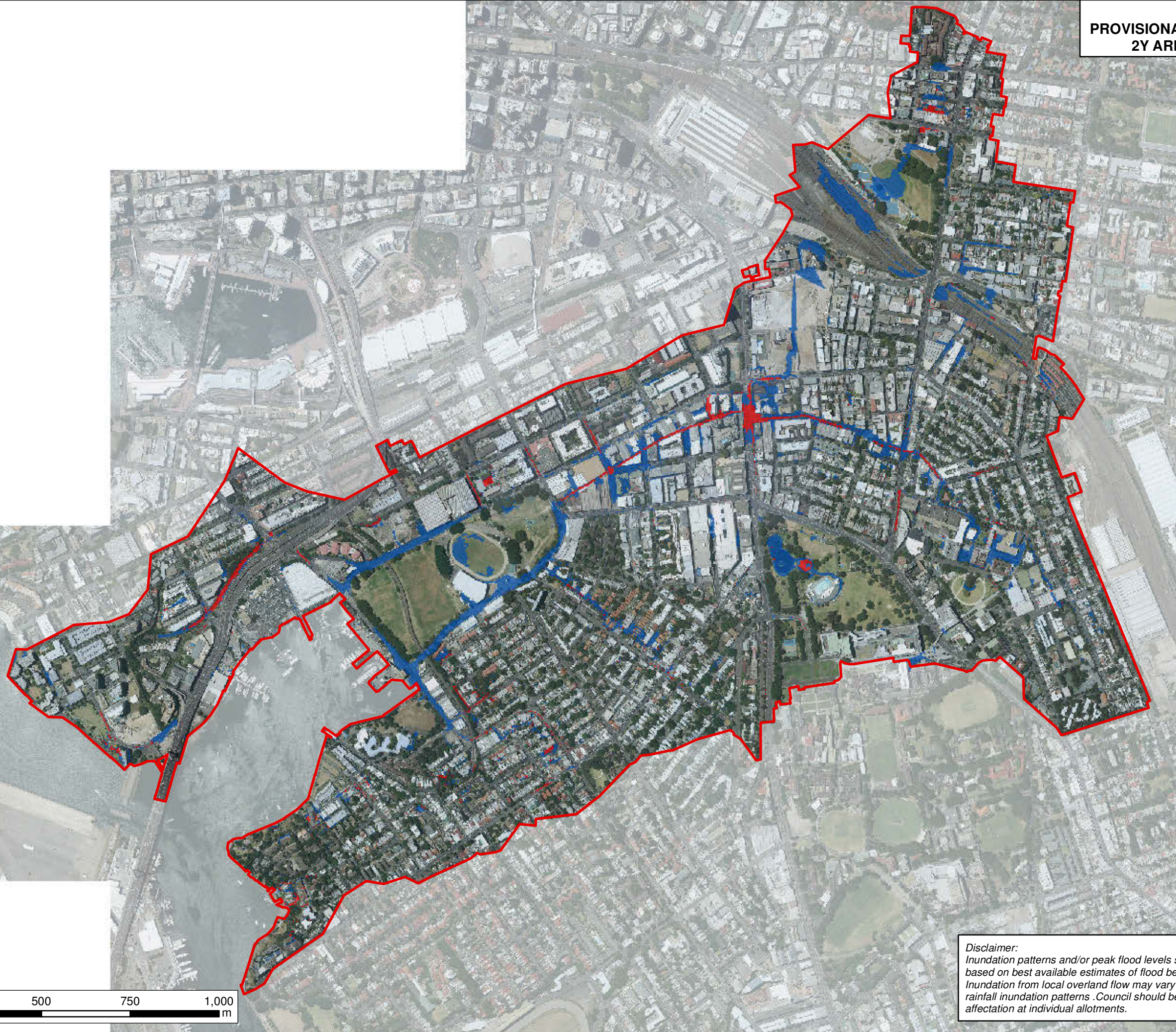
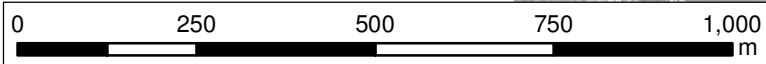


FIGURE 26
WENTWORTH PARK STORAGE FLOW COMPARISONS
1% AEP DESIGN FLOOD EVENT

FIGURE 27
PROVISIONAL HYDRAULIC HAZARD
2Y ARI DESIGN FLOOD EVENT

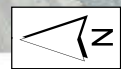
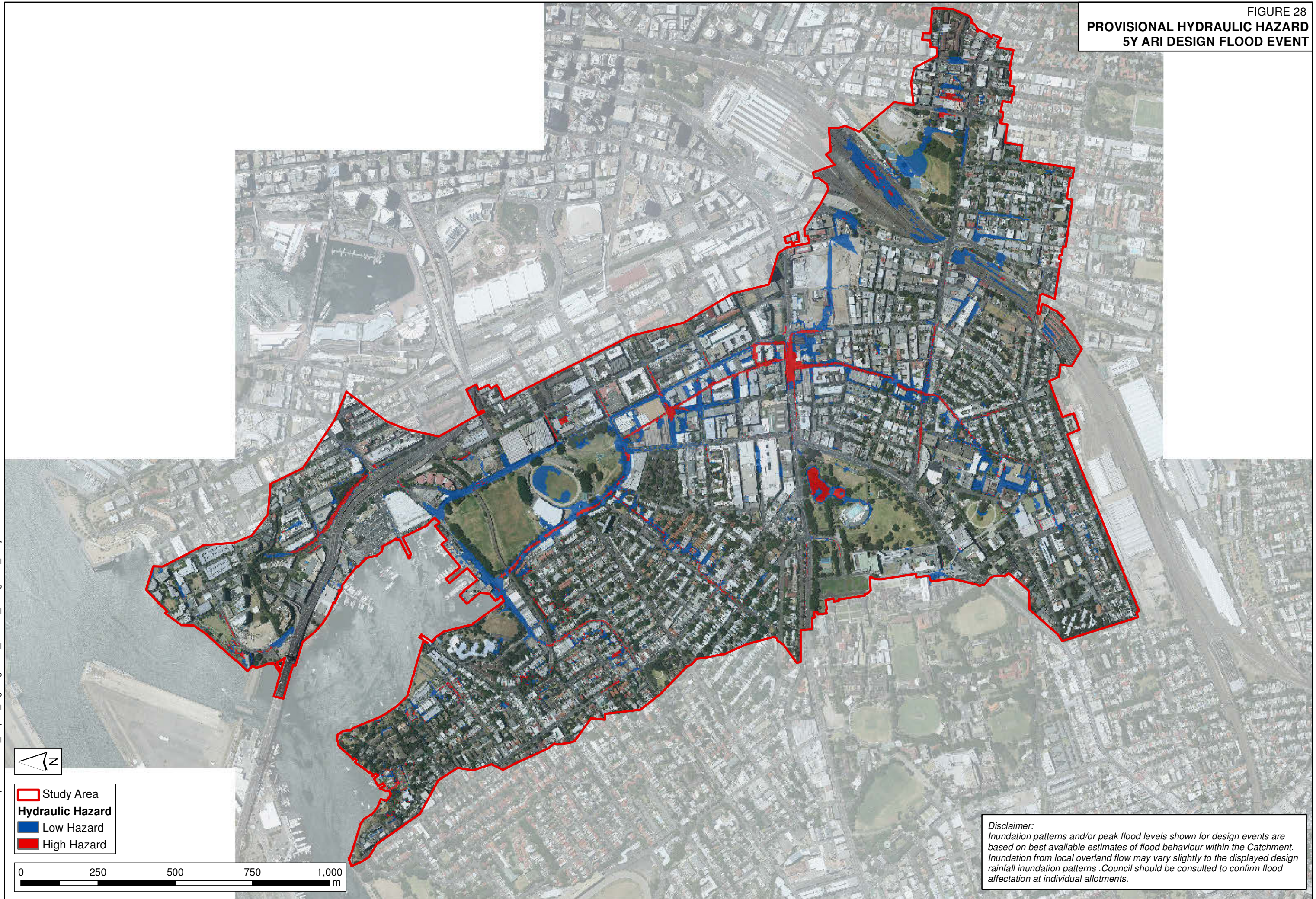


- Study Area
- Hydraulic Hazard
- Low Hazard
- High Hazard



Disclaimer:
Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour within the Catchment. Inundation from local overland flow may vary slightly to the displayed design rainfall inundation patterns. Council should be consulted to confirm flood affectation at individual allotments.

FIGURE 28
PROVISIONAL HYDRAULIC HAZARD
5Y ARI DESIGN FLOOD EVENT

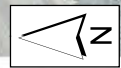
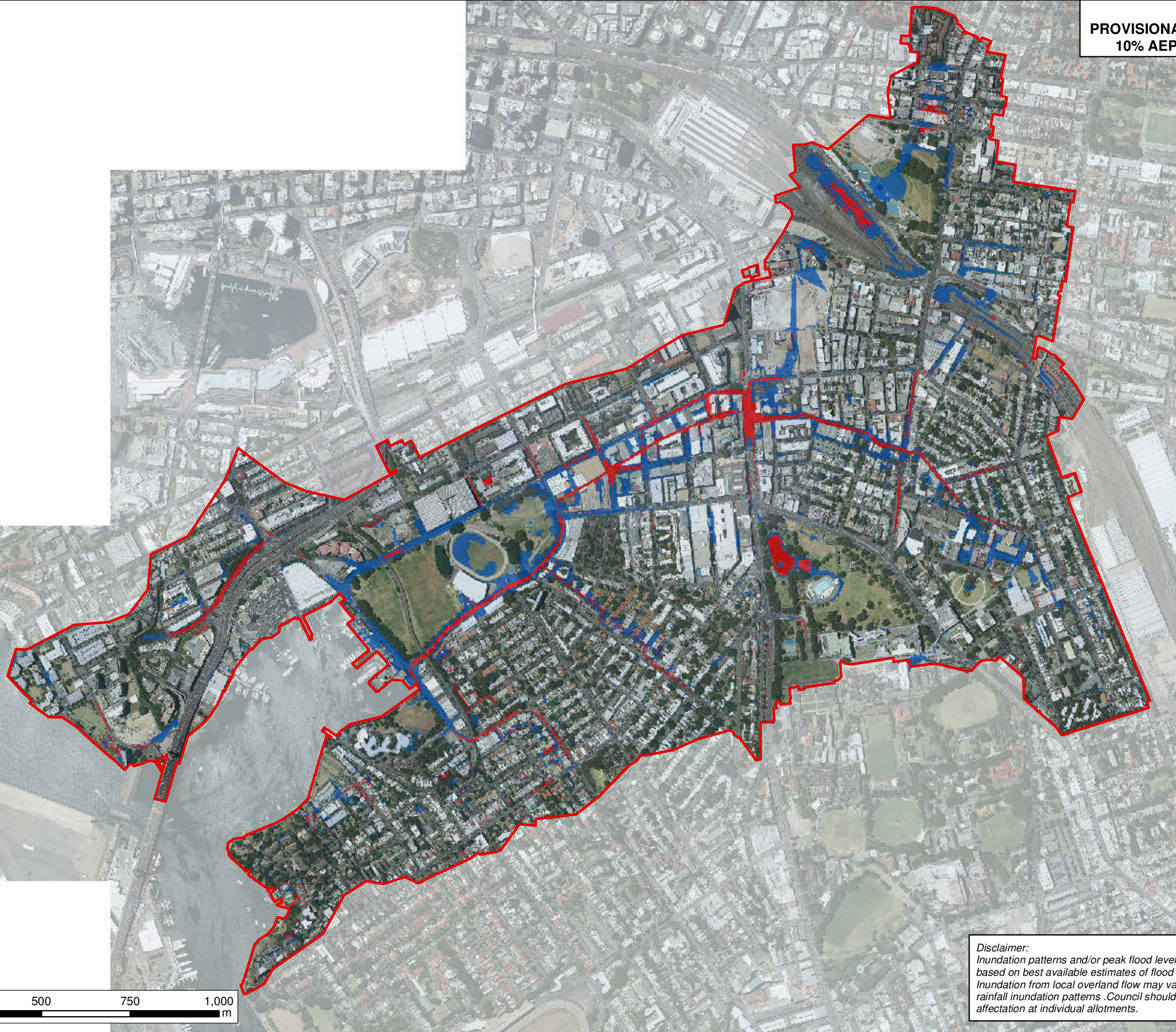


- Study Area
- Hydraulic Hazard
- Low Hazard
- High Hazard

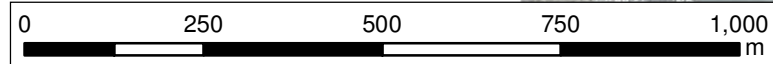
0 250 500 750 1,000 m

Disclaimer:
Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour within the Catchment. Inundation from local overland flow may vary slightly to the displayed design rainfall inundation patterns. Council should be consulted to confirm flood affectation at individual allotments.

