1 INTRODUCTION TO THE PLAN

1.8 Information required with applications for resource consents

1.8.10 Specific information accompanying applications for subdivision or development within the Erosion Hazard Area of Mangaroa River catchment

(a) Provision of a report by a suitability qualified and experienced person is required to determine the erosion risk to the proposed building platform or area of works in order to determine the effect of the proposal in accordance with Schedule 4 of the RMA;

1.8.11 Specific information accompanying applications for subdivision or development within the Pinehaven Catchment Overlay

Provision of a report by a suitably qualified and experienced person assessing the ability for the site to achieve hydraulic neutrality including;
Either;

- Full catchment hydrological and hydraulic analysis using the GWRC baseline information to demonstrate hydraulic neutrality for the 1 in 10 year and 1 in 100 year flood event including climate change. This would include;
    - Existing pre-development situation calibrated to GWRC baseline information;
    - Design of mitigation infrastructure;
    - Future development scenario model with mitigation infrastructure to demonstrate no increase in downstream flood flows at any point in the catchment.

Site Based Assessment, which would include;

- Hydrological analysis for existing pre-development scenario;
- Post-development scenario to mitigate design flows to 80% of pre-development flows for 1 in 10 and 1 in 100 year event including climate change.

Note 1: The full catchment approach would generally only be expected for large comprehensive developments.
Note 2: Reducing floods flow to 80% of the pre-development flood flows is to mitigate risks associated with changing the timing and coincidence of peak and recession flows from sub-catchments which, without mitigation could result in net increases in downstream peak flows.
Note 3: The 2012 Wellington Regional Standard for Water Services and the Wellington Regional Hydrological Guidelines shall be applied to the

hydrological analysis.

1.8.102 Further guidance on information requirements

Depending on the nature and scale of the proposal, consultation may be required with the following parties:

a. Persons likely to be adversely affected by the proposed activity
b. The Department of Conservation
c. Pouhere Taonga – Heritage New Zealand
d. Iwi authorities
e. New Zealand Transport Agency
f. Other relevant authorities or organisations

2 DEFINITIONS

Erosion Hazard Area	The area identified within the District Plan (Part 5) Hazard Maps that are at risk from erosion caused by the flood hazard.
Flood Hazard Extent	The area identified within the District Plan (Part 5) Hazard Maps. This identifies the area susceptible to the average flood return interval of 100 years (1 in 100-year flood), incorporating climate change to 2090. The Flood Hazard Extent comprises a High and Lower Hazard Area; • High Hazard Area comprises the stream and river corridor, overflow paths and the Erosion Hazard Area. • Lower Hazard Area comprises the ponding area and some parts of the Erosion Hazard Area.
Flood mitigation works	Work undertaken by local and regional authorities such as Greater Wellington Regional Council and Upper Hutt City Council or their nominated contractors where the primary purpose is to improve the ability and capacity of a stream or river to convey flood flows or reduce flooding across land, often in accordance with a relevant adopted Floodplain Management Plan.
Hydraulic neutrality	the principle of managing stormwater runoff from all new lots or development areas through disposal or stored on-site and

	released at a rate that does not exceed the peak stormwater runoff when compared to the pre-development or subdivision situation.
Overflow path	the area defined on the District Plan Part 5 Hazard Maps. The overflow paths are areas identified as conveying moving flood water across land during a flood event and may be fast and/or deep.
Pinehaven Catchment Overlay	the area encompassing the upper sub-catchments of the Pinehaven stream catchment.
Ponding area	the area defined on the District Plan Part 5 Hazard Maps comprising areas of still or slow moving water during a flood event.
River Corridor	The area as defined on the District Plan (Part 5) Hazard Maps as 'River Corridor'
Stream corridor	the area as defined on the District Plan Part 5 Hazard Maps as 'Stream Corridor'

9 SUBDIVISION AND EARTHWORKS

9.2 Resource Management Issues

9.2.4 ***That the needs of future generations are met.***

Land to be subdivided should be suitable for the anticipated land use, and be serviceable and clear of unacceptable hazards or limitations. Subdivision within a Flood Hazard Extent should avoid high hazard areas and ensure appropriate mitigation measures can be implemented in lower hazard areas to provide for suitable future development. Furthermore, the subdivided land should, where practical, also allow for a range of appropriate land uses so that the potential of the land for use by future generations is not significantly diminished. Thus, the pattern of subdivision within the City should provide future generations with a choice of lifestyles and living and working environments. It is important that indigenous vegetation, which is a finite resource, is protected for future generations, and for intrinsic ecological reasons.

9.2.6 ***Earthworks within identified Flood Hazard Extents can increase the flood hazard risk.***

Earthworks can adversely affect the function of the floodplain and therefore increase the flood risk to people and property.

Earthworks can obstruct or divert flood and surface water flow paths as well as increase erosion risk. Sediment loss from areas of work can affect the stream channel and have an impact on the function of the stream during times of flood.

9.2.7 ***Subdivision within identified Flood Hazard Extents could potentially create lots susceptible to flooding hazards.***

Subdivision creates an opportunity for further development within the new lot and therefore when proposed within an identified Flood Hazard Extent, the suitability of the proposed lot for future development needs to be considered to avoid exposing future development to unacceptable risk. Subdivision within the Flood Hazard Extent should avoid creating new lots in high hazard areas and ensure mitigation measures can be implemented in lower hazard areas to provide suitable future

development opportunities that do not expose people and property to unacceptable risk.

9.2.8 ***Subdivision within the upper sub-catchment of Pinehaven Stream provides further development opportunities which can increase stormwater runoff and flood risk.***

The flood risk in the Pinehaven Flood Hazard Extent is influenced by activities in the upper Pinehaven Catchment. Subdivision would provide for further development potential in the upper catchment which could result in increased stormwater runoff exacerbating the flood risk to the community in the lower Pinehaven floodplain.

9.3	Objectives

9.3.2 ***To control subdivision within identified Flood Hazard Extents and Erosion Hazard Area to ensure the risk from flood hazards to building platforms and access in high hazard areas are avoided and the flood risk to people and property can be appropriately mitigated in the lower hazard areas.***

Where subdivision is proposed within a Flood Hazard Extent, the natural hazard constraints will be considered, with development avoided in the high hazard areas, and mitigated in the lower hazard areas. The impact of development on the flood hazard will also need to be managed to ensure it does not increase the level of risk to other people and property.

Subdivision in a Flood Hazard Extent can also mean that any development or activity on the subdivided site is prone to flood hazards. By controlling subdivision within identified flood hazard extents, this risk to people and property can be managed.

9.3.3 ***To control earthworks within identified Flood Hazard Extents and Erosion Hazard Areas to ensure that the function of the floodplain is not reduced and unacceptable flood risk to people and property is avoided or mitigated.***

Earthworks can result in unacceptable risk for future development or

obstruct or divert flood flow paths. Where earthworks are proposed within the Flood Hazard Extent or Erosion Hazard Area, the natural hazard constraints should be considered and areas subject to high hazards are avoided or earthworks managed to protect the integrity of the high hazard area.

9.3.4

To control subdivision within the upper areas of the Pinehaven Catchment Overlay to ensure that peak stormwater runoff during both a 1 in 10-year and 1 in 100-year event does not exceed the existing run off and therefore minimise the flood risk to people and property within the Flood Hazard Extent.

Development in the Pinehaven Catchment Overlay needs to be controlled to ensure that stormwater runoff does not exacerbate the impact of flooding in the lower catchment. Most of the upper catchment is currently undeveloped and any new development has the potential to affect the land use and peak stormwater runoff. This policy seeks to ensure that the peak stormwater runoff does not increase, thereby increasing the flood risk downstream.

9.4	Policies

9.4.4.

To avoid subdivision where building platforms would be located within high hazard areas of the identified Flood Hazard Extents and Erosion Hazard Areas.

This policy seeks to avoid subdivisions that result in building platforms being located within the high hazard areas of the relevant Flood Hazard Extent or Erosion Hazard Area. This is due to the risk that these high hazard areas present to people and property, characterised by the stream or river corridor, erosion hazard area and overflow paths. The high hazard areas can contain both fast and deep flowing water in a 1 in 100-year flood event, or are potentially subject to erosion, which have the potential to damage buildings and threaten lives.

9.4.5.

To control subdivision where building platforms would be located within lower hazard areas of identified Flood Hazard Extents and Erosion Hazard Areas by requiring mitigation to minimise the risk to people and property.

This policy recognises that there are areas within the Flood Hazard Extent and Erosion Hazard Area that are outside the high hazard areas

and therefore represent a lower level of flood or erosion hazard to people and property. As such, some development within these areas may be appropriate providing appropriate mitigation measures are incorporated into developments to reduce the risk (for example floor levels above the 1 in 100-year flood extent or being setback from the riverbank). These lower hazard areas are characterised by still or slow moving water and do not present the same threat to people and property as the higher hazard areas subject to the risk being appropriately mitigated.

9.4.6 ***Limit earthworks in the high hazard areas within identified Flood Hazard Extents and Erosion Hazard Areas to avoid an increase in risk from flood hazards to people and property.***

Earthworks in high hazard areas are generally inappropriate and can result in the diversion of flood waters, blocking of water flow, or reduce bank stability, which can increase the risk to surrounding properties. To maintain the function of the floodplain it is important that the passage of flood waters is not impeded or blocked.