FIGURE 29
PROVISIONAL HYDRAULIC HAZARD
10% AEP DESIGN FLOOD EVENT

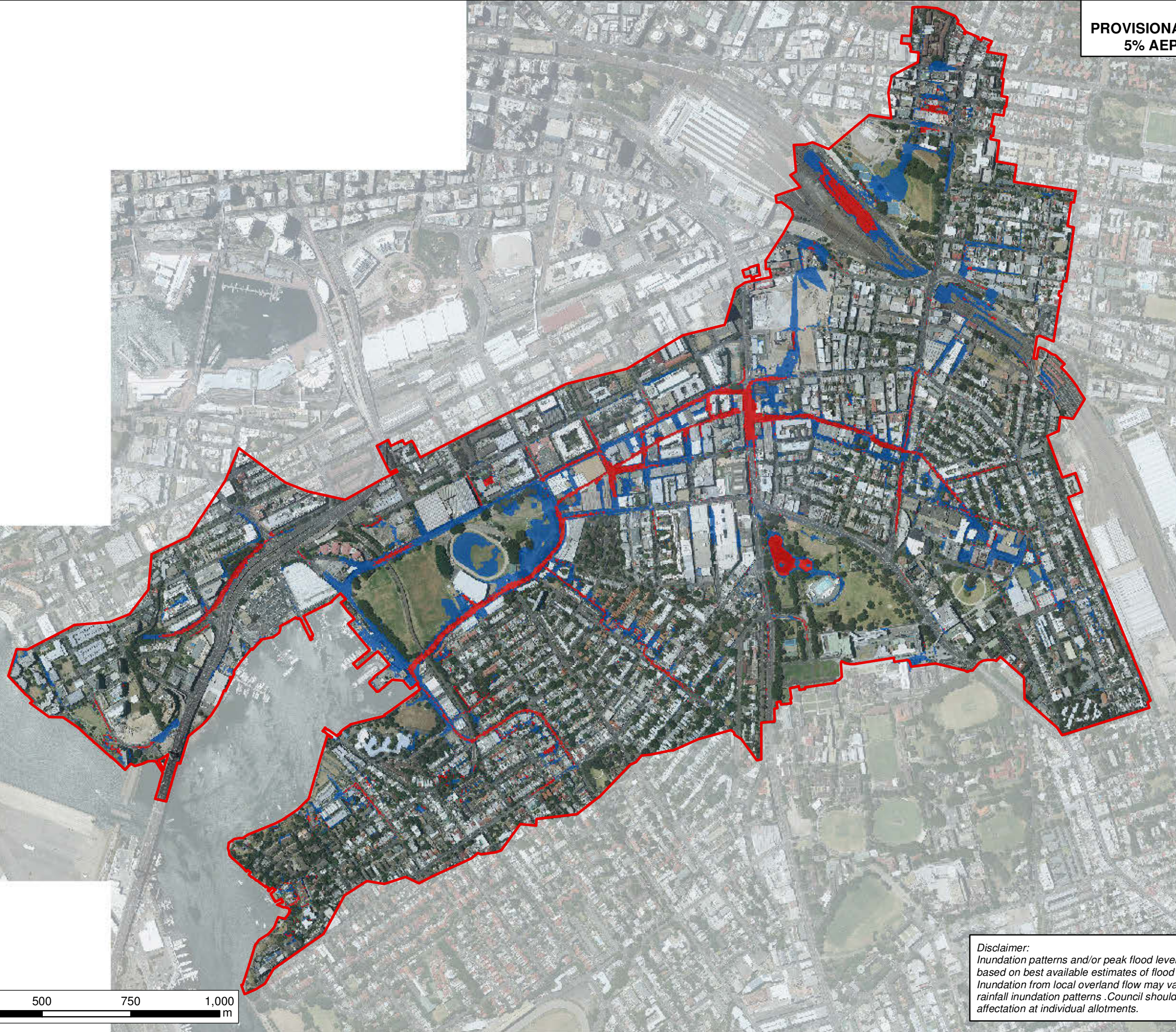


- Study Area
- Hydraulic Hazard
- Low Hazard
- High Hazard

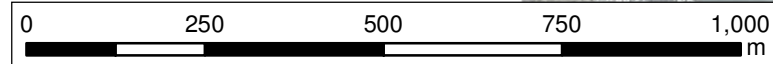


Disclaimer:
Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour within the Catchment. Inundation from local overland flow may vary slightly to the displayed design rainfall inundation patterns. Council should be consulted to confirm flood affectation at individual allotments.

FIGURE 30
PROVISIONAL HYDRAULIC HAZARD
5% AEP DESIGN FLOOD EVENT

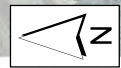
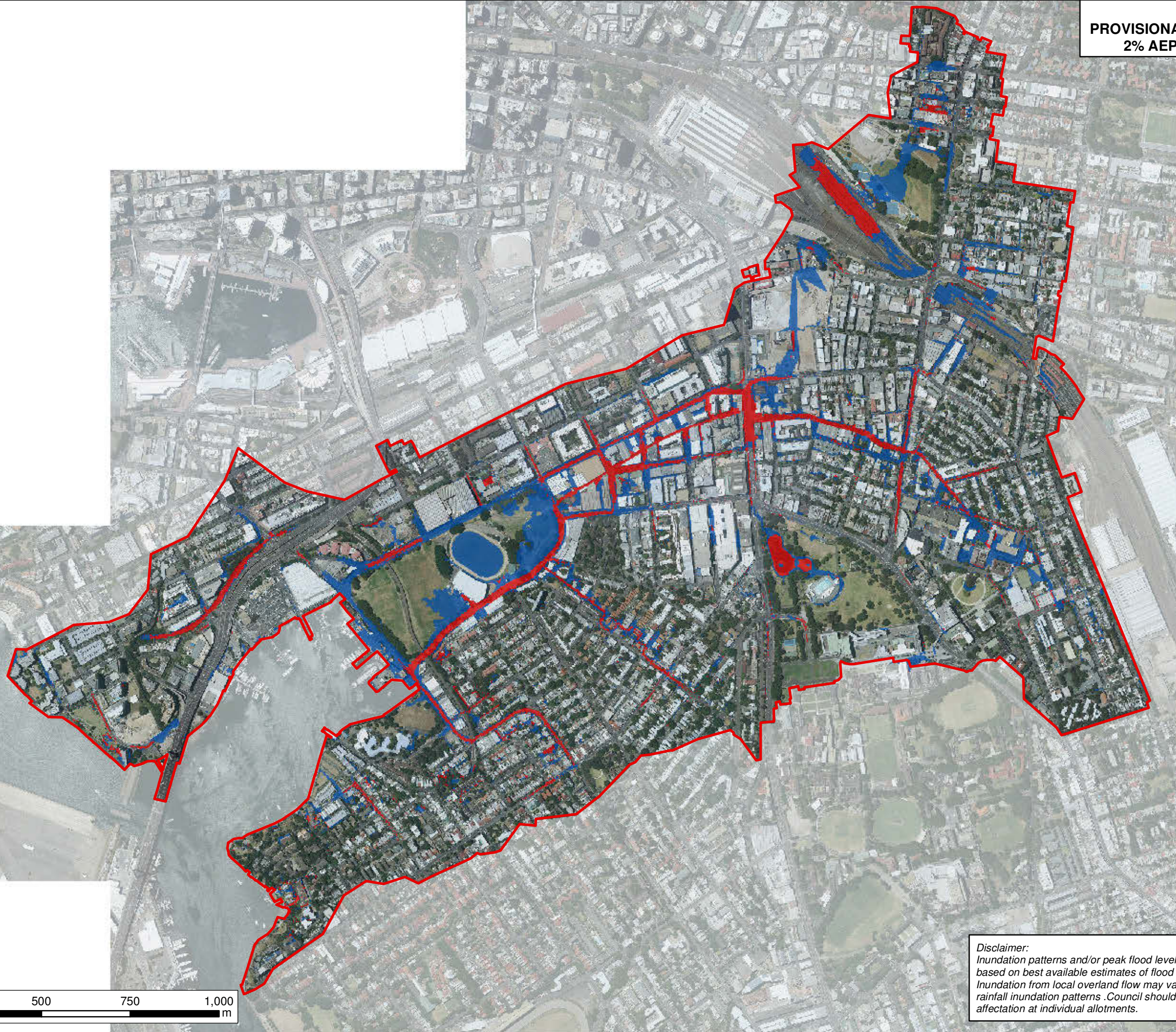


- Study Area
- Hydraulic Hazard
- Low Hazard
- High Hazard

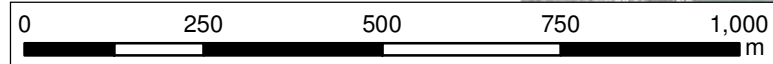


Disclaimer:
Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour within the Catchment. Inundation from local overland flow may vary slightly to the displayed design rainfall inundation patterns. Council should be consulted to confirm flood affectation at individual allotments.

FIGURE 31
PROVISIONAL HYDRAULIC HAZARD
2% AEP DESIGN FLOOD EVENT

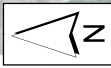
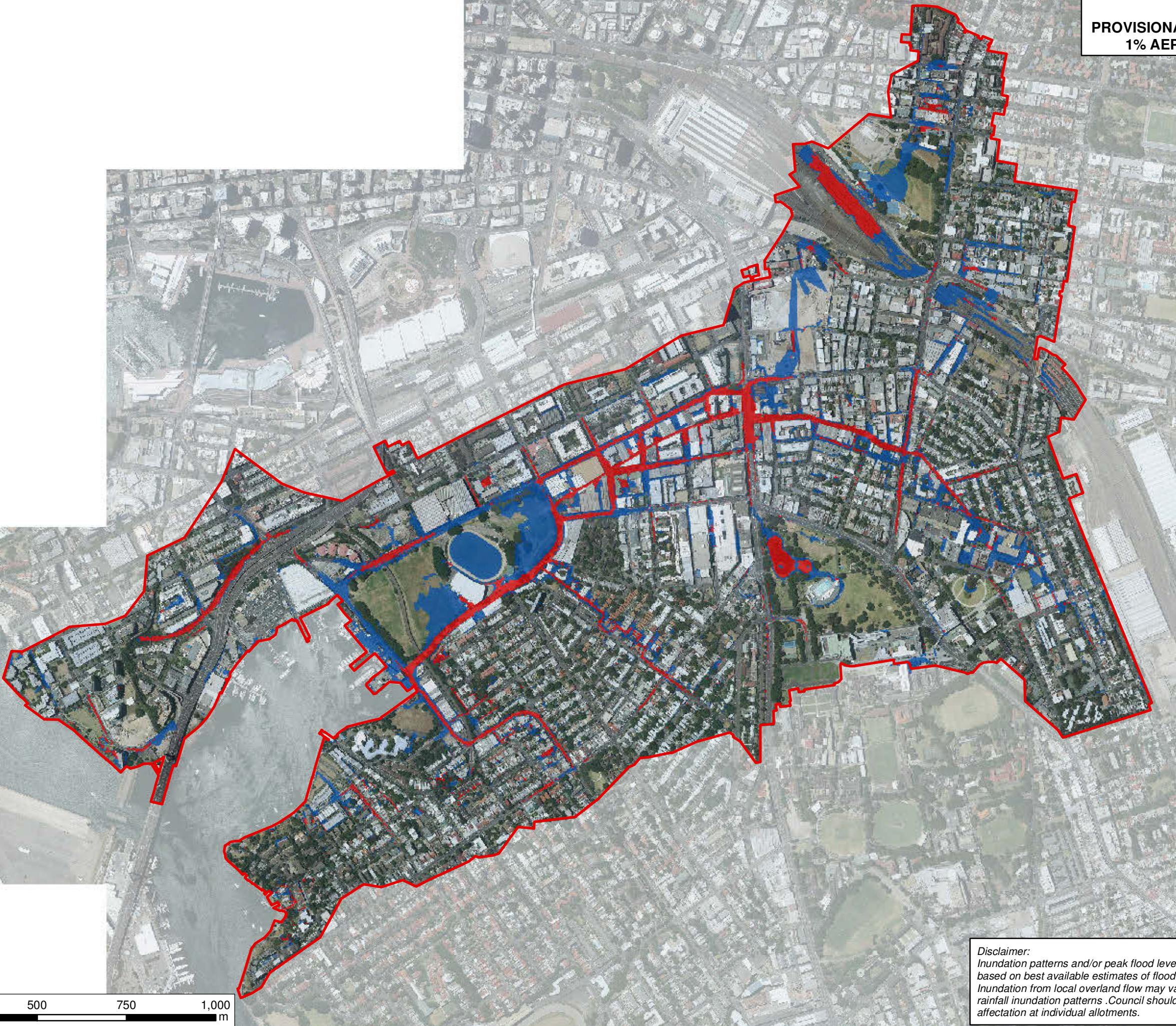





- Study Area
- Hydraulic Hazard
 - Low Hazard
 - High Hazard

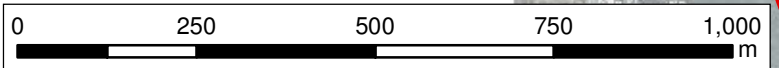


Disclaimer:
Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour within the Catchment. Inundation from local overland flow may vary slightly to the displayed design rainfall inundation patterns. Council should be consulted to confirm flood affectation at individual allotments.

**PROVISIONAL HYDRAULIC HAZARD
1% AEP DESIGN FLOOD EVENT**

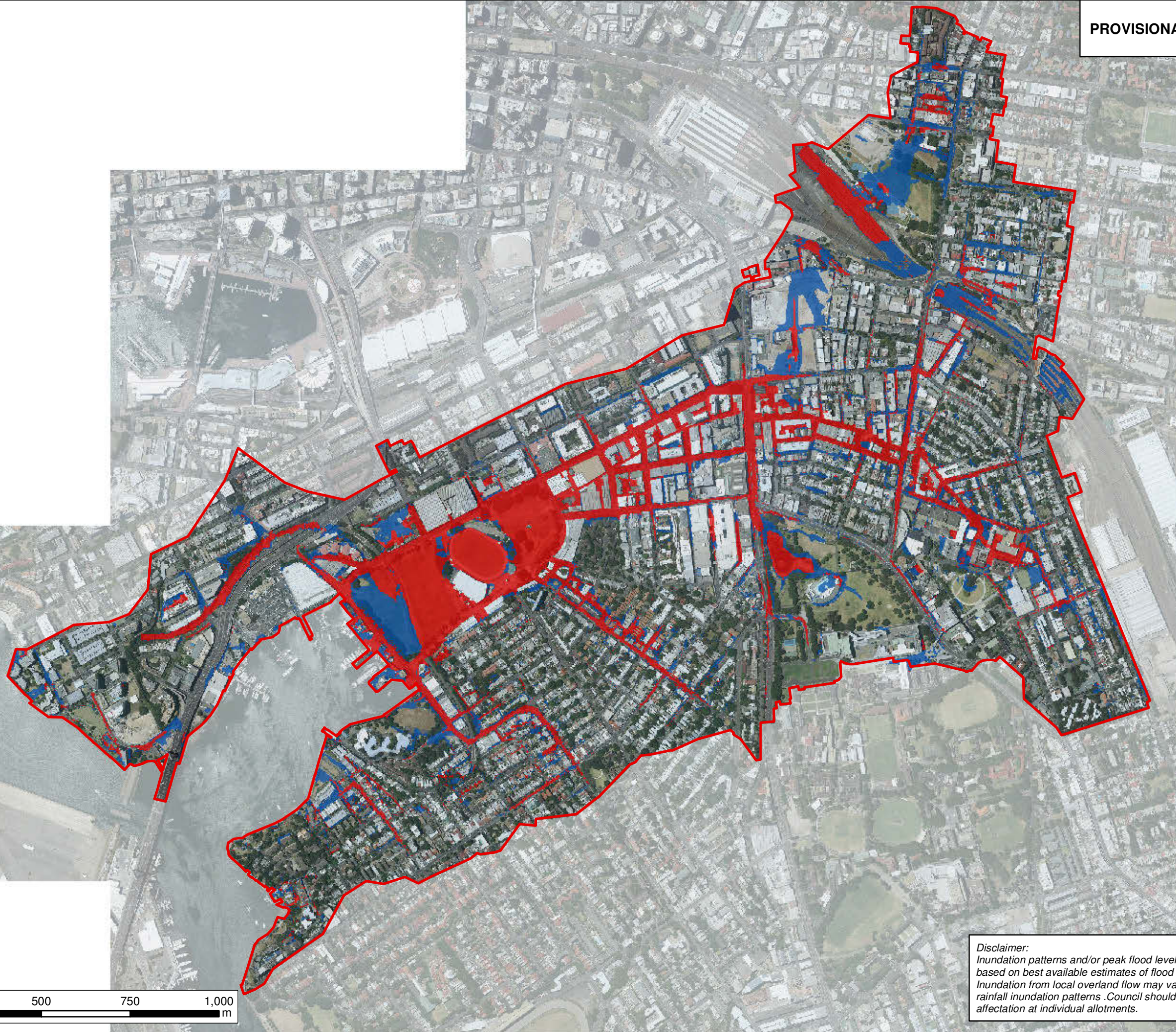


-  Study Area
- Hydraulic Hazard**
-  Low Hazard
-  High Hazard

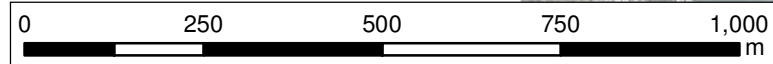


*Disclaimer:
Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour within the Catchment. Inundation from local overland flow may vary slightly to the displayed design rainfall inundation patterns. Council should be consulted to confirm flood affectation at individual allotments.*