9.4.7. ***To manage earthworks in the low hazard areas within identified Flood Hazard Extents and Erosion Hazard Areas to reduce the flood risk to people and property.***

Earthworks in lower hazard areas may be acceptable as there is less risk of the earthworks blocking water flow or diverting flood flows. Furthermore, earthworks are likely to be required to ensure that future building platforms (and in the case of the Mangaroa Flood Hazard Extent, the access routes) are above the 1 in 100-year flood level. Managing earthworks in these lower hazard areas will support the necessary mitigation and reduce the flood hazard threat to people and property, within the identified Flood Hazard Extents.

9.4.8 ***Require earthworks within identified Flood Hazard Extents and Erosion Hazard Area to be designed to minimise erosion and loss of sediment from the area of work to streams and rivers***

Earthworks in the Flood Hazard Extent and Erosion Hazard Area need to be undertaken in a manner to ensure that sediment runoff is minimalised. Sediment runoff has the potential to reduce the capacity of the river channel and exacerbate the flood risk. Furthermore, while not within the scope of the plan change, it is recognised that there are amenity, ecological and water quality benefits that are derived from controlling sediment runoff from earthworks

9.4.9 ***Enable earthworks within identified Flood Hazard Extents and Erosion Hazard Areas that are directly associated with specific and planned flood mitigation works or floodplain management that are designed to reduce the flood risk to people and property or maintain the function of the floodplain.***

Earthworks that are undertaken for the express purpose of reducing the flood risk through mitigation works have wider community benefits and therefore it is appropriate that these are supported and encouraged through the policy framework. These works are often undertaken by Greater Wellington Regional Council (or an associated approved contractor) and will be identified in approved floodplain management plans (if one exists).

9.4.10 ***To ensure subdivision within the Pinehaven Catchment Overlay area is designed so that the stormwater runoff, during both a 1 in 10-year and 1 in 100-year event, from all new lots and future building areas shall be at a rate no greater than when compared to the pre-development situation.***

Subdivision in the Pinehaven Catchment Overlay needs to be controlled to ensure that stormwater runoff does not exacerbate the impact of flooding in the lower catchment. The upper catchment is currently mostly undeveloped and any new development has the potential to affect the land use and peak runoff.

9.5 Methods

9.5.1 District Plan provisions consisting of:

1. Rules to promote the subdivision of land which reflects the objectives and policies of the District Plan.
2. Rules to control the density of development through zone requirements for minimum site areas.
3. Rules to control the location of building platforms, earthworks, and accessways in the identified Flood Hazard Extents and Erosion Hazard Area.
3. Performance standards and consent conditions to minimise the adverse effects of subdivision and earthworks. These relate to:

    - Provision of utilities, supply of water and disposal of

effluent.

- Landscape values, native vegetation, heritage and cultural sites.
- Managing dust, water body siltation, soil erosion, effects on ground stability and other natural hazards.

4. Allowing activities permitted by the District Plan or those granted resource consent, to be undertaken on newly created allotments.
5. Encouraging recognition of landscape character in the design and layout of subdivisions.
6. Financial contributions for reserves and community facilities.
7. Management of the effects of earthworks and clearing of native vegetation by using:

   - Zone performance standards to establish thresholds for resource consents.
   - Management plans and monitoring of ongoing operations.

8. The ability to impose conditions on resource consents to avoid, remedy or mitigate any adverse effects.

9.6 Anticipated environmental results and monitoring

The following results are expected to be achieved by the objective, policies, methods and rules in this chapter. The means of monitoring whether this Plan achieves the anticipated environmental results are also set out below.

Anticipated environmental results	Monitoring indicators	Data source
A sustainable pattern of urban development	Number of applications for activities to establish out of zone	Council records
A pattern of subdivision that enhances opportunities for the sustainable use of resources and provides for walking, cycling and public transport as viable and convenient transport alternatives	Activities located in the urban area of the City Infill development	Council records
Minimal adverse effects on the	Effectiveness of conditions of	Council complaints

environment from subdivision and earthworks	consent and methods used in managing adverse effects Complaints received about adverse effects	register Council resource consent records and monitoring compliance
The maintenance of a safe and efficient roading network	Accidents caused by poorly sited or designed access points	Vehicle accident records
Prevention of development which increases the level of risk in areas identified as being at high risk from natural hazards	Number of resource consent applications approved or declined in areas identified in the District Plan as being susceptible to natural hazards and whether these numbers change with time. The economic and insured costs from flood hazard events and whether these decrease in time, allowing for changes in inflation. The number of section 74 certificates imposed on the titles of properties at the time of building consent and whether these decrease in time.	Council flood hazard modelling Council resource consent records for compliance with conditions

14 NATURAL HAZARDS

14.2 Resource Management Issues

14.2.2 *Inappropriate development and activities located within floodplains that may result in damage to infrastructure and property and the obstruction of flood flow paths.*

Upper Hutt is dissected by several tributary rivers which flow into the main Hutt River.

The area most at risk is the Hutt River floodplain. Recognising this, the Wellington Regional Council has undertaken protection works, such as stopbanks and river bank stabilisation. These stopbanks run parallel to the developed urban area from Totara Park to Trentham Memorial Park. During a large flood the stopbanks may be breached, causing severe damage and disruption to the City. The stopbanks have a maximum design flood capacity so that it is possible in a significant flood event that they could be overtopped or a breach could occur causing significant damage and disruption to the City.

In addition, the Heretaunga Flood Detention Embankment and outlet control structure (referred to as the Heretaunga Retention Dam) has been designed to reduce the frequency and severity of flooding in the downstream urban areas along the Heretaunga Drain. A line defining the predicted maximum extent of ponding behind the Heretaunga Dam has been identified on the Planning Maps. So that the ponding capacity of the Heretaunga Dam is not compromised, earthworks, buildings or structures should not be undertaken within the area encompassed by the Retention Line as shown on the Planning Maps.

Subdivision in the rural areas is likely to increase the potential for development close to rivers and will require careful consideration.

It is recognised that there are varying levels of risk within an identified Flood Hazard Extent. High hazard areas include stream and river corridors, overflow paths and erosion hazard areas. In these higher risk areas flood waters can be both deep and fast moving and the risk of erosion is high. In some cases, parts of the erosion hazard area may be less susceptible due to the characteristics of the location and thus represent a lower risk to people and property. Lower hazard areas within identified flood hazard extents predominately comprise ponding areas but can also include lower risk parts of the erosion hazard area. Development should avoid higher hazard areas, with sufficient

mitigation applied to lower hazard areas.

14.2.4 ***The existing community in the Pinehaven catchment are susceptible to flood hazards***

The Pinehaven Stream flows through an urbanised community. The development around the stream has limited the natural function of the stream and its floodplain. The stream corridor, overflow paths and land along the stream banks are the most sensitive areas to inappropriate development that can adversely affect the function of the floodplain and exacerbate the risk from flooding.

14.3 Objective

14.3.2. ***Identify Flood Hazard Extents and Erosion Hazard Areas in order to avoid or mitigate the risk to people and property and provide for the function of the floodplain.***

The extent of the threat from flood hazards and erosion hazards must be identified within the Pinehaven Stream and Mangaroa River catchments. The types of hazards within an identified Flood Hazard Extent can vary, with high hazard areas and lower hazard areas that need to be considered when planning for future development.

High hazard areas within the Flood Hazard Extent comprise the stream and river corridor, overflow paths and the Erosion Hazard Area. These are characterised by areas of moving flood water which may also be deep or fast and includes areas most at risk to erosion during a flood event. These are identified on the Hazard Maps. Subdivision and development within high hazard areas should be avoided given the threat these areas represent to people and property.

Outside the high hazard areas, but still within the Flood Hazard Extent, are lower hazard areas generally comprising the ponding areas and some parts of the erosion hazard area. These areas are generally characterised by still or slow moving flood water and a lower risk of erosion. These areas are identified on the Hazard Maps. Subdivision or development may be possible in these areas subject to appropriate mitigation (such as raising the floor levels above the 1 in 100-year flood level).

All development should be undertaken in a manner that provides for the function of the floodplain to discharge flood waters and thereby ensure that the effects from flooding are not exacerbated on the site, adjacent properties or the wider environment.

14.4 Policies

14.4.1 ***To identify and mitigate the potential adverse effects of natural hazards that are a potentially significant threat within Upper Hutt.***

Adequate information is necessary to make informed decisions on developments that may be affected by natural hazards. The main objective relating to natural hazards is knowing where they can occur so that the effects can be avoided, or the appropriate management strategies can be put in place.

The Council will co-ordinate the provision of information identifying these hazards and the areas at risk. This can be used by developers, the community and the Council to consider the potential risks when making decisions on developments and deciding on possible mitigation measures where natural hazards are involved.

The Council will recognise the high and low hazard areas within the identified Pinehaven Stream and Mangaroa River Flood Hazard Extents.

High hazard areas comprise moving water that can also be deep and are the areas most at risk from erosion during a flood event. Accordingly, subdivision and development within high hazard areas should be avoided given the threat they have to people and property.

Lower hazard areas are generally characterised by still or slow moving flood water and a lower risk of erosion. In these areas, it may be possible to undertake development provided appropriate mitigation is implemented (for example floor levels above the 1 in 100-year flood extent or being setback from the stream or river bank).

Some parts of the identified Erosion Hazard Area within the Mangaroa Flood Hazard Extent may represent a lower risk depending on the characteristics of the site and its location in relation to the river. Where a site specific assessment identifies there is a lower threat then the erosion hazard may be considered a lower hazard area and assessed in accordance with the lower hazard policies.

14.4.3 ***Avoid development within high hazard areas of identified Flood Hazard Extents and Erosion Hazard Areas.***

The high hazard areas present a threat to people and property as they can contain both fast and deep flowing water in a 1 in 100-year flood event, or are at risk of bank collapse which has the potential to damage buildings and threaten lives.

The policy provides directive for careful consideration of development within the high hazard areas, with a strong directive to avoid development in these high hazard areas.

14.4.4 ***To control development (including buildings) within the lower hazard areas of identified Flood Hazard Extents and Erosion Hazard Areas by requiring mitigation to minimise the risk to people and property.***

The policy recognises that there are lower hazard areas within the identified Flood Hazard Extent and some parts of the Erosion Hazard Areas. The lower hazard areas are characterised by still or slowly moving water and a lower risk of erosion. As such, development within these lower hazard areas can be appropriate provided measures are incorporated to mitigate the risk.

14.4.5 ***Enable planned flood mitigation works within identified Flood Hazard Extents that decrease the flood risk to people and property or maintain the function of the floodplain.***

Flood mitigation works are undertaken to reduce the flood risk to people and property. This policy supports flood mitigation works as they are consistent with the purpose of providing for the continued function of the floodplain.

14.4.6 ***Within the Pinehaven Flood Hazard Extent, reduce blockage potential from fences, buildings and driveways in high hazard areas through design controls on development.***

Driveway crossings and structures over the stream channel within the flood hazard extent can impede flood flows. The flood risk and damage to people and property can be exacerbated by blockages of debris accumulating against fences, buildings and driveways crossing the stream. The blockage potential is compounded by the character of the catchment being urbanised and confined. This policy encourages fences, buildings and driveways to be appropriately designed.

14.4.7 ***Development within the Pinehaven Catchment Overlay is designed to ensure that the peak stormwater runoff, during both a 1 in 10-year and 1 in 100-year event, shall be at a rate no greater than when compared to the pre-development situation.***

Development in the Pinehaven Catchment Overlay needs to be controlled to ensure that stormwater runoff does not exacerbate the impact of flooding in the lower catchment. The upper catchment is currently mostly undeveloped and any new development has the potential to increase peak stormwater runoff.

14.4.8 ***Within the Mangaroa Flood Hazard Extent enable accesses positioned above the 1 in 100-year level to serve dwellings where located within the lower hazard areas and avoid locating accesses within high hazard areas to serve dwellings.***

This policy enables access way and driveways to dwellings in the Mangaroa Flood Hazard Extent to be above the 1 in 100-year flood level when located in the lower hazard areas. It discourages access routes being located in high hazard areas where access ways could be compromised and properties become isolated during a 1 in 100-year flood event. The policy encourages access ways to be safely located as they assist with evacuation, if required, during a flood event.

14.4.9 ***Within the Mangaroa Flood Hazard Extent, enable non-habitable accessory buildings within the lower hazard areas.***

This policy recognises that the Mangaroa Flood Hazard Extent is predominantly rural. Rural activities are often supported by accessory buildings, therefore it is appropriate to provide for these in lower hazard areas where they are unlikely to present a blockage issue, or are less likely to be structurally compromised during a flood event.

14.5 Methods

14.5.4 The use of sections 72 – 76 ~~36~~ of the Building Act ~~1991~~ 2004 and compliance with the New Zealand Building Code in the Council's building consent process for the structural safety of buildings to withstand wind, inundation, earthquakes and unstable ground.

14.6 Anticipated environmental results and monitoring

The following results are expected to be achieved by the objective, policies and methods in this Chapter. The means of monitoring whether this Plan achieves the anticipated results are also set out below.

Anticipated environmental results	Monitoring indicators	Data source
The avoidance, remedying, or mitigation of adverse environmental effects of natural hazards on communities, including mitigation measures in place in areas identified as being of high risk	Effectiveness of conditions of consents and methods used in managing adverse effects Development in areas subject to natural hazards Reduction of downstream effects caused by flooding events. Number of resource consent applications approved or declined in areas identified in the District Plan as being susceptible to natural hazards and whether these numbers change with time. The economic and insured costs from flood hazard events and whether these decrease in time, allowing for changes in inflation. The number of section 74 certificates imposed on the titles of properties at the time of building consent and whether these decrease in time.	Council complaints register Council resource consent records for compliance with conditions
Prevention of development which increases the level of risk in areas identified as being at high risk from natural hazards	Development in areas subject to natural hazards	Council and Wellington Regional Council records
Communities informed about, and prepared for, the occurrence of natural hazards	Consultation and community initiatives	Various

16 NETWORK UTILITIES

16.2 Resource Management Issues

16.2.1 *Balancing the national, regional and local benefits of network utilities with effects on the local environment.*

An important issue is managing the actual and potential adverse environmental effects arising from network utilities while also recognising the key role they play and benefits they have locally, regionally and nationally, and to ensure the technical and operational requirements of the network utility concerned is not unreasonably restricted. Failing to adequately provide for network utilities may result in the desired level of well-being and quality of life not being achieved within the City. This is because network utilities provide essential services to people's homes and businesses, such as water, transport means, electricity, gas and telecommunications, and are critical for the effective functioning and liveability of the City.

The high voltage electricity transmission lines that form part of the national grid play a vital role in the well-being of the community. The adverse effects of the high voltage electricity transmission lines are often local, while the benefits may be in a different locality and/or extend beyond the local to the regional and national.

However, the construction, operation and/or maintenance of network utilities can have adverse effects and adversely affect the amenity of areas of the City, as a result of, for example, noise, emissions, and visual dominance. Some network utilities are relatively large, visually prominent and capable of generating significant adverse effects on the surrounding environment. They may also have potential or perceived adverse effects on public health and safety. Adverse effects may only occur at the time of construction or installation of the network utility, but in some instances may continue throughout its operation or during maintenance and upgrade works. In some cases, it might not be entirely possible to avoid, remedy or mitigate all adverse effects associated with a network utility, meaning there may be some level of residual adverse effect on the surrounding environment. In such circumstances, there is a need to carefully consider both the benefits the network utility will provide and the significance of the adverse effects on the surrounding environment.

Network utilities and their on-going functioning can be affected by flood hazards. It is also possible for network utilities to increase the impact of flood hazards, particularly where linear infrastructure crosses stream or river corridors. The effect of flood hazards on new network utilities and the impact of new network utilities on the flood hazards needs to be avoided or mitigated.

16.3	Objectives

16.3.3 ***To recognise and provide for the sustainable, secure and efficient use, operation, maintenance and upgrading and development of network utilities within the City.***

This objective requires that the benefits of network utilities including those that are not identified as regionally significant be recognised and provided for. Network utility services form an essential part of the City's physical resource and provide for the community's social, cultural and economic well-being. They provide essential services to people's homes and businesses, such as water, transport means, electricity, gas, radiocommunications and telecommunications and are critical for the functioning and liveability of the City. Natural hazards such as flooding can threaten the continued security and operation of the network utilities. Failing to adequately provide for network utilities and protect them from natural hazards may result in the desired level of well-being and quality of life not being achieved within the City.

16.3.5 ***To ensure the continued operation of network utilities, and the development and operation of new network utilities, in flood hazard extents and to maintain the function of the floodplain to convey flood waters.***

Network utilities have the potential to impede or block water during a flood event and increase the risk to surrounding people and properties. This is particularly so, when linear structures cross a river or stream corridor and have not been designed to take into account the 1:100 year flood height.

Network utilities play a critical role in the functioning of community. Network utilities that are damaged or destroyed during flood event may slow the ability for the community to recover or worsen the effects from flooding (for example sewerage in floodwaters).

16.4	Policies

16.4.18 ***Network utility structures crossing streams within identified Flood Hazard Extents must be installed in a way to avoid contributing to blockages or restricting flood flows or compromising flood mitigation works.***

This policy ensures that network utility structures that cross river and stream corridors do not contribute to blockages or exacerbate the effects

from flooding on people or property.

This policy also recognises the need for Network Utility Structures to be designed in a manner that does not compromise flood mitigation works. This is to ensure that the installation of Network Utility Structures does not inadvertently increase the risk to the local community by lowering an existing level of protection that may be provided by the flood mitigation works.

It is also recognised that attaching Network Utility Structures to existing lawfully established structures crossing a stream or river will not increase the effect on flooding as long as the Network Utility Structure is not positioned any closer to the stream or river than the existing structure.

16.4.19 ***To manage the design and location of network utilities in identified Flood Hazard Extents to ensure their resilience to the effects of events.***

It is important that network utilities are able to continue to operate during and after a flood event to help the community respond and recover. This policy ensures directive for the network utilities in Flood Hazard Extents to ensure they are appropriately located and designed.

16.6 Anticipated environmental results and monitoring

The following results are expected to be achieved by the objective, policies and methods in this Chapter. The means of monitoring whether this Plan achieves the anticipated environmental results are also set out below.