FIGURE 33
PROVISIONAL HYDRAULIC HAZARD
PMF EVENT

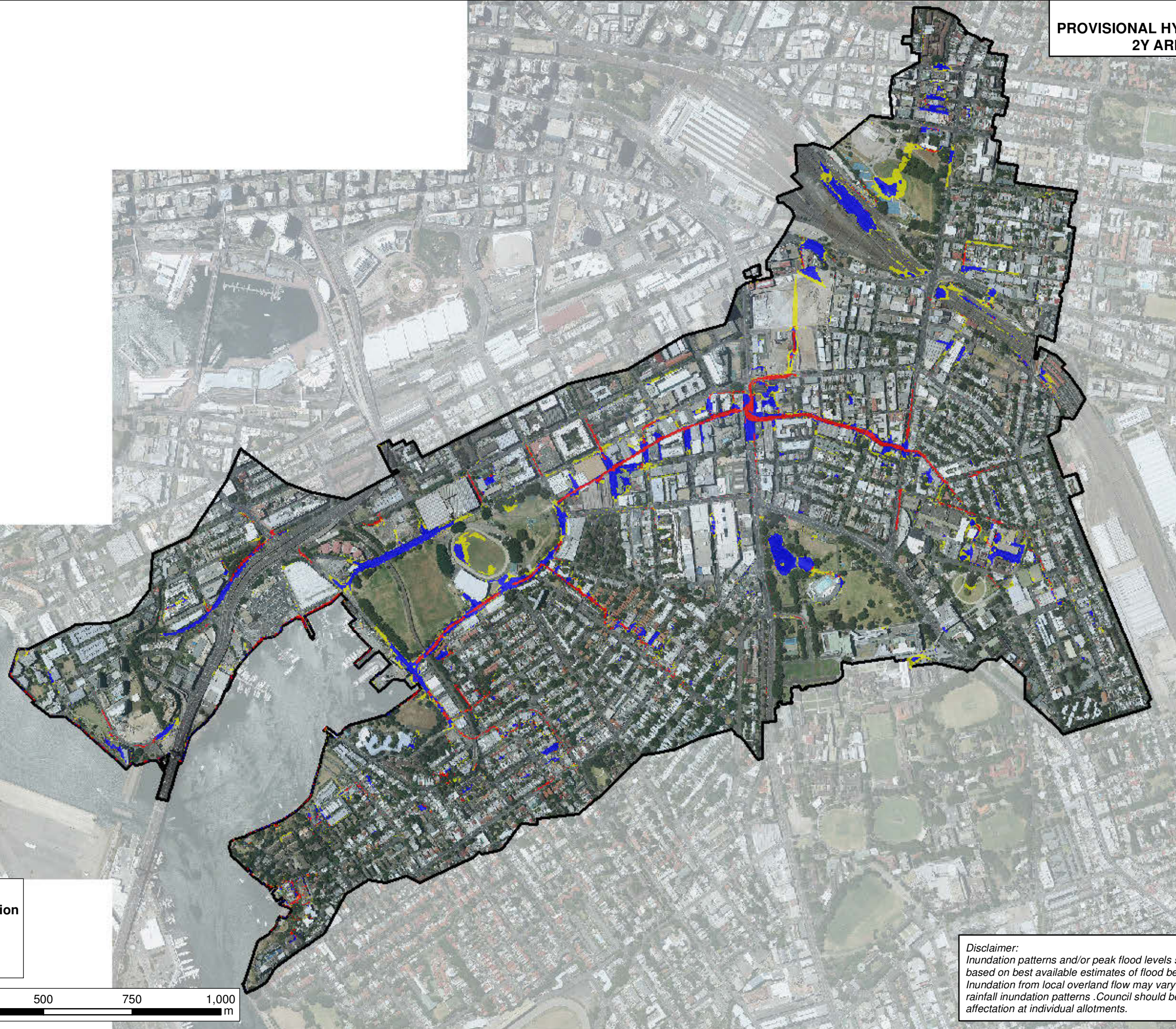


- Study Area
- Hydraulic Hazard
- Low Hazard
- High Hazard



Disclaimer:
Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour within the Catchment. Inundation from local overland flow may vary slightly to the displayed design rainfall inundation patterns. Council should be consulted to confirm flood affectation at individual allotments.

FIGURE 34
PROVISIONAL HYDRAULIC CATEGORIES
2Y ARI DESIGN FLOOD EVENT

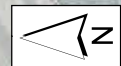
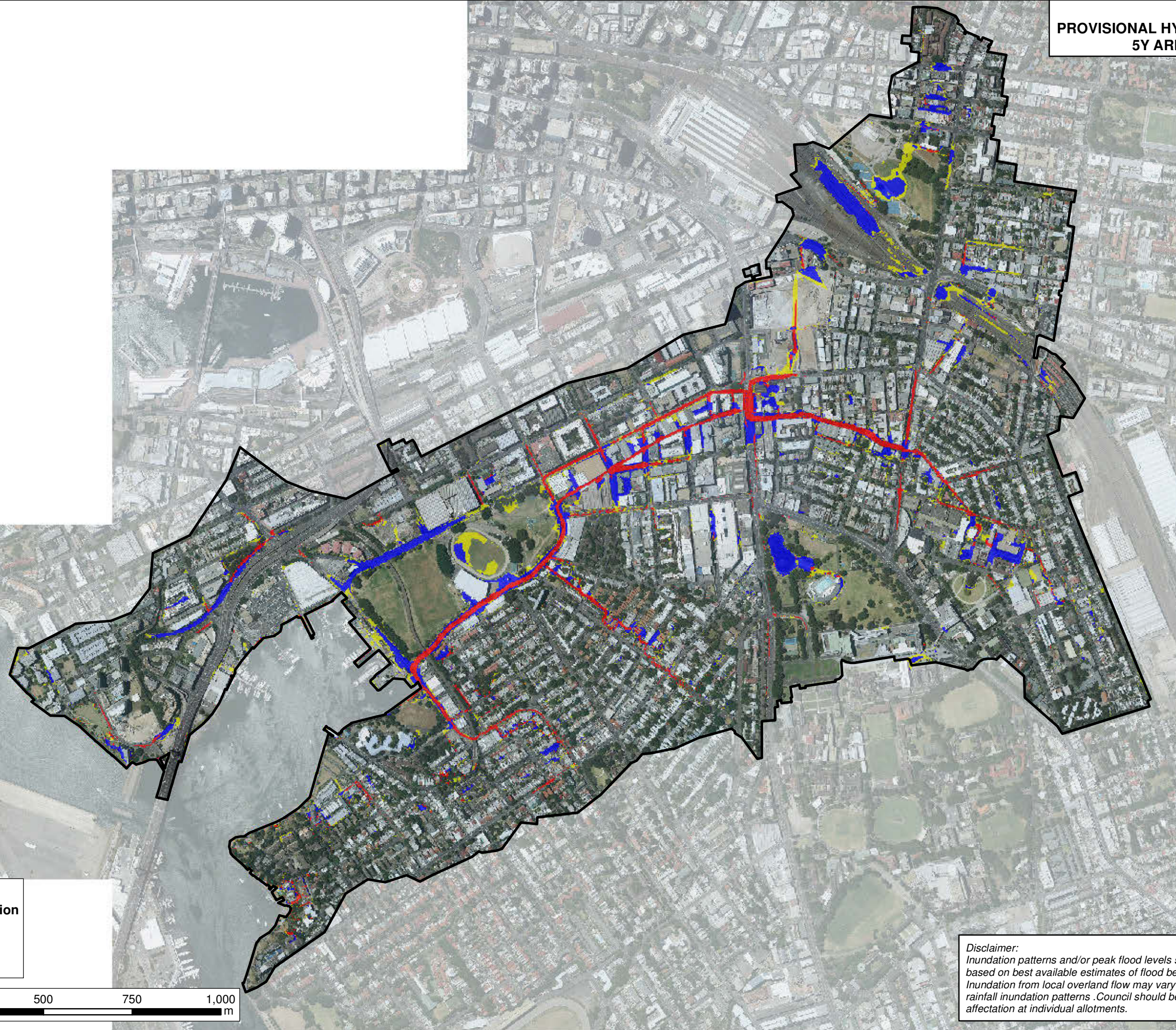


- Study Area
- Hydraulic Categorisation**
- Floodway
- Flood Storage
- Flood Fringe

0 250 500 750 1,000
m

*Disclaimer:
Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour within the Catchment. Inundation from local overland flow may vary slightly to the displayed design rainfall inundation patterns. Council should be consulted to confirm flood affectation at individual allotments.*

FIGURE 35
PROVISIONAL HYDRAULIC CATEGORIES
5Y ARI DESIGN FLOOD EVENT

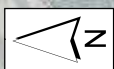
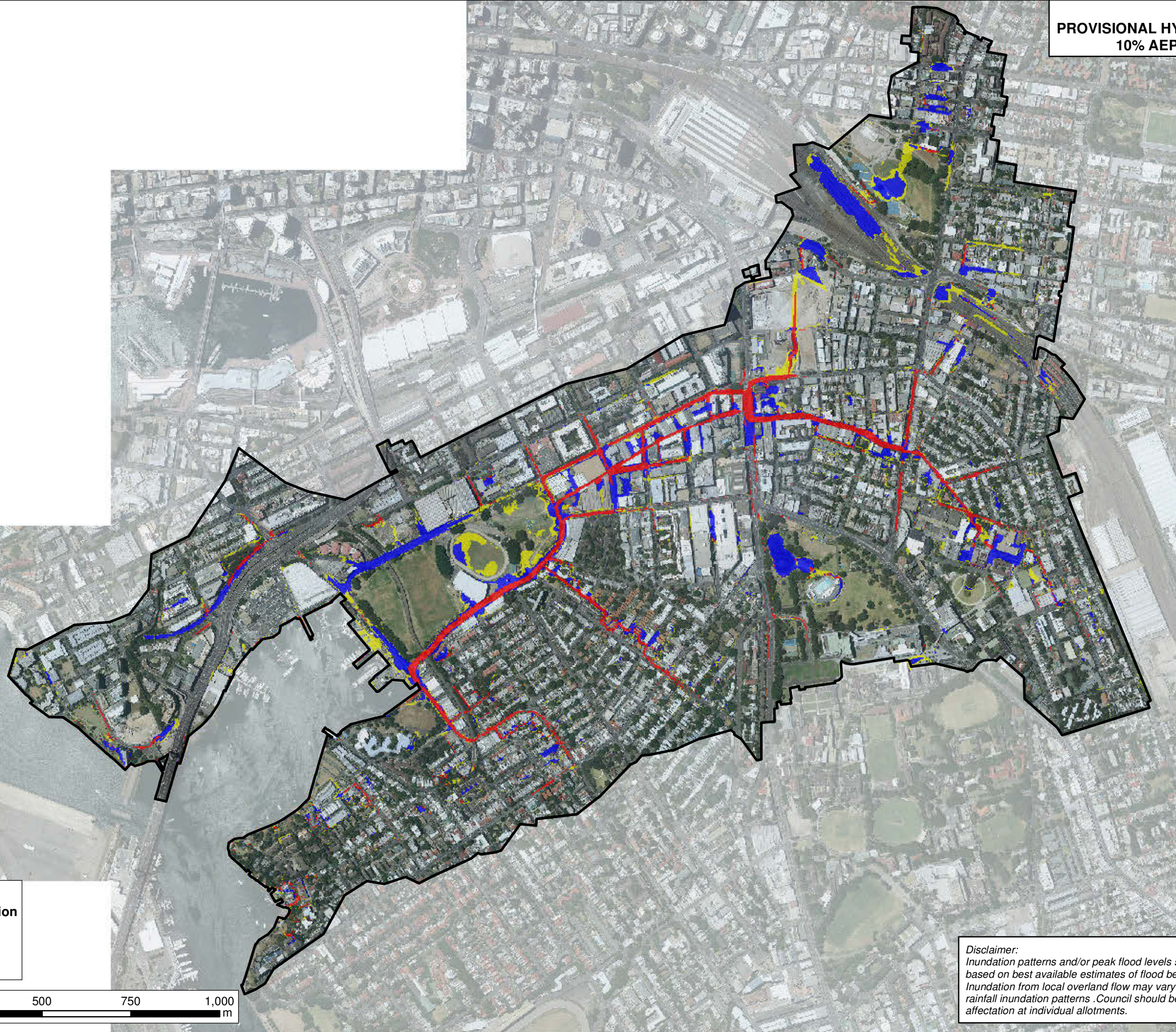






- Study Area
- Hydraulic Categorisation**
- Floodway
- Flood Storage
- Flood Fringe

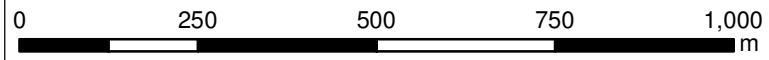
0 250 500 750 1,000
m

*Disclaimer:
Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour within the Catchment. Inundation from local overland flow may vary slightly to the displayed design rainfall inundation patterns. Council should be consulted to confirm flood affectation at individual allotments.*

**PROVISIONAL HYDRAULIC CATEGORIES
10% AEP DESIGN FLOOD EVENT**

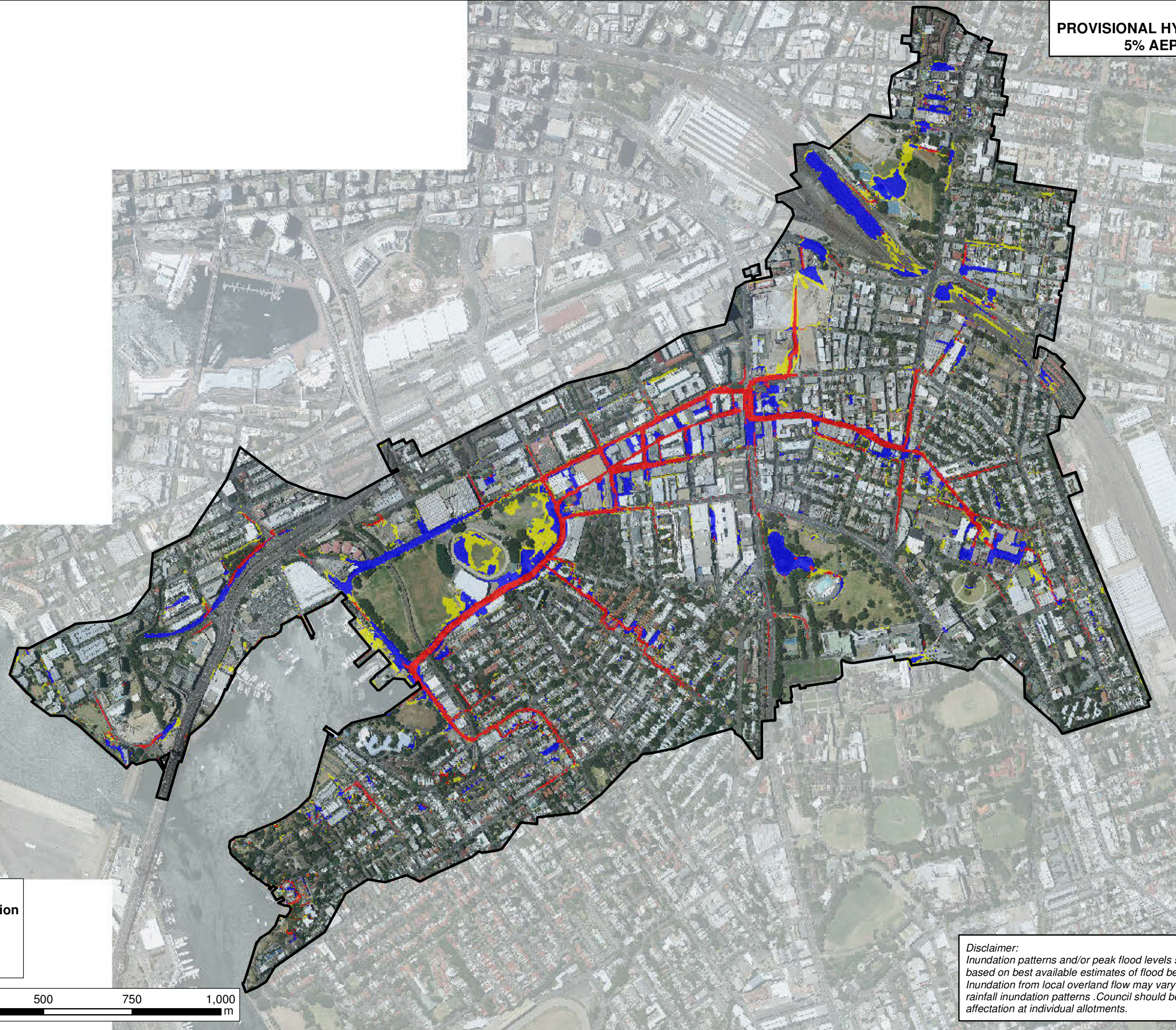


-  Study Area
- Hydraulic Categorisation**
-  Floodway
-  Flood Storage
-  Flood Fringe

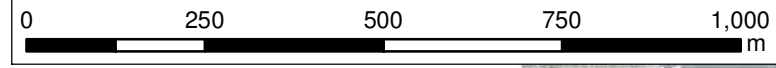


*Disclaimer:
Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour within the Catchment. Inundation from local overland flow may vary slightly to the displayed design rainfall inundation patterns. Council should be consulted to confirm flood affectation at individual allotments.*

FIGURE 37
PROVISIONAL HYDRAULIC CATEGORIES
5% AEP DESIGN FLOOD EVENT

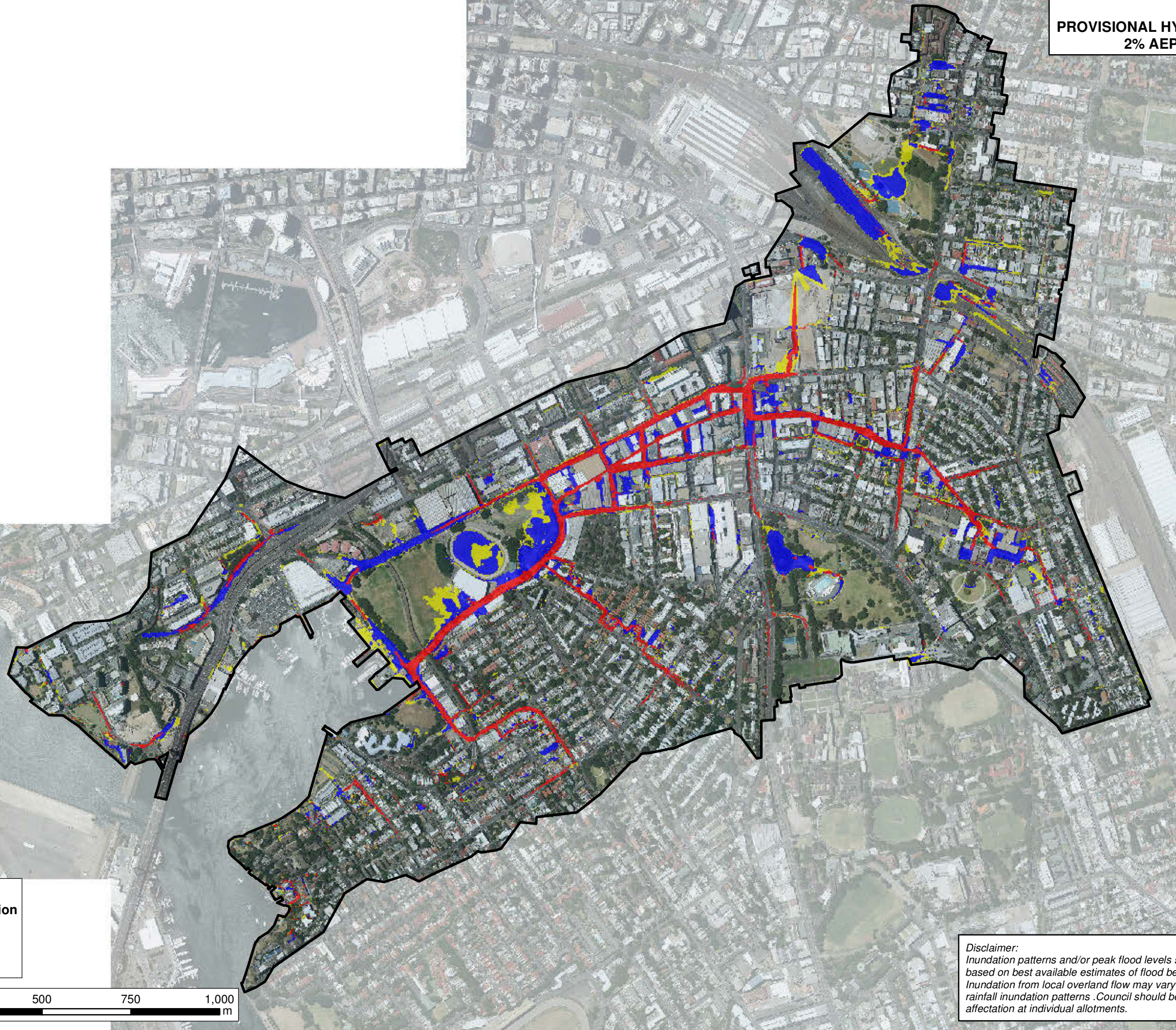


- Study Area
- Hydraulic Categorisation**
- Floodway
- Flood Storage
- Flood Fringe

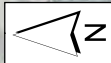


Disclaimer:
Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour within the Catchment. Inundation from local overland flow may vary slightly to the displayed design rainfall inundation patterns. Council should be consulted to confirm flood affectation at individual allotments.

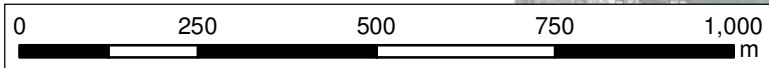
**PROVISIONAL HYDRAULIC CATEGORIES
2% AEP DESIGN FLOOD EVENT**



J:\Jobs\111021\GIS\ArcMaps\BW\Dratt_Report_Figs\Figure38_Hydraulic_Categories_2%_AEP.mxd

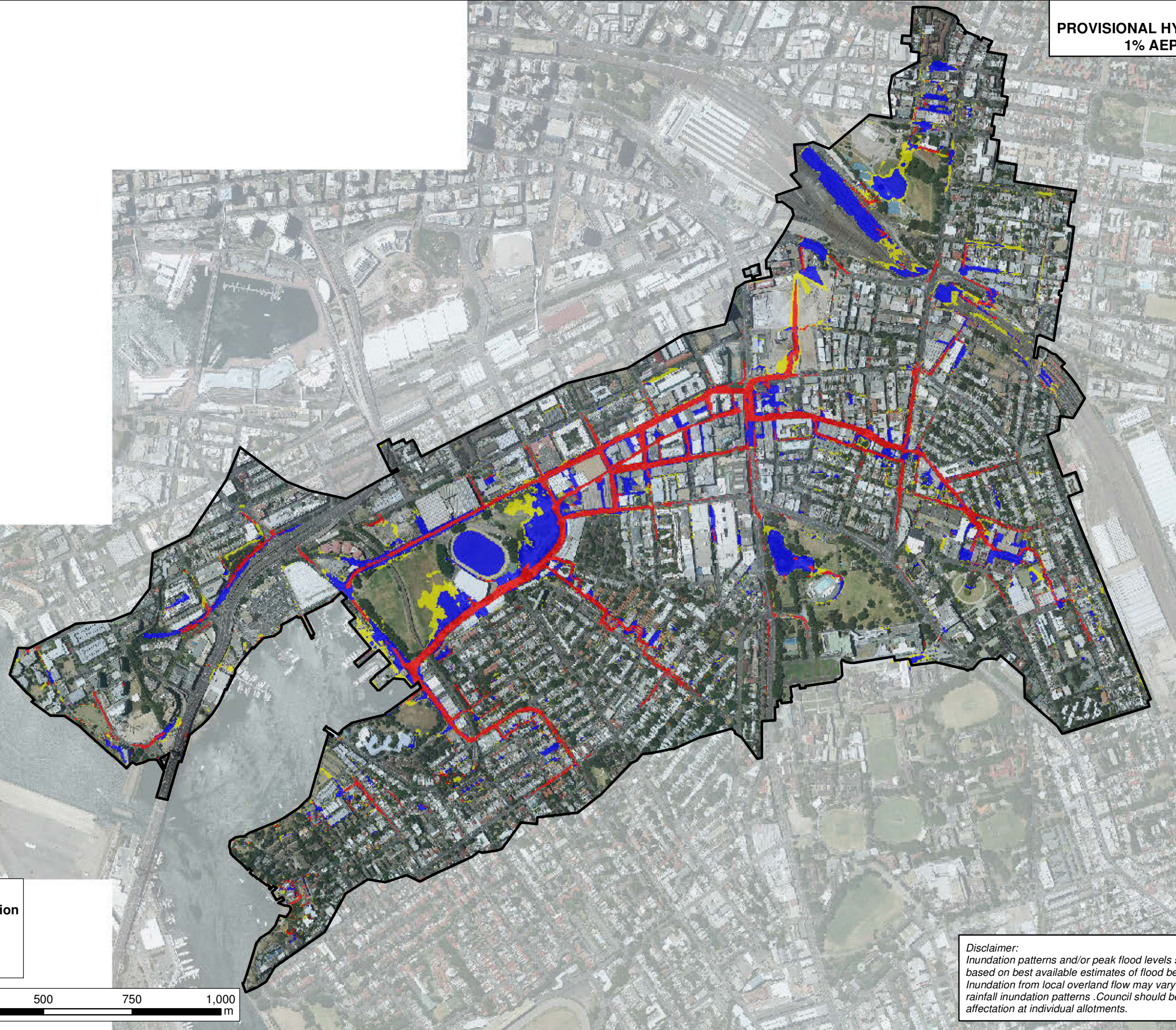


- Study Area
- Hydraulic Categorisation**
- Floodway
- Flood Storage
- Flood Fringe

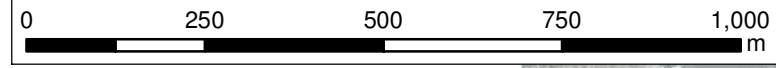


*Disclaimer:
Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour within the Catchment. Inundation from local overland flow may vary slightly to the displayed design rainfall inundation patterns. Council should be consulted to confirm flood affectation at individual allotments.*