Anticipated environmental results	Monitoring indicators	Data source
The sustainable management of network utilities throughout the City	Complaints and enforcement procedures Types of network utility development System failures Consultation with regional and national organisations to ensure utilities management is co-ordinated and consistent	Council complaints register Council records
The avoidance, remedying, or mitigation of the adverse effects of developing and maintaining the City's network utilities	Complaints and enforcement procedures Assessment of the effectiveness of selected methods in implementing policies relating to network utilities	Council complaints register Council resource consent records
The avoidance of potential conflicts between regionally significant network utilities and incompatible development, use and subdivision	Complaints and enforcement procedures Assessment of the effectiveness of selected methods in implementing policies relating to regionally significant network utilities	Council complaints register Council resource consent records
The avoidance of the potential for network utilities to increasing flood hazard risk or impacting on flood hazard structures.	System failures in flood events. Number of resource consent applications approved or declined in areas identified in the District Plan as being susceptible to natural hazards and whether these numbers change with time.	Council records

17 HAZARDOUS SUBSTANCES AND WASTE MANAGEMENT

17.4 Policies

17.4.1 ***To ensure that facilities using, manufacturing, storing or disposing of hazardous substances are located, constructed and operated in a manner that will not adversely affect the environment.***

The three main methods of managing hazardous substances at present are the promotion of voluntary methods of good practice, the co-ordination with agencies with responsibilities in hazardous substances management, and the management of the Council's own process of hazardous substances management. In addition, education and advice to users of hazardous substances can be provided to supplement these methods.

The proximity of natural hazards is an important consideration in siting hazardous activities or activities which use hazardous substances so that the risk of unintentionally releasing hazardous contaminants into the environment is minimised. Such activities will be discouraged from locating within flood hazard areas. Proposals must be assessed based on the scale of and type of substances and the adequacy of the facilities' design to avoid or mitigate the flood hazard effect.

18 RESIDENTIAL ZONE RULES

Activities Tables

Policies 3.4.1, 4.4.3, 4.4.11, 4.4.13, 9.4.4, 9.4.5, 9.4.10. 16.4.3, 16.4.7

18.1 **Subdivision Activities**	
Subdivision excluding unit title subdivision	
Subdivision which complies with the standards in rules 18.5 and 18.9 unless specified below	**C**
Subdivision in the Wallaceville Structure Plan Area (Chapter 39: Wallaceville) which complies with the standards in rules 18.5 and 18.9 unless specified below	**RD**
Subdivision in the Wallaceville Structure Plan Area that does not comply with the standards of rule 18.5 and 18.9	**D**
Subdivision which does not comply with the standards specified in rule 18.5	**D**
Subdivision which complies with the standards of rule 18.5 but not rule 18.9	**RD**
Subdivision around any existing lawfully established dwelling which does not result in the creation of any new undeveloped site that contains no dwelling **Note:** this form of subdivision does not need to comply with the minimum net site area requirements of rule 18.5, but does need to meet the access standards of rule 18.9	**C**
Subdivision around any existing lawfully established dwelling that does not result in the creation of any new undeveloped site that contains no dwelling, that does not comply with the access standards of rule 18.9	**RD**
Subdivision of land for utilities, reserves or conservation purposes	**C**
Subdivision of a site identified in Schedules 26.8 or 27.7	**D**
Creation of a lot that does not have formed legal access to a formed legal road, unless the proposal is for a paper road or other access to be formed as a condition of subdivision approval in accordance with the Code of Practice for Civil Engineering Works	**NC**
Subdivision which creates building platforms within 20m of high voltage (110kV or greater) electricity transmission lines as shown on the Planning Maps *(refer to the definition of *transmission line*)	**RD**
Subdivision within the Residential (Centres Overlay) Area which complies with the standards of rule 18.5 but not rule 18.9	**RD**
Subdivision within the Residential (Centres Overlay) Area which does not comply with the standards specified in rule 18.5	**D**

Subdivision within the Pinehaven Flood Hazard Extent and Pinehaven Catchment Overlay	
Subdivision within the ponding area of the Pinehaven Flood Hazard Extent, which creates any undeveloped lots that do not contain a dwelling, and complies with the requirements of Rule 18.5.	**RD**
Subdivision of a site within the Pinehaven Catchment Overlay	**RD**
Subdivision within the Pinehaven Flood Hazard Extent which creates any undeveloped lots that do not contain a dwelling, and does not; • comply with the requirements of Rules 18.5, or; • meet the standard of the Rule 18.37	**NC**
Subdivision of a site within the Pinehaven Catchment Overlay that does not meet the standards for either Rule 18.38 or Rule 18.5	**NC**
Subdivision within the Mangaroa Flood Hazard Extent	
Subdivision within the Ponding Area or Erosion Hazard Area of the Mangaroa Flood Hazard Extent, which results in any undeveloped lots that contain no dwelling or non-residential building, and complies with the requirements of Rule 18.5.	**RD**
Subdivision within the Mangaroa Flood Hazard Extent which results in any new undeveloped lots that contain no dwelling, where the activity does not comply with the requirements of Rule 18.5; or the proposed building platform is located within a river corridor.	**NC**
Subdivision of Comprehensive Residential Developments	
Subdivision of a Comprehensive Residential Development applied for concurrently with a Comprehensive Residential Development under Rule 18.28A.	**RD**

	Restricted Discretionary Activities
18.37	**Subdivision within the ponding area of the Pinehaven Flood Hazard Extent, which creates any undeveloped lots that do not contain a dwelling and complies with the requirements of Rule 18.5**
Policy 9.4.4, Policy 9.4.5	Standards • Suitable future building platform area must be identified and must not be located within an overflow path, or stream corridor. Council will restrict its discretion to, and may impose conditions on: • The matters listed in Rule 18.6.

- The appropriateness of the proposed building platform in terms of area and location in relation to the flood hazard.
- Ability for a future dwelling to be constructed above the 1 in 100-year flood level.
- The effect of the future development of the building platform on the Pinehaven flood hazard extent.
- Consent notice restricting the future development to the identified platform.
- Matters addressing the standards for access under Rule 18.9 where any standards are not met.

18.38 **Subdivision of a site within the Pinehaven Catchment Overlay is a Restricted Discretionary Activity.**

Policy 9.4.10

Standards

- Achieves hydraulic neutrality.
- Provision of a report by a suitably qualified and experienced person providing an assessment of the ability for the site to achieve hydraulic neutrality in accordance with the requirements of 1.8.11
- Compliance with the standard of Rule 18.5.

Council will restrict its discretion to, and may impose conditions on:

- The matters listed in Rule 18.6
- Ability for the subdivision and proposed design to ensure peak flow of stormwater discharge will be no greater than pre-subdivision levels and thus achieve hydraulic neutrality.
- The effect of the subdivision on the Pinehaven Flood Hazard Extent.
- Recommendations and mitigation measures of the hydraulic report.
- Consent notice restricting the future development of the lot to the design and recommendations of the hydraulic neutrality report.
- Matters addressing the standards for access under Rule 18.9 where any standards are not met.

18.39 **Subdivision within the Ponding Area or Erosion Hazard Area of the Mangaroa Flood Hazard Extent, which results in any undeveloped lots that contain no dwelling or non-residential building, and complies with the requirements of Rule 18.5**

Policies 9.4.4, 9.4.5

Standards

- Suitable future building platform area must be identified and must not be located within the River Corridor.
- Where located within the Erosion Hazard Area, provision of a report by a suitability qualified and experienced person assessing the erosion risk to the proposed building platform in accordance with the requirements of 1.8.10.

Council will restrict its discretion to, and may impose conditions on:

- The matters listed in Rule 18.6;
- The appropriateness of the proposed building platform in terms of area and location and erosion risk in relation to the flood hazard.
- Ability for a future dwelling to be constructed above the 1 in 100 year flood level.
- The effect of the future development of the building platform on the function of the floodplain.
- Consent notice restricting the future development to the identified platform.
- Matters addressing the standards for access under Rule 18.9 where any standards are not met.

Matters for Consideration

18.40 Matters that may be relevant in the consideration of any Discretionary or Non-Complying Activity resource consent may include the following:

Subdivision

- The requirements of section 106 of the Act.
- Whether the proposed allotments are capable of accommodating a range of activities in compliance with zone standards.
- Whether the subdivision compromises future subdivision potential of the land.
- The cumulative effect on existing infrastructure as a result of the proposed subdivision.
- The extent of compliance with the Council's Code of Practice for Civil Engineering Works.
- For subdivisions with a net site area less than 400m^2 located in a Residential (Centres Overlay) Area, the extent to which the proposal meets the requirements for 'small site design and development' of the Design Guide for Residential (Centres Overlay) Areas;
- For subdivisions of a Comprehensive Residential Development, the extent to which the proposal meets the requirements of the Design Guide for Residential (Centres Overlay) Areas.
- The design and layout of the subdivision where any lot may affect the safe and effective operation and maintenance of, and access to, regionally significant network utilities (excluding the National Grid), located on or in proximity to the site.
- The outcome of consultation with the owner or operator of regionally significant network utilities (excluding the National Grid) located on or in proximity to the site.