FIGURE 39
PROVISIONAL HYDRAULIC CATEGORIES
1% AEP DESIGN FLOOD EVENT

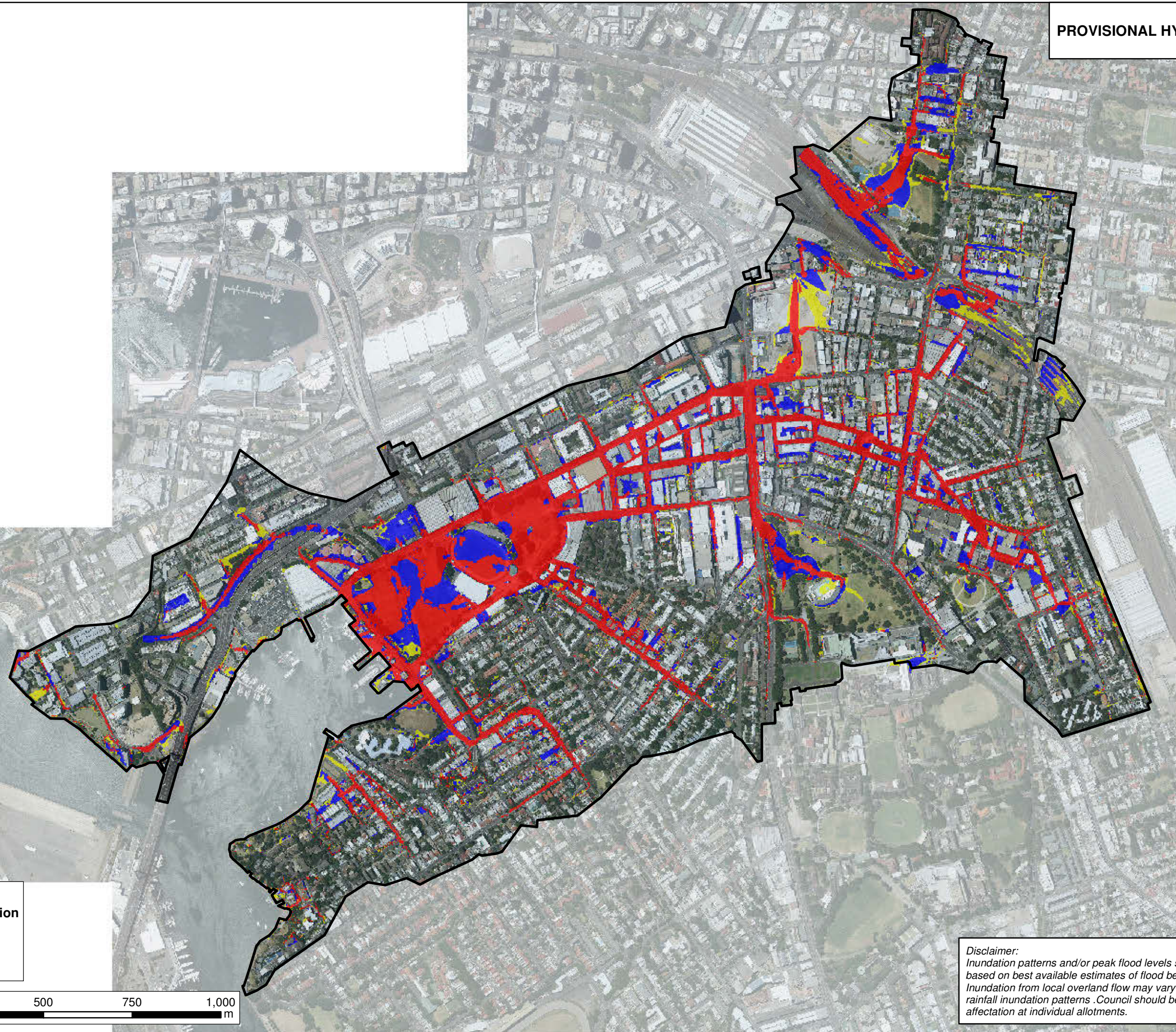


- Study Area
- Hydraulic Categorisation**
- Floodway
- Flood Storage
- Flood Fringe



Disclaimer:
Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour within the Catchment. Inundation from local overland flow may vary slightly to the displayed design rainfall inundation patterns. Council should be consulted to confirm flood affectation at individual allotments.

FIGURE 40
PROVISIONAL HYDRAULIC CATEGORIES
PMF EVENT

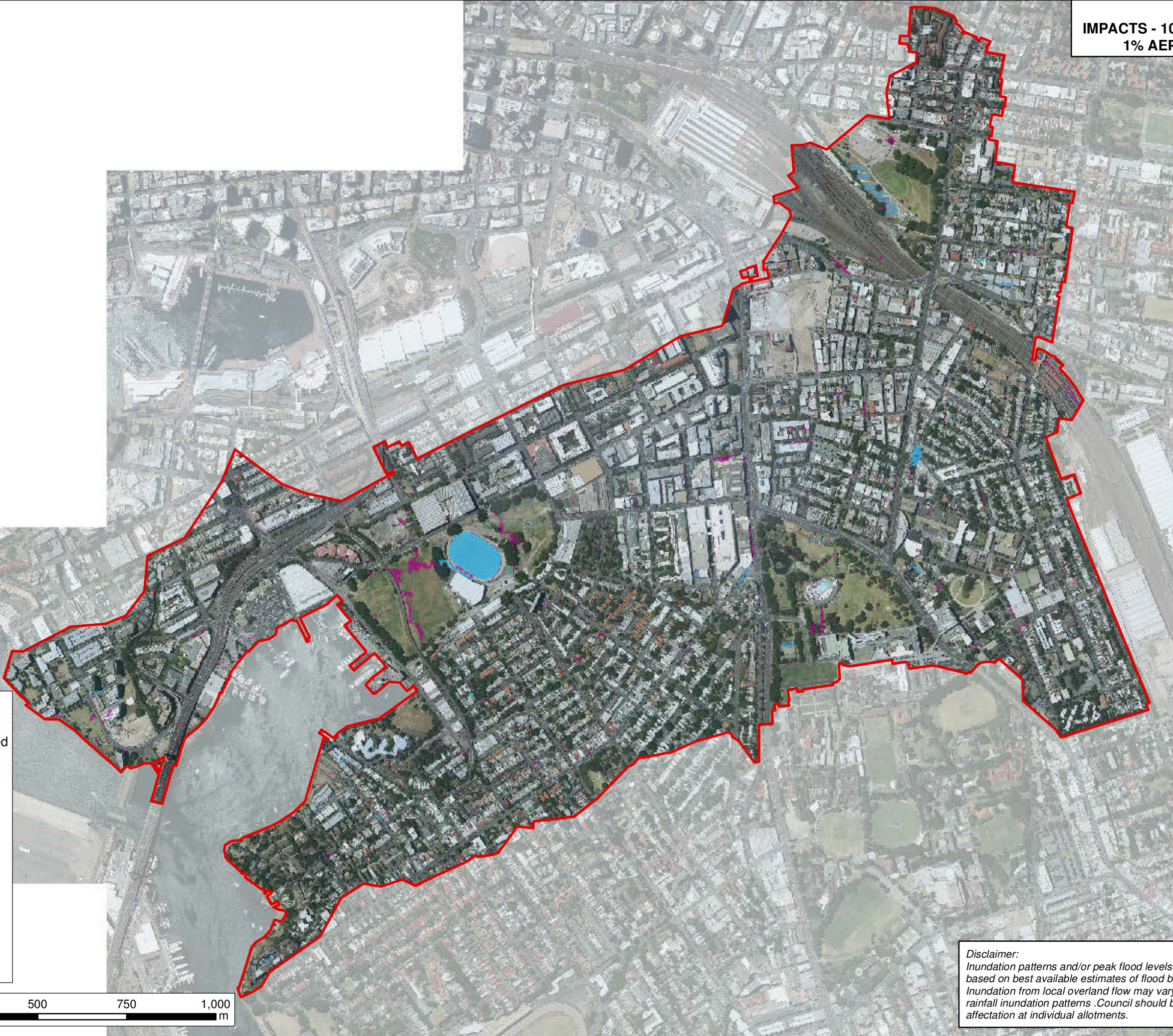


- Study Area
- Hydraulic Categorisation**
- Floodway
- Flood Storage
- Flood Fringe

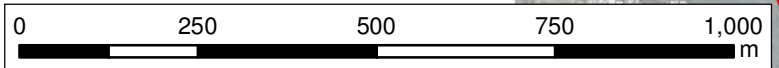
0 250 500 750 1,000
m

Disclaimer:
Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour within the Catchment. Inundation from local overland flow may vary slightly to the displayed design rainfall inundation patterns. Council should be consulted to confirm flood affectation at individual allotments.

**IMPACTS - 10% RAINFALL INCREASE
1% AEP DESIGN FLOOD EVENT**

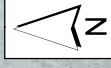
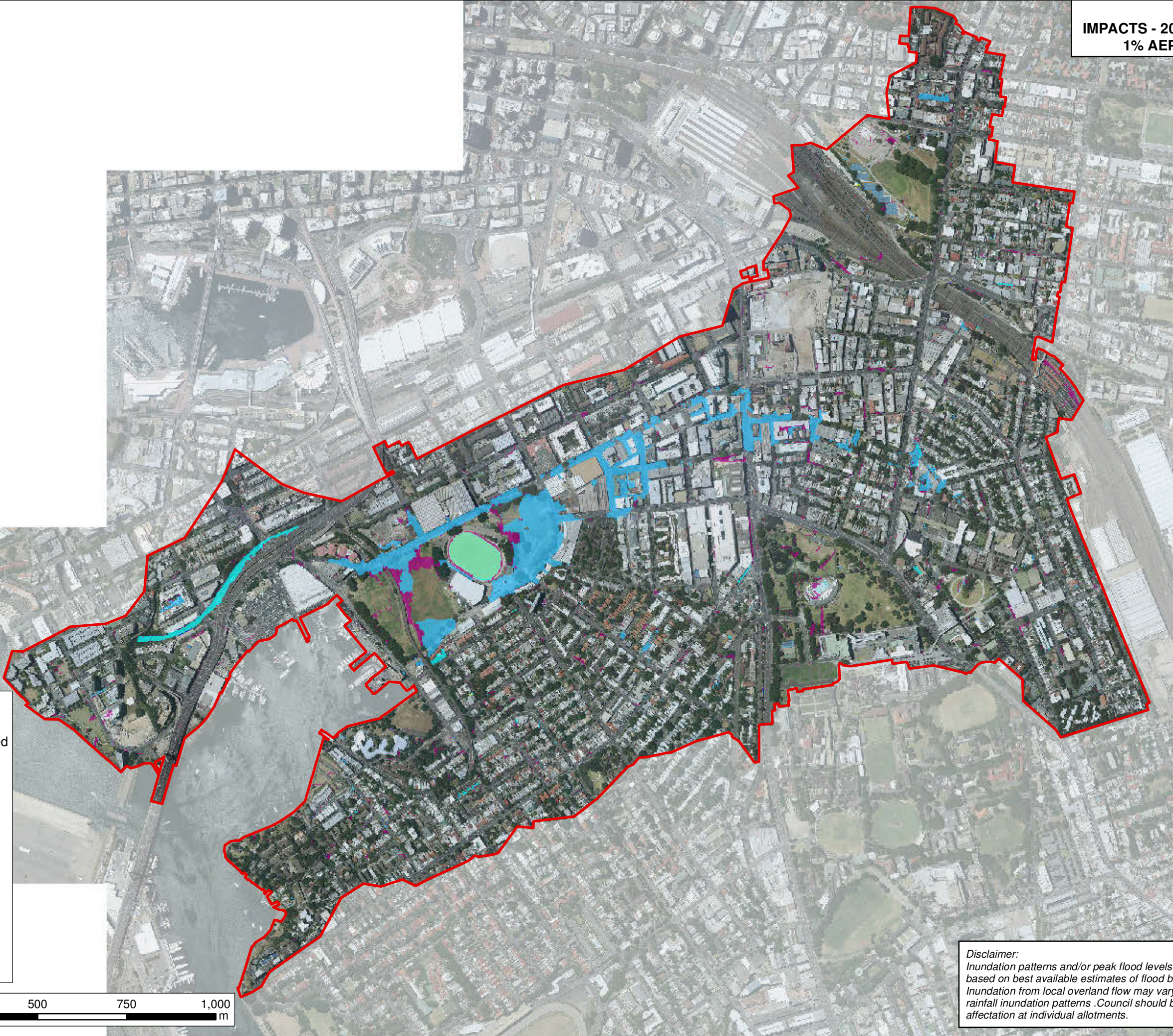


- Study Area
- Impact (m)**
- Previously Inundated
- < -0.1
- 0.1 - 0.1
- 0.1 - 0.2
- 0.2 - 0.3
- 0.3 - 0.4
- 0.4 - 0.5
- 0.5 - 0.6
- 0.6 - 0.7
- 0.7 - 0.8
- 0.8 - 1
- > 1
- Newly Inundated

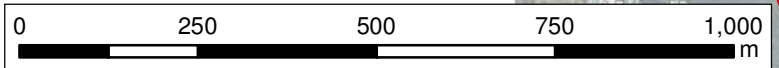


*Disclaimer:
Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour within the Catchment. Inundation from local overland flow may vary slightly to the displayed design rainfall inundation patterns. Council should be consulted to confirm flood affectation at individual allotments.*

**IMPACTS - 20% RAINFALL INCREASE
1% AEP DESIGN FLOOD EVENT**

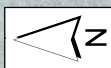
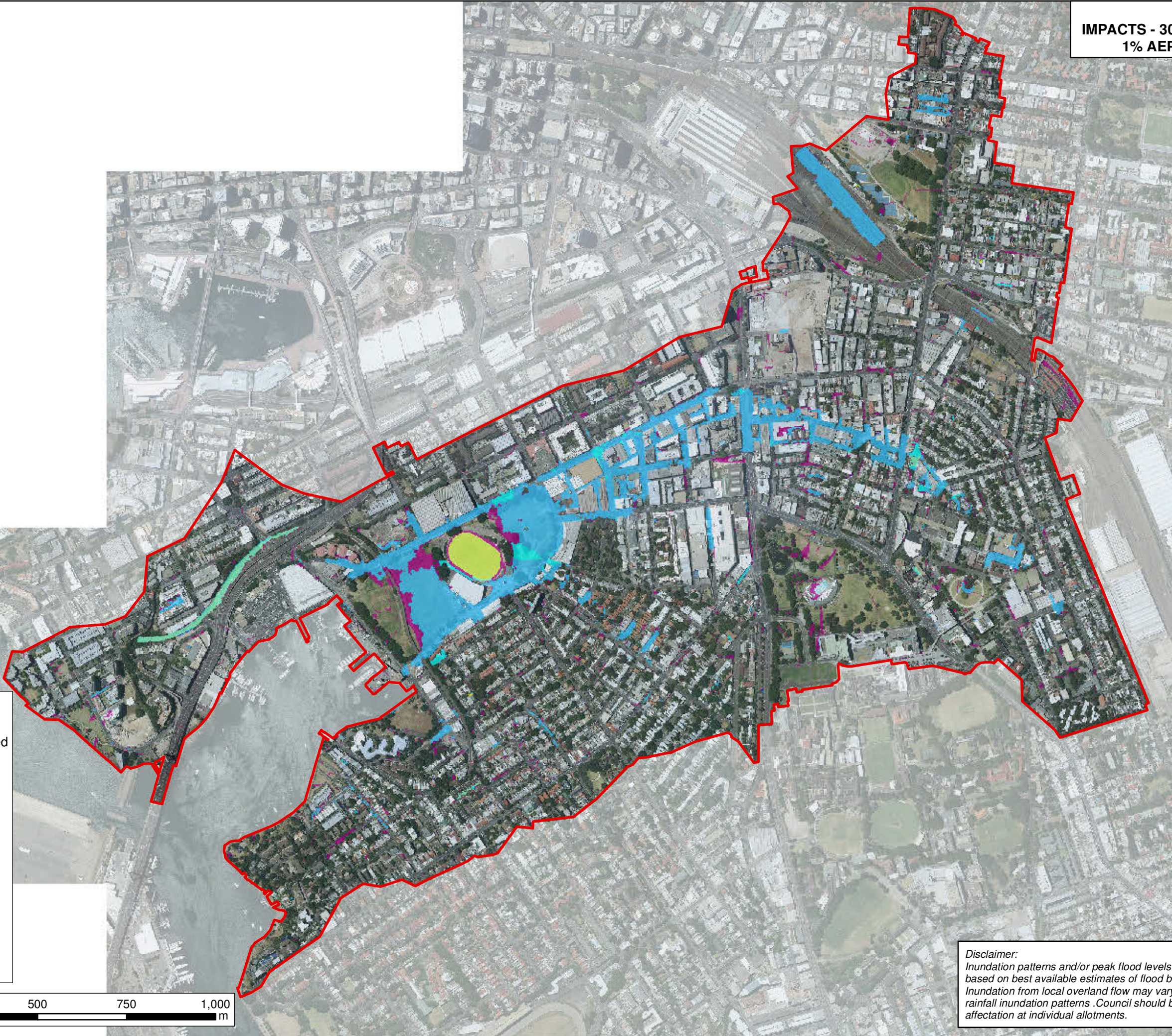


- Study Area
- Impact (m)**
- Previously Inundated
- < -0.1
- 0.1 - 0.1
- 0.1 - 0.2
- 0.2 - 0.3
- 0.3 - 0.4
- 0.4 - 0.5
- 0.5 - 0.6
- 0.6 - 0.7
- 0.7 - 0.8
- 0.8 - 1
- > 1
- Newly Inundated

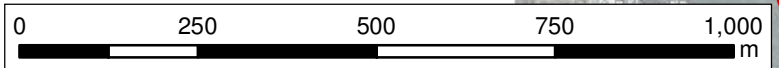


*Disclaimer:
Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour within the Catchment. Inundation from local overland flow may vary slightly to the displayed design rainfall inundation patterns. Council should be consulted to confirm flood affectation at individual allotments.*

**IMPACTS - 30% RAINFALL INCREASE
1% AEP DESIGN FLOOD EVENT**

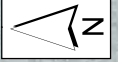


- Study Area
- Impact (m)**
- Previously Inundated
- < -0.1
- 0.1 - 0.1
- 0.1 - 0.2
- 0.2 - 0.3
- 0.3 - 0.4
- 0.4 - 0.5
- 0.5 - 0.6
- 0.6 - 0.7
- 0.7 - 0.8
- 0.8 - 1
- > 1
- Newly Inundated

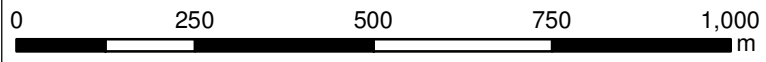


*Disclaimer:
Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour within the Catchment. Inundation from local overland flow may vary slightly to the displayed design rainfall inundation patterns. Council should be consulted to confirm flood affectation at individual allotments.*

**IMPACTS - SEA LEVEL RISE 2050 SCENARIO
1% AEP DESIGN FLOOD EVENT**

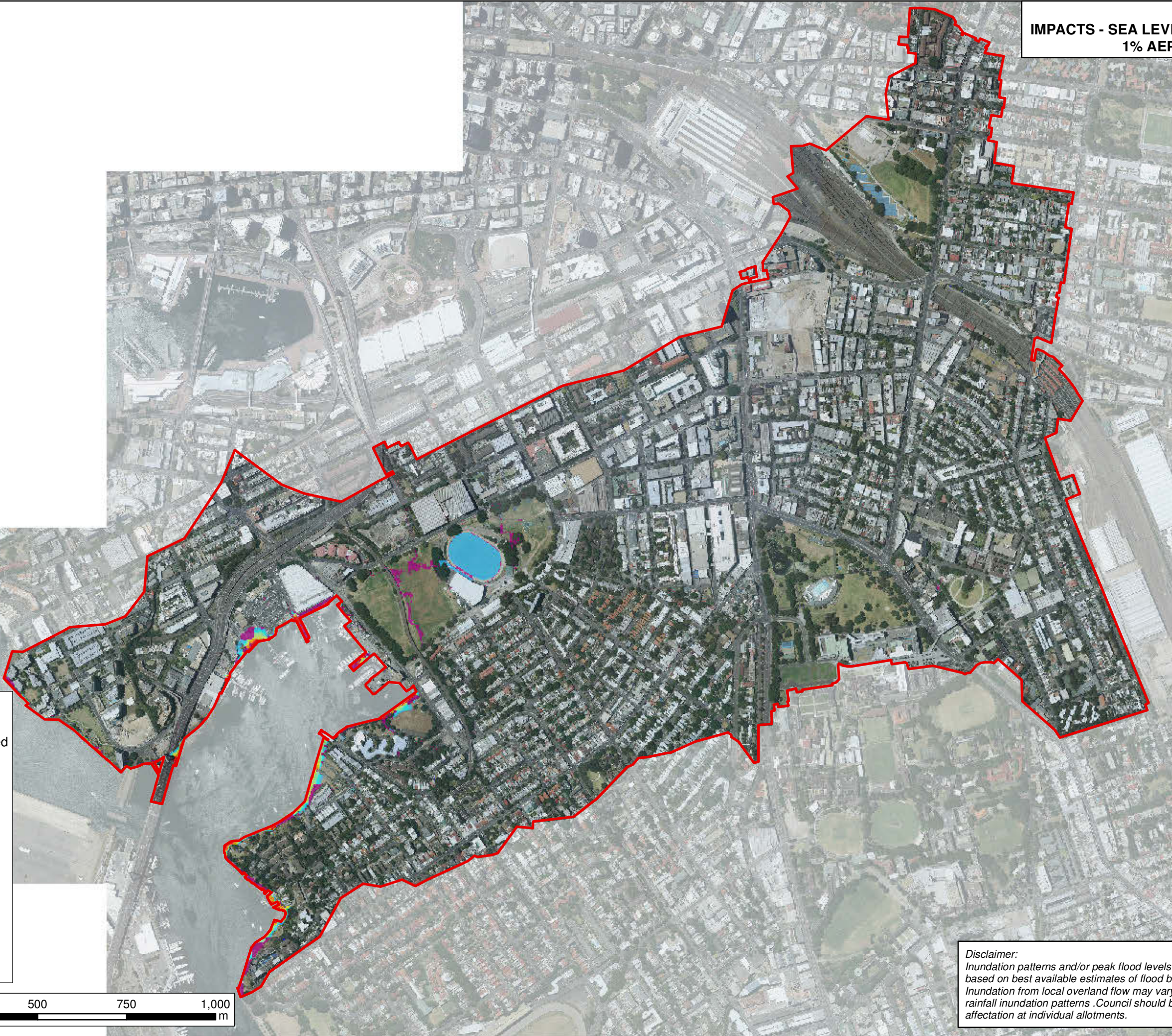


- Study Area
- Impact (m)**
- Previously Inundated
- < -0.1
- 0.1 - 0.1
- 0.1 - 0.2
- 0.2 - 0.3
- 0.3 - 0.4
- 0.4 - 0.5
- 0.5 - 0.6
- 0.6 - 0.7
- 0.7 - 0.8
- 0.8 - 1
- > 1
- Newly Inundated

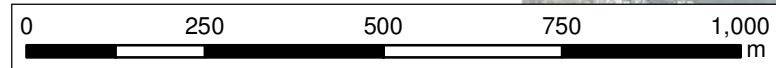


*Disclaimer:
Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour within the Catchment. Inundation from local overland flow may vary slightly to the displayed design rainfall inundation patterns. Council should be consulted to confirm flood affectation at individual allotments.*

**IMPACTS - SEA LEVEL RISE 2100 SCENARIO
1% AEP DESIGN FLOOD EVENT**

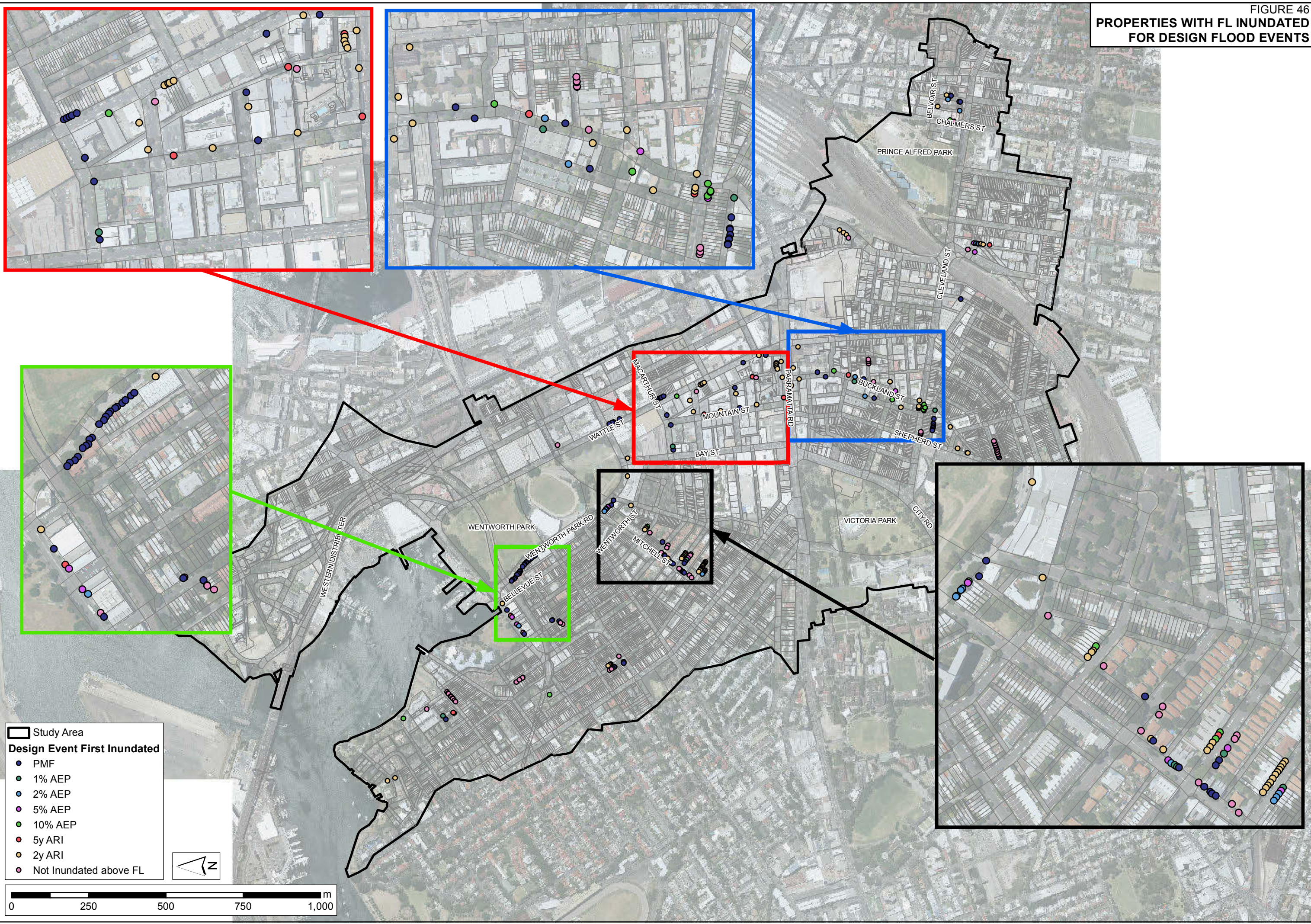


- Study Area
- Impact (m)**
- Previously Inundated
- < -0.1
- 0.1 - 0.1
- 0.1 - 0.2
- 0.2 - 0.3
- 0.3 - 0.4
- 0.4 - 0.5
- 0.5 - 0.6
- 0.6 - 0.7
- 0.7 - 0.8
- 0.8 - 1
- > 1
- Newly Inundated

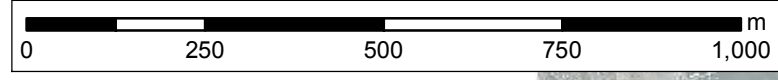


*Disclaimer:
Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour within the Catchment. Inundation from local overland flow may vary slightly to the displayed design rainfall inundation patterns. Council should be consulted to confirm flood affectation at individual allotments.*

FIGURE 46
**PROPERTIES WITH FL INUNDATED
 FOR DESIGN FLOOD EVENTS**



- Study Area
- Design Event First Inundated**
- PMF
- 1% AEP
- 2% AEP
- 5% AEP
- 10% AEP
- 5y ARI
- 2y ARI
- Not Inundated above FL





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.
design flood	A hypothetical flood representing a specific likelihood of occurrence (for example the 100 year ARI or 1% AEP flood). It is a probabilistic or statistical estimate, generally being based on some form of probability analysis of flood or rainfall data.
design rainfall	Used in the estimation of a flood or the design of a particular component or feature of a hydraulic structure. Design rainfall estimates are based on the intensity, frequency and duration of the storm bursts. The use of a design rainfall in the estimation of a flood does not imply that if such rainfall occurred at a given time, the estimated flood elevations would result.
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 (m³/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 diagrammatic 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 “flood liable land” concept in the 1986 Manual.
Flood Planning Levels (FPLs)	FPLs 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 “standard 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	<p>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.</p> <p>existing flood risk: the risk a community is exposed to as a result of its location on the floodplain.</p> <p>future flood risk: the risk a community may be exposed to as a result of new development on the floodplain.</p> <p>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.</p>

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	<p>in a residential situation: a living or working area, such as a lounge room, dining room, rumpus room, kitchen, bedroom or workroom.</p> <p>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.</p>
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	<p>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:</p> <ul style="list-style-type: none"> \$ 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	<p>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.</p> <p>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.</p>
minor, moderate and major flooding	<p>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:</p> <p>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.</p> <p>moderate flooding: low-lying areas are inundated requiring removal of stock and/or evacuation of some houses. Main traffic routes may be covered.</p> <p>major flooding: appreciable urban areas are flooded and/or extensive rural areas are flooded. Properties, villages and towns can be isolated.</p>
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 water 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: IDENTIFICATION OF POTENTIAL FLOOD LIABLE BUILDINGS

B1. Introduction

As a precursor to the future Floodplain Risk Management Study and Plan and to further investigate potentially flood liable regions within the catchment, selected properties have been surveyed to identify potential flood liable buildings. The selected properties are displayed in Figure B1 and were chosen using the two step method described below:

1. The 1% AEP design flood depth grid was inspected using a GIS program. Properties in the immediate vicinity of flood depths greater than 0.5 metres were noted as being in a flood prone region; and then
2. Using Google Earth the tagged properties were visually inspected to determine if over floor inundation may be possible during a flood event. Generally, properties that have floor levels approximately at or below the kerb level were identified as potentially flood liable and were selected for detail floor level survey.

Using the surveyed floor levels and modelled design flood levels, the flood liability of the selected properties was able to be determined.