  Note: Rule 18.29 covers subdivision within the Electricity Transmission Corridor.
- The design and layout of the subdivision where any lot may affect the safe and effective operation and maintenance of, and access to, consented or existing renewable energy generation activities located on or in proximity to the site.
- The outcome of consultation with the owner or operator of consented or existing renewable energy generation activities located on or in proximity to the site.
- Account must be taken of the future development potential of adjoining or adjacent land.
- Account must be taken of any potential reverse sensitivity effects on regionally significant network utilities (excluding the National Grid).
- Where located within an identified flood hazard extent, any relevant restricted discretionary activity matters for subdivision.

19 RURAL ZONE RULES

Activities Tables

Policies 3.4.1, 5.4.1, 5.4.2, 5.4.3, 5.4.9, 5.4.10, 9.4.4, 9.4.5, 9.4.10, 14.4.6, 16.4.7

19.1	**Subdivision Activities**
Subdivision excluding unit title subdivision	
Subdivision which complies with the standards in rules 19.5 and 19.8 unless specified below	**C**
Subdivision which does not comply with the standards specified in rule 19.5	**D**
Subdivision which complies with the standards of rule 19.5 but not rule 19.8	**RD**
Subdivision around any existing lawfully established dwelling which does not result in the creation of any new undeveloped site that contains no dwelling **Note:** this form of subdivision does not need to comply with the minimum net site area requirements of rule 19.5, but does need to comply with the access standards of rule 19.8	**C**
Subdivision around any existing lawfully established dwelling which does not result in the creation of any new undeveloped site that contains no dwelling, that does not comply with the access standards of rule 19.8	**RD**
Subdivision of land for utilities, reserves or conservation purposes	**C**
Subdivision of a site identified in Schedules 26.8 or 27.7	**D**
Subdivision in the Blue Mountains Area	**NC**
Creation of a lot that does not have formed legal access to a formed legal road, unless the proposal is for a paper road or other access to be formed as a condition of subdivision approval in accordance with the Code of Practice for Civil Engineering Works	**NC**
Subdivision which creates building platforms within 32m of high voltage (110kV or greater) electricity transmission lines as shown on the Planning Maps *(refer to the definition of *transmission line*)	**RD**

Subdivision of a site within the Pinehaven Catchment Overlay	
Subdivision of a site within the Pinehaven Catchment Overlay	**RD**
Subdivision of a site within the Pinehaven Catchment Overlay that does not meet the standard of 19.27a	**NC**
Subdivision in the Mangaroa Flood Hazard Extent	
Subdivision within the Ponding Area and Erosion Hazard Area of the Mangaroa Flood Hazard Extent, which results in any undeveloped lots that contain no dwelling or non-residential building.	**RD**
Subdivision within the Ponding Area and Erosion Hazard Area of the Mangaroa Flood Hazard Extent which results in any undeveloped lots that contain no dwelling or non-residential building, where one or more of the following occurs; • the proposed access is below the 1 in 100-year flood level; • proposed access is located within an overflow path; • proposed lots do not comply with standard 19.5.	**D**
Subdivision within the Mangaroa Flood Hazard Extent which results in any new undeveloped lots that contain no dwelling, where one or more of the following occurs; • the proposed building platform is located within an overflow path or river corridor; • access to the building platform is within a river corridor	**NC**
Updates of existing company lease and cross lease, and all unit title subdivision	
Subdivision which is a unit title subdivision or an alteration to a company lease, unit title or cross lease title to include a building extension or alteration or accessory building on the site (excluding an additional dwelling) that has been lawfully established in terms of the Building Act 2004	**C**

Restricted Discretionary Activities

19.28 **Subdivision of a site within the Pinehaven Catchment Overlay**

Policy 9.4.10

Standards:

- Achieves hydraulic neutrality.
- Provision of a report by a suitably qualified and experienced person providing an assessment of the ability for the site to achieve hydraulic neutrality in accordance with the requirements of 1.8.11.
- Compliance with the standards of Rule 19.5.

Council will restrict its discretion to, and may impose conditions on:

- The matters contained in Rule 19.6.
- Ability for the subdivision and proposed design to ensure peak flow of stormwater discharge will be no greater than pre-subdivision levels and thus achieve hydraulic neutrality.
- The effect of the subdivision on the Pinehaven Flood Hazard Extent.
- Recommendations and mitigation measures of the hydraulic report.
- Consent notice restricting the future development of the lot to the design and recommendations of the hydraulic neutrality report.
- Matters addressing the standards for access under Rule 19.8 where any standards are not met.

19.29 **Subdivision within the Ponding Area or Erosion Hazard Area of the Mangaroa Flood Hazard Extent which results in any undeveloped lots that contain no dwelling or non-residential building.**

Policies 9.4.4, 9.4.5, 14.4.6

Standards:

- where the proposed building platform is located within the Erosion Hazard Area, provision of a report by a suitability qualified and experienced person to determine the erosion risk is required in accordance with 1.8.10;
- suitable future building platform area for the dwelling must be identified and must not be located within an overflow path or river corridor.
- Access serving the building platform is above the 1 in 100-year flood level and does not cross an overflow path or river corridor.
- Complies with the standards of Rule 19.5.

Council will restrict its discretion to, and may impose conditions on:

- The matters contained in Rule 19.6.
- The appropriateness of the proposed building platform in terms of area and location in relation to the flood hazard and/or erosion risk;
- Ability for a future dwelling to be constructed above the 1 in 100 year flood level.
- The effect of the future development of the building platform on the function of the floodplain.
- Consent notice restricting the future development to the

identified platform.

- The suitability of the proposed access to the future building platform to facilitate access during a 1 in 100-year flood event and does not obstruct or divert floodwater flows within the Flood Hazard Extent.

Matters for Consideration

19.30 Matters that may be relevant in the consideration of any Discretionary or Non-Complying Activity resource consent may include the following:

Subdivision

- The requirements of section 106 of the Act.
- Whether the proposed allotments are capable of accommodating a range of activities in compliance with zone standards.
- Whether the subdivision compromises future subdivision potential of the land.
- The cumulative effect on existing infrastructure as a result of the proposed subdivision.
- The extent of compliance with Council's Code of Practice for Civil Engineering Works.
- Where located within the Mangaroa Flood Hazard Extent;
  - An assessment of the proposed access to the building platform to achieve suitable access during a 1 in 100-year flood event, and its effect on obstructing or diverting overflow paths or floodwater flows within the Flood Hazard Extent.
  - ability for the building platform to accommodate a future building with a finished floor level above the 1 in 100-year level
  - suitability of the proposed lot areas to accommodate future activities
  - Consent notice restricting the future development to the identified building platform area.

20 BUSINESS ZONE RULES

Activities Tables

Policies 3.4.1, 6.4.1, 9.4.4, 9.4.5, 16.4.7

20.1 Subdivision Activities	
Subdivision excluding unit title subdivision	
Subdivision which complies with the standards in rules 20.5 and 20.8 unless specified below	**C**
Subdivision in the Wallaceville Structure Plan Area that does not comply with the standards in rules 20.5 and 20.8 unless specified below	**RD**
Subdivision which does not comply with the standards specified in rule 20.5	D
Subdivision which complies with the standards of rule 20.5 but not 20.8	**RD**
Subdivision in the Wallaceville Structure Plan Area that does not comply with the standards of rule 20.5 and 20.8	**D**
Subdivision around any existing lawfully established dwelling or commercial unit which does not result in the creation of any new undeveloped site that contains no dwelling or commercial unit **Note:** this form of subdivision does not need to comply with the minimum net site area requirements of rule 20.5, but does need to meet the access standards of rule 20.8	**C**
Subdivision around any existing lawfully established dwelling or commercial unit which does not result in the creation of any new undeveloped site that contains no dwelling or commercial unit, that does not comply with the access standards of rule 20.8	**RD**
Subdivision of land for utilities, reserves or conservation purposes	**C**
Subdivision of a site identified in Schedules 26.8 or 27.7	**D**
Creation of a lot that does not have formed legal access to a formed legal road, unless the proposal is for a paper road or other access to be formed as a condition of subdivision approval in accordance with the Code of Practice for Civil Engineering Works	**NC**

Subdivision which creates building platforms within 20m of high voltage (110kV or greater) electricity transmission lines as shown on the Planning Maps *(refer to the definition of *transmission line*)	**RD**
Subdivision within the Pinehaven Flood Hazard Extent	
Subdivision within the ponding area the Pinehaven Flood Hazard Extent, which results in any undeveloped site that contains no building, and complies with the requirements of Rule 20.5	**RD**
Subdivision within the Pinehaven Flood Hazard Extent which results in any undeveloped lots that contain no building, and does not comply with the requirements of Rule 20.5	**NC**
Subdivision within the Mangaroa Flood Hazard Extent	
Subdivision within the Erosion Hazard Area of the Mangaroa Flood Hazard Extent, which results in any undeveloped lots that contain no building, and complies with the requirements of Rule 20.5.	**RD**
Subdivision within the Mangaroa Flood Hazard Extent which results in any undeveloped lots that contain no building, where one or more of the following occurs; • does not comply with the requirements of Rule 20.5; • the proposed building platform is located within a river corridor.	**NC**
Updates of existing company lease and cross lease, and all unit title subdivision	
Subdivision which is a unit title subdivision or an alteration to a company lease, unit title or cross lease title to include a building extension or alteration or accessory building on the site (excluding an additional dwelling) that has been lawfully established in terms of the Building Act 2004	C
Any subdivision not provided for in this table	**D**

Key

P Permitted activity which complies with standards for permitted activities specified in the Plan

C Controlled activity which complies with standards for controlled activities specified in the Plan

RD Restricted discretionary activity

D Discretionary activity

NC Non complying activity

Restricted Discretionary Activities

20.32 **Subdivision within the ponding area of the Pinehaven Flood Hazard Extent, which results in any undeveloped site that contains no building, and complies with the requirements of Rule 20.5.**

Policy 9.4.5

Council will restrict its discretion to, and may impose conditions on:

- The matters contained in Rule 20.6.
- The appropriateness of the proposed building platform in terms of area and location in relation to the flood hazard;
- Ability for a future building to be constructed above the 1 in 25-year flood level;
- The effect of the future development of the building platform on the function of the floodplain;
- Consent notice restricting the future development to the identified platform.
- Matters addressing the standards for access under Rule 20.8 where any standards are not met.

20.33 **Subdivision within the Erosion Hazard Area of the Mangaroa Flood Hazard Extent, which results in any undeveloped lots that contain no building, and complies with the requirements of Rule 20.5.**

Policies 9.4.4, 9.4.5

Standards:

- Suitable future building platform area must be identified and must not be located within the River Corridor;
- Where the proposed building platform is located within the Erosion Hazard Area, provision of a report by a suitability qualified and experienced person to determine the erosion risk to the proposed building platform is required in accordance with 1.8.10;

Council will restrict its discretion to, and may impose conditions on:

- The matters contained in Rule 20.6.
- The appropriateness of the proposed building platform in terms of area and location in relation to the flood hazard;
- Ability for a future building to be constructed above the 1 in 100-year flood level;

- The effect of the future development of the building platform on the function of the floodplain;
- Consent notice restricting the future development to the identified platform.
- The suitability of the proposed access to the future building platform to facilitate access during a 1 in 100-year flood event and does not obstruct or divert floodwater flows within the Flood Hazard Extent.

23 RULES FOR EARTHWORKS

Activities Tables

Policies 9.4.1, 9.4.2, 9.4.6, 9.4.7, 9.4.8, 9.4.9, 12.4.8, 16.4.7

23.1 Earthworks	*All Zones*
Earthworks which meet the standards under rules 23.2 –23.17	P
Earthworks on a site identified in Schedule 26.8 or affecting a tree identified in Schedule 27.7 or 27A.14 For the purposes of this rule, the following exclusion applies: Earthworks undertaken by a network utility operator affecting a tree identified in Schedule 27A.14 when undertaken in compliance with the rules of Chapters 27A.	**D**
Earthworks which do not meet the standards under rules 23.2 – 23.17 (unless specifically identified as a Discretionary or Non-Complying Activity)	**RD**
Earthworks within an area identified as Southern Hills Overlay Area which meet the standards under rules 23.2 to 23.13	**P**
Earthworks within an area identified as Southern Hills Overlay Area which do not meet any one or more of the standards under rules 23.2 to 23.11, but meet the standards under rules 23.12 and 23.13	**RD**
Earthworks within an area identified as Southern Hills Overlay Area which do not meet any one or more of the standards under rules 23.2 to 23.13	**D**
Earthworks within the Pinehaven Flood Hazard Extent	
Earthworks within the ponding area of the Pinehaven Flood Hazard Extent which are directly required for the building platform associated with the alteration and addition to existing buildings, including new accessory buildings, and are less than 20m^2 in area.	**P**
Earthworks associated with the flood mitigation works within the Pinehaven Flood Hazard Extent.	**P**
Earthworks associated with the maintenance, upgrade or installation of network utilities within the ponding area, overflow path or stream corridor of the Pinehaven Flood Hazard Extent where earthworks are located within the legal road reserve, and complies with standards under Rule 23.17.	**P**

All earthworks not associated with permitted building extensions (up to 20m²) or flood mitigation works within the ponding area of the Pinehaven Flood Hazard Extent.	**RD**
Earthworks within the Pinehaven Flood Hazard Extent (excluding those associated with flood protection works and network utilities identified as permitted activities), which are within the overflow path or stream corridor.	**NC**
Earthworks within the Mangaroa Flood Hazard Area	
Earthworks within the Ponding Area of the Mangaroa Flood Hazard Extent, except in the Residential Zone, are a Permitted Activity where the proposal complies with the relevant zone standards for Permitted Activities	**P**
Earthworks associated with flood mitigation works within the Mangaroa Flood Hazard Extent	**P**
Earthworks associated with the maintenance, upgrade or installation of network utilities within the overflow path or river corridor of the Mangaroa Flood Hazard Extent where earthworks are located within the legal road reserve, and complies with the standards under Rule 23.17.	**P**
Earthworks within the Ponding Area (excluding the Erosion Hazard Area) of the Mangaroa Flood Hazard Extent where one of the following applies; • the proposal does not meet the Permitted Activity earthworks standards for the relevant zone, or • the proposal is within the Residential Zone;	**RD**
Earthworks within the Erosion Hazard Area of the Mangaroa Flood Hazard Extent.	**RD**
Earthworks within an Overflow Path of the Mangaroa Flood Hazard Extent (excluding those associated with network utilities that are otherwise identified as a Permitted Activity).	**D**
Earthworks within the River Corridor of the Mangaroa Flood Hazard Extent (excluding those associated with network utilities that are otherwise identified as a Permitted Activity).	**NC**
Note:	
For the purposes of this Plan, earthworks are defined as: *'the removal, relocation or depositing of soil, earth or rock from, to or within a site, including quarrying or mining and the deposition of cleanfill, but excluding land disturbance resulting exclusively from domestic gardening and planting, cropping or drainage of land in connection with farming and forestry operations'.*	

Key

P Permitted activity which complies with standards for permitted activities specified in the Plan

RD Restricted discretionary activity

D Discretionary activity

NC Non-complying activity

	Standards for Permitted Activities
23.14 Policy 9.4.9	**Earthworks associated with flood mitigation works within the Pinehaven or Mangaroa Flood Hazard Extents.** Must be undertaken by Greater Wellington Regional Council, Upper Hutt City Council or their nominated contractor and be for the express purpose of mitigating the identified flood hazard and, where applicable, achieving the design and objectives of the relevant floodplain mitigation plan.
23.15 *Policies 9.4.7, 9.4.8*	**Earthworks within the ponding area of the Pinehaven Flood Hazard Extent which are directly required for the building platform** Within the ponding area of the Pinehaven Flood Hazard Extent, earthworks directly required for the building platform associated with the alteration and addition to existing buildings, including new accessory buildings, are a permitted activity provided they are 20m^2 or less in area providing they comply with the following standards: • Earthworks must be directly associated with the building platform of the proposed extension or alteration or new accessory building provided for as a permitted activity under Rule 33.2, and • The earthworks cannot exceed 20m^2 in area; and • The earthworks must not be within the stream corridor or an overflow path.
23.16 *Policy 9.4.6, 9.4.7, 9.4.8*	**Earthworks within the Ponding Area of the Mangaroa Flood Hazard Extent, except in the Residential Zone, where the proposal complies with the relevant zone standards for Permitted Activities.**

The earthworks are required to comply with the following standards

- Must not be within the Erosion Hazard Area, River Corridor or Overflow Path; and
- Must not be located in a Residential Zone; and
- Complies with the relevant earthworks zone standards for Permitted Activities.

23.17

Policy 9.4.6, 9.4.7, 9.4.8, 16.4.18

Earthworks associated with the maintenance, upgrade or installation of network utilities within the identified Pinehaven and Mangaroa Flood Hazard Extents where earthworks are located within the legal road reserve;

Standards

- Ground levels are reinstated to those existing prior to the works; or,
- Earthworks are associated with the installation of underground utilities using directional drilling or thrusting techniques.

	Restricted Discretionary Activity

23.18 **Earthworks which do not meet the standards under rules 23.2 – 23.11**

Policies 9.4.1, 9.4.2, 16.4.7

Council will restrict its discretion to, and may impose conditions on:

- Avoiding, remedying or mitigating effects related to the standard in question.
- Financial contributions.

23.19 **Earthworks within an area identified as Southern Hills Overlay Area which do not meet the standards under rules 23.2- 23.11, but meet the standards under rules 23.12 and 23.13**

Policies 9.4.1, 9.4.2, 12.4.8

Council will restrict its discretion to, and may impose conditions on:

- Avoiding, remedying or mitigating effects relating to the standard in question.
- Effects on visual values.
- Effects on landscape values.
- Effects on ecological values.

- Measures to avoid, remedy or mitigate potential adverse effects.

23.20

Policies 9.4.2, 9.4.6, 9.4.7, 9.4.8

All earthworks not associated with permitted building extensions (up to 20m²) or flood mitigation works within the ponding area of the Pinehaven Flood Hazard Extent

Standard:

- Must not be within the stream corridor or an overflow path.

Council will restrict its discretion to, and may impose conditions on:

- Height of cut or fill and area of earthworks above ground level.
- Earthworks stability.
- Erosion and sediment control.
- Effect on the flooding risk to people and property
- Permanent surface treatment of earthwork area.
- Avoiding, remedying or mitigating effects related to the standard in question.
- Financial contributions.