Parcel Tags as on Council Cadastre (GIS Tag)	Photo Name	Number of Buildings	Street Number	Street Name	Easting (m)	Northing (m)	Indicative Ground Level (mAHD)	Lowest Habitable Floor Level (m AHD)	Floor Construction Pier (P) Slab (S) Other	Type Commercial (C) Industrial (I) Public (P)	Name and Nature of Use/Business	Lowest Floor Level (mAHD)	Floor Construction Pier (P) Slab (S) Other
174627	1 Belvoir Street.jpg	1	1	Belvoir Street	334174.4	6248726.0	30.74	31.05	P				
175732	104-106 Buckingham Street.jpg	1	104 to 106	Buckingham Street	334224.3	6248684.3	31.70			C	Not known	31.78	S
182309	2 Pembroke Street.jpg	1	2	Pembroke Street	334165.4	6248647.7	30.46	31.42	P				
244124	208 Chalmers Street.jpg	1	204 to 214	Chalmers Street	334140.4	6248661.8	30.49			Com/Res	Chalmers Convenience Store	30.64	S
515871	Shop 1, 330 Wattle Street.jpg	1	Shop 1, 330	Wattle Street	333177.0	6249733.7	4.05			C	City Stationery (W C Penfolds) - Stationers	4.23	S
	Shop 2, 330 Wattle Street.jpg	1	Shop 2, 330	Wattle Street	333169.2	6249748.6	3.88			C	Li's Trading Pty Ltd - Catering equipment supplier	4.12	S
	Shop 3, 330 Wattle Street.jpg	1	Shop 3, 330	Wattle Street	333159.4	6249768.3	3.89			C	Insanely Great Software - Computer Programmers	4.15	S
	Shop 4, 330 Wattle Street.jpg	1	Shop 4, 330	Wattle Street	333154.0	6249780.0	3.86			C	Nightingales - Bridal Shop	4.18	S
515873	430 Wattle Street.jpg	1	430	Wattle Street	332238.1	6249627.8	4.78			C	Fantastic Gourmet - Fast food shop	5.02	S
515874	432 Wattle Street.jpg	1	432	Wattle Street	333239.7	6249624.0	4.69	5.01	P				
515875	434 Wattle Street.jpg	1	434	Wattle Street	333241.5	6249620.0	4.65	4.96	P				
515876	436 Wattle Street.jpg	1	436	Wattle Street	333243.3	6249616.0	4.65	4.97	P				
515877	438 Wattle Street.jpg	1	438	Wattle Street	333245.1	6249612.2	4.69	4.98	P				
519134	36 Talfourd Street.jpg	1	36	Talfourd Street	332351.4	6249754.3	15.91	17.31	P				
519135	38 Talfourd Street.jpg	1	38	Talfourd Street	332348.1	6249759.5	15.99	17.22	P				
519136	39 Talfourd Street.jpg	1	39	Talfourd Street	332379.7	6249781.9	13.11	16.29	P		NB: This level is Talfourd Street entry level - no access available to lower floor		
519137	40 Talfourd Street.jpg	1	40	Talfourd Street	332345.3	6249762.5	16.08	17.21	P				
519138	41 Talfourd Street.jpg	1	41	Talfourd Street	332377.4	6249785.2	13.29	16.29	P		NB: This level is Talfourd Street entry level - no access available to lower floor		
519139	42 Talfourd Street.jpg	1	42	Talfourd Street	332343.0	6249766.0	16.23	17.39	P				
519140	43 Talfourd Street.jpg	1	43	Talfourd Street	332375.3	6249788.1	13.46	16.58	P		NB: This level is Talfourd Street entry level - no access available to lower floor		
519142	45 Talfourd Street.jpg	1	45	Talfourd Street	332373.1	6249791.0	13.67	14.53	P				
519184	9 Phillip Street.jpg	1	9	Phillip Street	332819.6	6249667.7	5.72	6.02	P				
519186	11 Phillip Street.jpg	1	11	Phillip Street	332816.4	6249670.8	5.57	5.83	P				
519187	13 Phillip Street.jpg	1	13	Phillip Street	332813.8	6249673.1	5.56	5.85	P				
519189	15 Phillip Street.jpg	1	15	Phillip Street	332811.2	6249676.4	5.39	5.77	P				
519334	35 Campbell Street.jpg	1	35	Campbell Street	332707.2	6249479.1	13.05	13.18	P				
519335	36 Campbell Street.jpg	1	36	Campbell Street	332665.0	6249460.4	13.22	13.78	P				
519336	37 Campbell Street.jpg	1	37	Campbell Street	332704.3	6249481.6	13.02	13.18	P				
519337	38 Campbell Street.jpg	1	38	Campbell Street	332661.8	6249462.8	13.21	13.70	P				
519339	39 Campbell Street.jpg	1	39	Campbell Street	332701.6	6249483.9	12.99	13.20	P				
519340	40 Campbell Street.jpg	1	40	Campbell Street	332658.9	6249465.3	13.22	13.71	P				
519342	42 Campbell Street.jpg	1	42	Campbell Street	332655.7	6249467.7	13.28	13.72	P				
519344	44 Campbell Street.jpg	1	44	Campbell Street	332652.8	6249470.2	13.14	13.73	P				
520356	21-27 Wentworth Street.jpg	1	21 to 27	Wentworth Street	332833.7	6249695.3	3.34	4.59	S				
520908	23 Forsyth Street.jpg	1	23	Forsyth Street	332207.7	6250284.7	5.30	5.34	S				
520910	25 Forsyth Street.jpg	1	25	Forsyth Street	332212.0	6250287.5	5.15	5.34	S				
520964	2 Wentworth Park Road.jpg	1	2	Wentworth Park Road	332872.0	6249774.1	2.39	2.94	S				
520966	4 Wentworth Park Road.jpg	1	4	Wentworth Park Road	332868.9	6249777.4	2.39	3.05	S				
520967	6 Wentworth Park Road.jpg	1	6	Wentworth Park Road	332865.7	6249780.8	2.39	3.06	S				
520968	8 Wentworth Park Road.jpg	1	8	Wentworth Park Road	332862.1	6249784.0	2.39	3.08	S				
520969	10 Wentworth Park Road.jpg	1	10	Wentworth Park Road	332858.4	6249787.0	2.44	3.10	S				
520970	12 Wentworth Park Road.jpg	1	12	Wentworth Park Road	332855.1	6249789.3	2.44	3.11	S				
520989	48-64 Wentworth Park Road.jpg	1	48 to 64	Wentworth Park Road	332726.2	6249993.4	2.12	2.24	S				
520990	Unit 1, 66 Wentworth Park Road.jpg	1	Unit 1/66	Wentworth Park Road	332702.7	6250036.9	2.05	3.27	S				
	Unit 2, 66 Wentworth Park Road.jpg	1	Unit 2/66	Wentworth Park Road	332706.6	6250032.7	2.12	3.27	S				
	Unit 3, 66 Wentworth Park Road.jpg	1	Unit 3/66	Wentworth Park Road	332708.7	6250028.0	2.10	3.27	S				
	Unit 4, 66 Wentworth Park Road.jpg	1	Unit 4/66	Wentworth Park Road	332712.1	6250023.2	2.14	3.27	S				
	Unit 5, 66 Wentworth Park Road.jpg	1	Unit 5/66	Wentworth Park Road	332714.7	6250018.8	2.12	3.27	S				
520992	68 Wentworth Park Road.jpg	1	68	Wentworth Park Road	332694.0	6250038.1	2.02	3.12	P				
520993	70 Wentworth Park Road.jpg	1	70	Wentworth Park Road	332691.7	6250041.8	2.04	3.12	P				
520994	72 Wentworth Park Road.jpg	1	72	Wentworth Park Road	332688.9	6250045.2	2.06	3.11	P				
520995	74 Wentworth Park Road.jpg	1	74	Wentworth Park Road	332685.6	6250048.3	2.09	3.13	P				
520996	76 Wentworth Park Road.jpg	1	76	Wentworth Park Road	332682.8	6250051.8	2.17	3.11	P				
520997	78 Wentworth Park Road.jpg	1	78	Wentworth Park Road	332680.2	6250055.5	2.20	3.11	P				
520998	80-82 Wentworth Park Road.jpg	1	Unit 1/80-82	Wentworth Park Road	332665.1	6250068.4	2.18	3.12					
	80-82 Wentworth Park Road.jpg	1	Unit 2/80-82	Wentworth Park Road	332660.6	6250072.0	2.14	3.12	S				
	80-82 Wentworth Park Road.jpg	1	Unit 3/80-82	Wentworth Park Road	332656.1	6250076.2	2.14	3.12					
	80-82 Wentworth Park Road.jpg	1	Unit 4/80-82	Wentworth Park Road	332652.1	6250079.5	2.15	3.11	S				
	80-82 Wentworth Park Road.jpg	1	Unit 5/80-82	Wentworth Park Road	332648.1	6250083.3	2.15	3.11					
	80-82 Wentworth Park Road.jpg	1	Unit 6/80-82	Wentworth Park Road	332644.2	6250087.1	2.06	3.12	S				
	80-82 Wentworth Park Road.jpg	1	Unit 7/80-82	Wentworth Park Road	332640.9	6250090.5	2.06	3.13					
	80-82 Wentworth Park Road.jpg	1	Unit 8/80-82	Wentworth Park Road	332638.1	6250093.4	2.02	3.12	S				
	80-82 Wentworth Park Road.jpg	1	Unit 9/80-82	Wentworth Park Road	332635.8	6250095.9	2.02	3.12					
521613	2 Bridge Road.jpg	1	2	Bridge Road	332569.1	6250109.0	2.00			C	Kauri Foreshore Hotel - Pub	-0.02	S
521615	4 Bridge Road.jpg	1	4	Bridge Road	332554.4	6250097.8	1.99			C	Carnival & Party Warehouse - Party supplies retailer	2.45	S
521616	6 Bridge Road.jpg	1	6	Bridge Road	332538.7	6250087.1	2.02			C	Flat - Furniture supplier	2.20	S
521617	8 Bridge Road.jpg	1	8	Bridge Road	332529.3	6250080.8	2.02			C	Hello Happy Pty Ltd	2.29	S
521618	10 Bridge Road.jpg	1	10	Bridge Road	332507.8	6250065.4	2.07			C	Ruby Star Traders - Furniture retailer	2.35	S
521620	12 Bridge Road.jpg	1	12	Bridge Road	332501.0	6250060.9	1.98			I	Osmond Air Services - Air conditioning installers	2.44	S

521623	14-18 Bridge Road.jpg	1	14 to 18	Bridge Road	332488.5	6250052.4	2.03			C	BWS - Liquor retailer	3.09	S
521626	20 Bridge Road.jpg	1	20	Bridge Road	332470.9	6250039.4	2.38			C	Reece Plumbing - Plumbing supplies retailer	2.77	S
522343	38 Burton Street.jpg	1	38	Burton Street	332305.0	6250066.9	8.54	8.97	P				
525509	137 Broadway.jpg	1	137	Broadway	333343.8	6249232.1	5.68			C	Project 8 Café	5.28	S
	139 Broadway.jpg	1	139	Broadway	333338.8	6249232.3	5.68			C	Electric Monkeys	5.28	S
	141 Broadway.jpg	1	141	Broadway	333333.9	6249232.3	5.68			C	Chubby Girl's Bunz Shop - Bakery	5.28	S
	143 Broadway.jpg	1	143	Broadway	333329.1	6249232.1	5.18			C	Tattoo World	5.28	S
	145 Broadway.jpg	1	145	Broadway	333323.8	6249232.0	5.18			C	ICM Mobile Phone Access	5.28	S
526433	86 Cleveland Street.jpg	1	86	Cleveland Street	333195.5	6248790.3	11.42	11.74	P				
526435	88 & 90 Cleveland Street.jpg	1	88	Cleveland Street	333200.1	6248789.3	11.35	11.50	P				
526437	89 & 90 Cleveland Street.jpg	1	90	Cleveland Street	333204.5	6248787.8	11.29	11.52	P				
526444	97 Cleveland Street.jpg	1	97	Cleveland Street	333189.4	6248749.1	11.59	11.75	P				
526445	99 Cleveland Street.jpg	1	99	Cleveland Street	333193.8	6248746.8	11.44	11.55	P				
526446	101 Cleveland Street.jpg	1	101	Cleveland Street	333198.8	6248746.6	11.42			C	Thai Tha Hai - Restaurant	11.78	S & P
529443	9-15 MacArthur Street.jpg	1	9 to 15	MacArthur Street	333115.7	6249562.2	3.87	5.32	S				
614246	93 Glebe Street.jpg	1	93	Glebe Street	332733.3	6249540.5	11.26	11.39	S				
	95 Glebe Street.jpg	1	95	Glebe Street	332730.0	6249543.5	11.22	11.39	S				
	97 Glebe Street.jpg	1	97	Glebe Street	332725.3	6249545.0	11.02	11.44	S				
	99 Glebe Street.jpg	1	99	Glebe Street	332721.4	6249547.3	10.98	11.12	S				
	101 Glebe Street.jpg	1	101	Glebe Street	332717.6	6249550.0	10.87	11.14	S				
	103 Glebe Street.jpg	1	103	Glebe Street	332714.0	6249552.5	10.85	11.10	S				
	96 Mitchell Street.jpg	1	96	Mitchell Street	332708.1	6249579.7	9.46	9.90	S				
	98 Mitchell Street.jpg	1	98	Mitchell Street	332705.9	6249576.7	10.43	10.06	S				
	100 Mitchell Street.jpg	1	100	Mitchell Street	332703.4	6249574.1	10.43	10.32	S				
	102 Mitchell Street.jpg	1	102	Mitchell Street	332701.3	6249571.2	10.88	10.63	S				
	104 Mitchell Street.jpg	1	104	Mitchell Street	332699.4	6249567.8	10.88	10.96	S				
622676	12 Phillip Street.jpg	1	12	Phillip Street	332793.9	6249614.9	5.64	7.05	P				
	15 Broughton Street.jpg	1	15	Broughton Street	332769.4	6249613.3	8.06	8.58	P				
622677	24 Broughton Street.jpg	1	24	Broughton Street	332750.2	6249581.1	8.57	10.57	P				
	24a Broughton Street.jpg	1	24a	Broughton Street	332744.5	6249586.3	8.43	10.06	P				
	82 Mitchell Street.jpg	1	82	Mitchell Street	332731.0	6249605.1	8.82	9.37	P				
	84 Mitchell Street.jpg	1	84	Mitchell Street	332727.9	6249601.4	9.10	9.37	P				
	88 Mitchell Street.jpg	1	88	Mitchell Street	332721.4	6249593.0	9.30	9.72	P				
	92 Mitchell Street.jpg	1	92	Mitchell Street	332718.0	6249589.3	9.50	9.73	P				
622757	90 Glebe Street.jpg	1	90	Glebe Street	332720.3	6249507.0	11.31	12.24	P				
	92 Glebe Street.jpg	1	92	Glebe Street	332714.0	6249511.8	11.30	11.87	P				
	94 Glebe Street.jpg	1	94	Glebe Street	332707.6	6249516.9	10.97	11.49	P				
	96 Glebe Street.jpg	1	96	Glebe Street	332701.5	6249521.9	11.02	11.54	P				
	98 Glebe Street.jpg	1	98	Glebe Street	332695.1	6249526.1	11.12	11.62	P				
	100 Glebe Street.jpg	1	100	Glebe Street	332688.2	6249530.4	11.26	11.69	P				
	106a Mitchell Street.jpg	1	106a	Mitchell Street	332683.2	6249548.0	12.13	12.58	P				
	106 Mitchell Street.jpg	1	106	Mitchell Street	332681.1	6249542.3	12.43	12.57	P				
	108 Mitchell Street.jpg	1	108	Mitchell Street	332675.8	6249538.8	12.72	13.03	P				
	110 Mitchell Street.jpg	1	110	Mitchell Street	332673.2	6249535.8	12.86	13.04	P				
	112 Mitchell Street.jpg	1	112	Mitchell Street	332671.0	6249531.4	12.97	13.04	P				
623773	41 Campbell Street.jpg	1	41	Campbell Street	332693.9	6249480.7	13.00	13.20	P				
	43 Campbell Street.jpg	1	43	Campbell Street	332691.6	6249482.1	12.93	13.21	P				
	45 Campbell Street.jpg	1	45	Campbell Street	332688.9	6249484.2	12.94	13.20	P				
	47 Campbell Street.jpg	1	47	Campbell Street	332685.1	6249486.6	12.85	13.18	P				
	49 Campbell Street.jpg	1	49	Campbell Street	332681.6	6249489.3	12.94	13.15	P				
	51 Campbell Street.jpg	1	51	Campbell Street	332678.8	6249491.6	12.99	13.34	P				
	53 Campbell Street.jpg	1	53	Campbell Street	332675.9	6249494.0	12.98	13.22	P				
	55 Campbell Street.jpg	1	55	Campbell Street	332673.1	6249495.9	13.10	13.23	P				
623775	120 Mitchell Street.jpg	1	120	Mitchell Street	332655.0	6249504.8	13.09	14.59	P				