23.21

Policies 9.4.6, 9.4.7, 9.4.8

Earthworks within the Ponding Area (excluding the Erosion Hazard Area) of the Mangaroa Flood Hazard Extent where one of the following applies;

- **the proposal does not meet the Permitted Activity earthworks standards for the relevant zone, or**
- **the proposal is within the Residential Zone;**

Standards:

- Must not be within the Erosion Hazard Area, an Overflow Path or the River Corridor.

Council will restrict its discretion to, and may impose conditions on:

- Height of cut or fill and area of earthworks above ground level.
- Earthworks stability
- Erosion and sediment control
- Effect on the flood risk to people and property
- Permanent surface treatment of earthwork area
- Avoiding, remedying or mitigating effects related to the standard in question.

- Financial contributions.

23.22
Policies 9.4.6, 9.4.7, 9.4.8

Earthworks within the Erosion Hazard Area of the Mangaroa Flood Hazard Extent are a Restricted Discretionary Activity in all zones.

Standards:

- Where the proposal is located within the Erosion Hazard Area, provision of a report by a suitability qualified and experienced person to determine the erosion risk is required in accordance with the requirements of 1.8.10;
- Must not be within the River Corridor or an Overflow Path (but includes ponding areas within the Erosion Hazard Area).

Council will restrict its discretion to, and may impose conditions on:

- Effect on slope stability and appropriateness of the works based on the provided report required by 1.8.10
- Height of cut or fill and area of earthworks above ground level
- Erosion and sediment control
- Effect on the flood risk to people and property
- Permanent surface treatment of earthwork area
- Financial contributions

Matters for Consideration

23.23 Matters that may be relevant in the consideration of any Discretionary or Non-Complying Activity resource consent may include the following:

Earthworks

- The extent to which any cut or fill will remove existing vegetation, alter existing landforms, affect water quality, cause or contribute to land instability, soil erosion or affect existing natural features, such as water bodies.
- The effect of any cut or fill on any stands of important indigenous vegetation, or sites, buildings or places of scientific, cultural or heritage value.
- The extent to which any cut or fill can be restored or treated to resemble natural landforms.
- The extent to which the proposed earthworks will impact on prominent or visually sensitive features, such as ridgelines, escarpments, water bodies, or high visual and/or landscape value areas identified within the Southern Hills Overlay Area.
- The proposed methods and timing to avoid, remedy or mitigate potential adverse effects including rehabilitation, re-contouring and re-vegetation or retention of existing vegetation.
- The necessity for carrying out the work, and extent to which the earthworks are required.
- Whether the earthworks proposed increase or decrease flood hazards.
- The time period when the soil will be exposed.
- Traffic movements.
- Noise.
- Dust.
- The findings of any assessment prepared by a suitably qualified expert ecologist or landscape planner, either commissioned by Council or accompanying a resource consent application.
- The Southern Hills Environmental Management Study prepared for Upper Hutt City Council by Boffa Miskell Ltd July 2008
- Effect on the diversion or obstruction of flood waters in the overflow path and stream/river corridors and proposed measures to mitigate the effect on the function of the floodplain.
- Effect of the flood risk to people and property.

30 RULES FOR NETWORK UTILITIES

STANDARDS FOR PERMITTED ACTIVITIES

30.8a

Policy 16.4.18

Network utility structures (excluding cabinets) that

- **Cross a stream or river; and,**
- **are within an identified flood hazard area;**

must either:

- **be located underground; or,**
- **positioned above the 1 in 100-year flood level (except when attached to existing lawfully established crossing structures such as bridges in which case the Network utility structure must not be fixed or positioned any closer to the stream bed or river bed than the lowest point of the existing crossing structure.**

Restricted Discretionary Activities

30.13

Policy 16.4.8, 16.4.9, 16.4.12, 16.4.18

Cabinets and other network utility structures not otherwise listed in this table that do not meet all of the relevant standards.

Council will restrict its discretion to, and may impose conditions on:

- The degree, extent and effects of the non-compliance with the Permitted Activity Standards
- Risks to public health and safety
- Any effect on heritage and cultural values
- Design and external appearance
- Visual effect including impacts on:
    - The residential and recreational use of land in the vicinity of the proposed utility;
    - The existing character, landscape, streetscape and amenity values of the locality;
    - Key public places, public viewing points and significant recreational areas
- Amenity effects, including noise vibration, odour, dust, earthworks and lighting

- Any potential interference with public use and enjoyment of the land and the operation of land uses in the vicinity
- Measures to mitigate the bulk and scale of the utility, including screening, colour and finish treatment, earth mounding and/or planting, viewing distances, the location of support structures
- Whether the size and scale of the proposal is generally compatible with other development in the area
- Any adverse effects on traffic and pedestrian safety including sight lines and the visibility of traffic signage.
- The extent to which the affected persons/community has been consulted with.
- Except in the case of cabinets, where located within an identified Flood Hazard Extent:
  - The extent to which the utility or network utility structure will be adversely impacted during a flood event;
  - Where proposed to cross a river or stream, the extent to which the Network Utility Structure will adversely contribute to blockages or obstructing flood flows;
  - The extent to which the utility will adversely impact the flood hazard area, exacerbating the effect on people and property on adjacent sites and/or adversely affect the function of the flood hazard extent.
  - The extent to which locating the Network Utility Structure within the Flood Hazard Extent will provide and local, regional or national benefit.

33 RULES FOR FLOODING AND FAULT BAND HAZARDS

Activities Table

Policies 14.4.1, 14.4.2, 14.4.3, 14.4.4, 14.4.5, 14.4.6, 14.4.7.

33.1 Activities	All Zones
Flood mitigation works undertaken or approved by a local authority	**P**
Buildings and structures to be erected within the 1% (1 in 100 year) flood extent of the Hutt River, as shown on the Planning Maps.	**D**
Any new habitable building or structure to be erected within the fault band identified on the Planning Maps.	**D**
Pinehaven Flood Hazard Extent and Pinehaven Catchment Overlay	
Within the ponding area of the Pinehaven Flood Hazard Extent the alteration and addition to existing buildings, or construction of accessory buildings are a Permitted Activity provided the gross floor area is less than 20m^2 and the proposal complies with the relevant zone standards for permitted activities.	**P**
Driveways and bridges over the Pinehaven Stream	**C**
Within the ponding area of the Pinehaven Flood Hazard Extent the construction of new buildings, or alteration and addition to existing buildings, including accessory buildings over 20m^2, that are not Permitted Activities.	**RD**
Visitor accommodation or residential accommodation activities within the Commercial Business Zone of the Pinehaven Flood Hazard Extent.	**RD**
Any part of a fence within an overflow path of the Pinehaven Flood Hazard Extent.	**RD**
Any building within the Pinehaven Catchment Overlay must achieve hydraulic neutrality for stormwater runoff.	**RD**
Any part of a building within an overflow path of the Pinehaven Flood Hazard Extent.	**D**
Within the Pinehaven Flood Hazard Extent, any Permitted, Controlled or	**NC**

Restricted Discretionary Activity which fails to comply with any of the relevant Permitted Activity conditions, Controlled or Restricted Discretionary Activity Standards or Terms and is not identified as a Discretionary Activity, is a Non-Complying Activity.	
Any building, structure or fence within the stream corridor of the Pinehaven Flood Hazard Extent (except where provided for under the rule for driveways and bridges as a Controlled Activity).	**NC**
Mangaroa Flood Hazard Extent	
Within the Ponding Area of the Mangaroa Flood Hazard Extent (outside the Erosion Hazard Area), the construction of a new, or alteration and addition to an existing, accessory building is a Permitted Activity where the proposal complies with the relevant zone standards for permitted activities.	**P**
Within the Ponding or Erosion Hazard Area within the Mangaroa Flood Hazard Extent, the primary driveway or vehicle access serving the dwelling is a Permitted Activity.	**P**
Within either the Ponding Area or Erosion Hazard Area of the Mangaroa Flood Hazard Extent, where one or more of the following occurs; • the construction of new dwellings • the alteration and addition to existing dwellings, • construction of accessory buildings in the Erosion Hazard Area • construction of otherwise permitted non-residential buildings • residential accommodation for caretaker activities in the Business Industrial Zone	**RD**
Within the Ponding Area or Erosion Hazard Area of the Mangaroa Flood Hazard Extent, the primary driveway or vehicle access serving the dwelling where below the 1 in 100 year flood level.	**RD**
Within either the Ponding Area or Erosion Hazard Area of the Mangaroa Flood Hazard Extent, where one or more of the following occurs; • the construction of new dwellings • the alteration and addition to existing dwellings • construction of otherwise permitted non-residential buildings; • residential accommodation for caretaker activities in the Business Industrial Zone which have a FFL below the 1 in 100 year flood level	**D**
Within the Overflow Path of the Mangaroa Flood Hazard Extent, where one or more of the following occurs; • the construction of new dwellings • the alteration and addition to existing dwellings • construction of accessory buildings • construction of otherwise permitted non-residential buildings;	**D**
Within an Overflow Path of the Mangaroa Flood Hazard Extent, the primary driveway or vehicle access serving the dwelling	**D**

Within the River Corridor of the Mangaroa Flood Hazard Extent, where one or more of the following occurs; • The primary driveway or vehicle access serving the dwelling is located in the River Corridor; • the construction of new dwellings • the alteration and addition to existing dwellings, • construction of accessory buildings • construction of otherwise permitted non-residential buildings; • residential accommodation for caretaker activities in the Business Industrial Zone	**NC**
Note:	
Network Utility Structures are addressed through the provisions within Chapter 16 and 30. For the avoidance of doubt any Network Utility Structure activity undertaken by a network utility operator within the Flood Hazard Extent in accordance with the provisions of Chapter 30, will prevail over the provisions of Chapter 33.	