Floor Level Survey (undertaken in 2013)

Parcel Tags as on Council Cadastre (GIS Tag)	Photo Name	Number of Buildings	Street Number	Street Name	Easting (m)	Northing (m)	Indicative Ground Level (mAHD)	RESIDENTIAL BUILDING			NON-RESIDENTIAL BUILDING				
								Lowest Habitable Floor Level (m AHD)	Floor Construction Pier (P) Slab (S) Other	Type Commercial (C) Industrial (I) Public (P)	Additional Comments	Name and Nature of Use/Business	Lowest Floor Level (mAHD)	Floor Construction Pier (P) Slab (S) Other	
521707	137 Bridge Road		137	Bridge Road	33292.3	6249747.7	17.05	16.95	S						
521711	143 Bridge Road		143	Bridge Road	332375.9	6249736.3	17.71	18.25	S						
521713	145 Bridge Road		145	Bridge Road	332372.8	6249734.0	18.03	18.48	S						
519141	44 Talfourd Street		44	Talfourd Street	332351.9	6249776.3	16.23	17.39	S						
519143	46 Talfourd Street		46	Talfourd Street	332349.4	6249779.8	16.33	17.89	S						
603543	79 Darling Street		79	Darling Street	332512.3	6249962.9	7.14	7.20	S						
603544	81 Darling Street		81	Darling Street	332509.1	6249967.8	6.75	6.81	S						
520182	1-21 Bay Street		1 to 21	Bay Street	332997.5	6249303.7				P	BROADWAY SHOPPING CENTRE CAR PARK		9.50	S	
622429	10-16 Bay Street		10 to 16	Bay Street	333046.7	6249622.9	2.57	2.70	S						
637350	23-35 Bay Street		23 to 35	Bay Street	332994.3	6249319.2				P	BROADWAY SHOPPING CENTRE CAR PARK		9.60	S	
529440	1-3 Macarthur Street		1 to 3	Macarthur Street	333060.7	6249573.3	4.32	5.01	S						
529441	5-7 Macarthur Street		5 to 7	Macarthur Street	333073.5	6249573.9	4.17	4.85	S						
604411	17-19 Macarthur Street		17 to 19	Macarthur Street	333189.1	6249601.2	3.84	5.11	S						
602436	385 Wattle Street		385	Wattle Street	333233.5	6249562.3	4.37			C	Paint Supplies Store		4.42	S	
532651	387-429 Wattle Street		387 to 429	Wattle Street	333219.7	6249521.7	4.27			C	Petrol Station		4.40	S	
532659	435 Wattle Street		435	Wattle Street	333273.3	6249485.2	4.81	5.05	S						
532661	437 Wattle Street		437	Wattle Street	333275.1	6249481.5	4.81	5.05	S						
532663	439 Wattle Street		439	Wattle Street	333276.9	6249477.9	4.81	5.05	S						
532665	441 Wattle Street		441	Wattle Street	333278.8	6249474.4	4.81	5.05	S						
532669	445 to 483 Wattle Street		445 to 483	Wattle Street							NO HEIGHTS NEEDED AS BUILDING IS CONSTRUCTED				
630976	485-501 Wattle Street		485 to 501	Wattle Street	333344.3	6249344.9	6.08			I			6.55	S	
631133	507 Wattle Street		507	Wattle Street	333349.7	6249311.8	6.76	6.31							
630979	503 Wattle Street		503	Wattle Street	333321.7	6249328.6	6.26	6.14							
532677	513 to 519 Wattle Street		513 to 519	Wattle Street	333363.7	6249305.4	6.54	7.47							
525492	104-110 Broadway		104 to 110	Broadway	333373.9	6249193.1	8.17			P	Notre Dame University		9.13	S	
525493	112-126 Broadway		112 to 126	Broadway	333328.4	6249190.3	8.11			C	Café		8.20	S	
525494	128 Broadway		128	Broadway	333270.3	6249187.5	7.80			P	University		7.97	S	
525500	129-135 Broadway		129 to 135	Broadway	333357.6	6249225.8	7.83			C	Restaurant		7.96	S	
525515	142-152 Broadway		142 to 152	Broadway	333237.1	6249186.1	8.46			P	Carpark		8.48	S	
533573	147-171 Broadway		147 to 171	Broadway	333245.1	6249220.5	7.42			C	Restaurant		7.54	S	
606602	173-179 Broadway		173 to 179	Broadway	333230.3	6249219.1	8.46			C	Bakery		8.48	S	
522674	2-14 Mountain Street		2 to 14	Mountain Street	333174.2	6249511.6	4.27	4.40	S						
522678	16-20 Mountain Street		16 to 20	Mountain Street	333180.8	6249473.2	4.50	4.68	S						
600502	22-36 Mountain Street		22 to 36	Mountain Street	333233.1	6249563.7	4.52	4.52	S						
522690	38-44 Mountain Street		38 to 44	Mountain Street	333198.8	6249350.1	5.73	5.92	S						
533570	52 Mountain Street		52	Mountain Street	333284.5	6249310.8	7.28	7.55	S						
533554	46-52 Mountain Street		46 to 52	Mountain Street	333201.2	6249332.5	6.04	6.29	S						
531302	13-15 Smail Street		13 to 15	Smail Street	333198.0	6249359.8	5.15	5.73	S						
531301	11 Smail Street		11	Smail Street	333232.5	6249369.7	5.09	5.29	S						
525704	4-12 Buckland Street		4 to 12	Buckland Street	333310.0	6249108.0	8.33	9.47	S						
525725	19-21 Buckland Street		19 to 21	Buckland Street	333290.0	6249166.0	7.79	8.23	S						
525732	23-35 Buckland Street		23 to 35	Buckland Street	333296.0	6249080.0	8.33	9.60	S						
525707	14-16 Buckland Street		14 to 16	Buckland Street	333316.0	6249046.0	9.00	9.13	S						
525708	18-20 Buckland Street		18 to 20	Buckland Street	333307.0	6249017.0	9.32	9.59	S						
525737	57-75 Buckland Street		57 to 75	Buckland Street	333280.0	6248981.0	9.61	10.06	S						
525733	30 Buckland Street		30	Buckland Street	333297.0	6248985.0	9.69	9.99	S						
529083	34 Buckland Street		34	Buckland Street	333289.5	6248954.7	10.16	10.60	S						
525743	83-85 Buckland Street		83 to 85	Buckland Street	333265.5	6248924.3	10.07	10.17	S						
525736	36 Buckland Street		36	Buckland Street	333281.1	6248925.1	10.29	12.44	S						
624757	28-32 Pine Street		28 to 32	Pine Street	333238.0	6248951.0	10.18	10.34	S						
530142	42-44 Pine Street		42 to 44	Pine Street	333229.0	6248922.0	10.39	10.86	S						
622428	62-64 Pine Street		62 to 64	Pine Street	333201.0	6248835.0	11.21	11.35	S						
522780	82-96 Myrtle Street		82 to 96	Myrtle Street	333273.6	6248875.6	10.40	10.45	S						
522773	70-80 Myrtle Street		70 to 80	Myrtle Street	333221.0	6248900.0	10.88			P	PARK		10.88	Grass	
522764	61-63 Myrtle Street		61 to 63	Myrtle Street	333222.0	6248867.0	11.16	11.22	S						
522768	65 Myrtle Street		65	Myrtle Street	333252.0	6248855.0	11.09	11.22	S						
523502	5040 Paints Lane		5040	Paints Lane	333259.0	6248904.0	10.10				SUBSTATION				
526441	92-120 Cleveland Street		92 to 120	Cleveland Street	333222.0	6248777.0	11.36	11.47	S	R&C	Also Known As No.100 "Dolphin Square"				
526447	103 Cleveland Street		103	Cleveland Street	333216.0	6248757.0	11.50	11.74	P	C	Mellenium Bar Restaurant and Pizzeria				

Parcel Tags as on Council Cadastre (GIS Tag)	Photo Name	Number of Buildings	Street Number	Street Name	Easting (m)	Northing (m)	Indicative Ground Level (mAHD)	RESIDENTIAL BUILDING			NON-RESIDENTIAL BUILDING				
								Lowest Habitable Floor Level (m AHD)	Floor Construction Pier (P) (S) (describe)	Slab Other	Type Commercial (C) Industrial (I) Public (P)	Name and Nature of Use/Business	Lowest Floor Level (mAHD)	Floor Construction Pier (P) (S) (describe)	Slab Other
194712	63 Vine Street		63	Vine Street	333127.0	6248734.0	13.20	13.38	P						
194713	65 Vine Street		65	Vine Street	333124.0	6248735.0	13.12	13.45	P						
519440	12 Junction Street		12	Junction Street	331763.0	6249192.0	14.32	11.76	S	C	Level Of Office at Rear of 3 Storey Building				
519440	12 Junction Street		12	Junction Street	331762.0	6249178.0		10.88	S	C	Level Floor Old Building Rear of Site				
521860	1A Hegarty Street		1A	Hegarty Street	331967.0	6249623.0	14.00	14.30	S		Bottom Floor of 3 Storey Brick Flats				
188501	16 Eveleigh Street		16	Eveleigh Street	333549.1	6248647.6	18.28	18.28	S						
193153	13 Renwick Street		13	Renwick Street	332986.9	6247555.6	26.48	26.96	S						
193154	15 Renwick Street		15	Renwick Street	332974.6	6247553.2	26.43	26.97	S						
193155	17 Renwick Street		17	Renwick Street	332968.5	6247552.0	26.36	26.97	S						
193156	19 Renwick Street		19	Renwick Street	332962.3	6247550.8	26.40	26.99	S						
193157	21 Renwick Street		21	Renwick Street	332956.6	6247549.7	26.40	26.99	S						
193158	23 Renwick Street		23	Renwick Street	333728.3	6248579.0	26.35	26.99	S						
246249	25-27 Renwick Street		25 to 27	Renwick Street	333728.0	6248576.8	26.35	26.47	S						
249952	29 Renwick Street		29	Renwick Street	333726.9	6248569.0	26.29	26.56	S						
613353	35-37 Renwick Street		35 to 37	Renwick Street	333724.0	6248549.7	26.51	26.72	S						
203082	32-134 Shepherd Street		132 to 134	Shepherd Street	333064.0	6248657.0	14.47	14.60	S	P(COMMUNITY)					
183743	138 Shepherd Street		138	Shepherd Street	333052.6	6248622.9	14.98	15.20	P	R					
183744	140 Shepherd Street		140	Shepherd Street	333051.3	6248619.1	14.98	15.22	P	R					
202408	1-19 Regent Street		1 to 19	Regent Street	333724.1	6248648.0	28.22			C	Various Retail Stores	28.14	S		
621684	21 Regent Street		21	Regent Street	336143.8	6248968.7	26.30			C	Various Retail Stores	26.95	S		
518066	55-59 Regent Street		55 to 59	Regent Street	333772.0	6249050.0	17.81			C	Various Retail Stores	18.10	S		
627845	60-65 Regent Street		60 to 65	Regent Street	333764.0	6249027.0	17.81			C	Various Retail Stores	17.81	S		
515495	67-69 Regent Street		67 to 69	Regent Street	333757.0	6249020.0	17.94			C	Various Retail Stores	17.94	S		
516920	71-75 Regent Street		71 to 75	Regent Street	333745.0	6249006.0	18.11			C	Various Retail Stores	19.16	S		
518418	80 Broughton Street		80	Broughton Street	32498.2	6249935.8	6.75		S	P(COMMUNITY)	BROUGHTON ST CHILD CARE CENTRE	7.09	S		
202206	12 Boundary Street		12	Boundary Street	333135.0	6248876.0	13.06	13.06	P						
522340	32 Burton Street		32	Burton Street	332326.8	6250060.1	6.69	8.38	S						
522341	34 Burton Street		34	Burton Street	332324.8	6250063.4	7.37	8.82	S						
522022	27 Cardigan Street		27	Cardigan Street	332508.5	6249942.3	7.53	7.61	S						
522023	29 Cardigan Street		29	Cardigan Street	332500.1	6249936.4	7.01	7.18	S						
522024	31 Cardigan Street		31	Cardigan Street	332501.1	6249937.1	7.01	7.18	S						
201521	36-38 George Street		36 to 38	George Street	333780.9	6248550.2	26.51			P	Carpark	26.73	S		
514080	47-53 Jones Street		47 to 53	Jones Street	333146.1	6249954.8	3.12			P	School	4.42	S		
521045	42 Lombard Street		42	Lombard Street	33261.6	6249961.2	19.41	20.60	S						
612303	1-73 Mount Vernon		1 to 73	Mount Vernon Street	332197.0	6249431.0	24.85	25.17	P		Level Dwelling No.146 Corner St Johns Road and Mt Vernon Lane				
613427	2-8 Wentworth Street		2 to 8	Wentworth Street	332903.4	6249726.3	3.07	0.47							