Key

P Permitted activity which complies with standards for permitted activities specified in the Plan

C Controlled activity which complies with standards for controlled activities specified in the Plan

RD Restricted Discretionary Activity

D Discretionary activity

NC Non-Complying Activity

Standards for Permitted and Controlled Activities

33.2

Policies 14.4.2,

Within the ponding area of the Pinehaven Flood Hazard Extent the alteration and addition to existing buildings, or construction of accessory buildings are a Permitted Activity provided the gross floor area is less than 20m² and the proposal complies with the relevant zone standards for permitted activities.

- Additions and alterations are not below the floor level of the existing building, and do not exceed 20m² in area.
- Must not be within the stream corridor or overflow path.
- Only one addition to the existing building following the date of

notification of this plan change.

33.3 ***Driveways and bridges over the Pinehaven Stream***

Policy 14.4.6

- Only one crossing per property
- No fences (excluding required support rails) are to be constructed along the bridge crossing.

Council may impose conditions over the following matters

- Design of the crossing to avoid obstructing the stream corridor from conveying flood water.

33.4 ***Within the Ponding Area of the Mangaroa Flood Hazard Extent (outside the Erosion Hazard Area), the construction of a new, or alteration and addition to an existing, accessory building is a Permitted Activity where the proposal complies with the relevant zone standards for permitted activities.***

Policy 14.4.9

- The construction or additions and alterations are not within the river corridor, overflow path or Erosion Hazard Area
- The construction or additions and alterations comply with the relevant zone standards for permitted activities.

33.5 ***Within the Ponding or Erosion Hazard Area within the Mangaroa Flood Hazard Extent, the primary driveway or vehicle access serving the dwelling is a Permitted Activity.***

Policy 14.4.8

- The access is above the 1 in 100-year flood level, and
- Does not cross an overflow path or river corridor

Restricted Discretionary Activities

33.6
Policy 14.4.4.

Within the ponding area of the Pinehaven Flood Hazard Extent the construction of new buildings, or alteration and addition to existing buildings, including accessory buildings over 20m², which are not Permitted Activities, are a Restricted Discretionary Activity.

Standards:

- The Finished Floor Level must be above the 1 in 100-year event level for residential activities, or;
- The Finished Floor Level above the 1 in 25-year event level if a commercial activity within the Business Commercial Zone.
- The buildings, additions or alterations must not be within the stream corridor or an overflow path.

Council will restrict its discretion to, and may impose conditions on:

- Building floor level.
- Building location within the site.
- Building floor area.
- Effect of displacement of flood waters from the site.

33.7

Visitor accommodation or residential accommodation activities within the Business Commercial Zone of the Pinehaven Flood Hazard Extent are a Restricted Discretionary Activity.

Policy 14.4.4

Standard:

- Activities must be in buildings with a Finished Floor Level above the 1 in 100-year event level.

Council will restrict its discretion to, and may impose conditions on:

- Where residential accommodation is proposed, the susceptibility of the activity to flood hazards and whether appropriate mitigation can be achieved

33.8

Policy 14.4.6

Any part of a fence within an overflow path of the Pinehaven Flood Hazard Extent.

Standard:

- The design of the fence must not obstruct the direction or route of the overflow path.

Council will restrict its discretion to, and may impose conditions on:

- Effect on the overflow path's ability to convey flood water along the identified route shown on the relevant hazard map.

33.9

Policy 14.4.7

Any building within the Pinehaven Catchment Overlay must achieve hydraulic neutrality for stormwater runoff.

Standards:

- Achieves hydraulic neutrality
- Provision of a report by a suitably qualified and experienced person providing an assessment of the ability for the site to achieve hydraulic neutrality in accordance with the requirements of 1.8.11.

Council will restrict its discretion to, and may impose conditions on:

- To avoid, remedy or mitigate the effects of any increase in risk to people or property as a result of the peak runoff.
- Ability for the proposed development and proposed design to ensure peak flow of stormwater discharge will be no greater than pre-subdivision levels and thus achieve hydraulic neutrality.
- Mitigation measures proposed to achieve hydraulic neutrality.
- Effect on the Pinehaven Flood Hazard Extent.

33.10

Policies 14.4.4, 14.4.6

Within either the Ponding or Erosion Hazard Area of the Mangaroa Flood Hazard Extent, where one or more of the following occurs;

- ***the construction of new dwellings***
- ***the alteration and addition to existing dwellings,***
- ***construction of accessory buildings in the Erosion Hazard Area***
- ***construction of otherwise permitted non-residential***

buildings

- ***residential accommodation for caretaker activities in the Business Industrial Zone***

Standards

- Finished Floor Level above the 1 in 100-year event level for:
  - the construction of new dwellings
  - the alteration and addition to existing dwellings,
  - construction of otherwise permitted non-residential buildings;
  - residential accommodation for caretaker activities in the Business Industrial Zone
- Building must not be located within an overflow path or river corridor.
- Where the proposal is located within the Erosion Hazard Area, provision of a report by a suitably qualified and experienced person is required to determine the erosion risk in accordance with the requirements of 1.8.10.

Council will restrict its discretion to, and may impose conditions on:

- assessment of the appropriateness of the proposed building location in terms of area and position in relation to the flood hazard and erosion risk and any recommendations of the report required by 1.8.10;

- Where residential accommodation is proposed, the susceptibility of the activity and whether appropriate mitigation can be achieved

33.11

Policy 14.4.6

Within the Ponding or Erosion Hazard Area of the Mangaroa Flood Hazard Extent, the primary driveway or vehicle access serving the dwelling where below the 1 in 100-year flood level is a Restricted Discretionary Activity.

Council will restrict its discretion to, and may impose conditions on:

- The suitability of the proposed access to facilitate evacuation during a 1 in 100 year flood event.

Matters for Consideration

33.~~2~~12 Matters that may be relevant in the consideration of any Discretionary or Non-Complying Activity resource consent include the following:

Flood hazards

- Whether the proposed development would increase the level of risk or jeopardise the safety of the occupants and other persons.
- The effects of any earthworks or infilling.
- In addition, where located within the Pinehaven Flood Hazard Extent;
  - Effect on the overflow path's ability to continue conveying flood water.
  - Any increase in risk to people or property as a result of the building location.
- In addition, where located within the Mangaroa Flood Hazard Extent;
  - Assessment of the appropriateness of the proposed building location and floor level in terms of area and position in relation to the flood hazard and erosion risk
  - Where residential accommodation is proposed, the susceptibility of the activity and whether appropriate mitigation can be achieved;
  - Assessment of the effect of the building on the function of the floodplain and whether it would unacceptably obstruct or divert floodwater flows within the Flood Hazard Extent.
  - The suitability of the proposed access during a 1 in 100-year flood event, and its effect on obstructing or diverting overflow paths or floodwater flows within the Flood Hazard Extent

Buildings within the fault band

- The accuracy of information relating to the location of the fault.
- The potential effects of an earthquake in terms of the nature and scale of use proposed for the building.
- The extent to which the building complies with Clause B1 Structure of the New Zealand Building Code.
- The measures proposed to avoid, remedy or mitigate the effects of an earthquake.

34 RULES FOR HAZARDOUS SUBSTANCES AND CONTAMINATED LAND

Matters for Consideration

34.5 Matters that may be relevant in the consideration of any resource consent may include the following:

Environmental Risk Assessment

A qualitative or quantitative risk assessment is required, by a suitably qualified person, identifying any risk to both the environment and the community with particular attention to:

1. The sensitivity of the surrounding natural and physical environment, including:

   - Aquifers, wetlands, streams/rivers/lakes.
   - Nature of subsoil.
   - Ecosystems, habitats, important stands of native vegetation, identified ecological areas and the potential of the substances to damage or destroy the life-supporting capacity of the habitats or the environment.

2. Methods and location for the disposal of the hazardous substances or contaminants.

3. Susceptibility of the site to natural hazards including flood hazards, the presence of other active geological or geomorphological processes and the probability of a hazard event occurring. An assessment of the scale and probability of flood hazards occurring, the potential impact of a breach and how the facility is designed to avoid flood water mixing with hazardous substances and escaping from the site.

4. Site drainage and off-site infrastructure (for example stormwater, sewer type and capacity).

5. Cumulative and synergistic effects, and bioaccumulation of hazardous substances used, stored, manufactured or disposed of.

6. The number of people potentially at risk from the activity, and:

   - the risk to health and safety of adjacent property and people in the locality;
   - location of sensitive activities (for example hospitals, educational and child care facilities, dwellings, parks and reserves, heritage or cultural sites, places of public assembly and the like);

- suitability of the surrounding area for future residential growth.

7. Monitoring systems.

Insert Urban Hazard Maps 1 to 50
Insert Rural Hazard Maps 1 to 33