## Site

Wharf Street to Railway Concrete Floodwall

Start NZTM X:1770752 Y:5576372

End NZTM X:1770855 T:5576336

## Legal Description(s)

Pt Section 227 Right Bank Whanganui River - Whanganui District Council

Pt Section 392 Right Bank Whanganui River - Whanganui District Council



Annex 4B - Lower Whanganui Designations

1:2,500

## Site

Gilberd Street Block Flood Wall

Start NZTM X:1771066 Y:5575207

End NZTM X:1171189 Y:5576144

# Legal Description(s)

Owner: Whanganui District Council

Lot 2 DP 50299

Pt Lot K Right Bank Whanganui River

Lot 1 DP 46506

TO FORM F18 (18-1)

# **DESIGNATION FOR FLOOD CONTROL PURPOSES**

## Site

Sailing Club Block Flood Wall

Start NZTM X:1771816 Y:5575867

End NZTM X:1771922 Y: 5575829

# Legal Description(s)

Owner: Whanganui District Council

Road Reserve

## Site

Karoro Street Block Flood Wall

Start NZTM X:1772260 Y:5575676

End NZTM X:1772422 Y: 5575632

# Legal Description(s)

Owner: Whanganui District Council

Road Reserve

## Site

Affco Block Flood Wall

Start NZTM X:1773256 Y:5575637

End NZTM X:1773289 Y: 5575659

# Legal Description(s)

Owner: Affco New Zealand Ltd

Lot 2 DP 420707

## Site

Affco Concrete Flood Wall

Start NZTM X:1773294 Y:5575649

End NZTM X:1773284 Y: 5575699

## Legal Description(s)

Owner: Affco New Zealand Ltd

Lot 2 DP 420707

Owner: Davis, Reuben & Sheree

Pt Lot 19 DP 2471

## Site

Gilberd Street Planter Box

Start X:1771190 Y:5576145

End X:1171218 Y:5576062

# Legal Description(s)

Owner: Whanganui District Council

Road Reserve

#### Site

Heads Road to Wharf Street Stopbank

Start NZTM X:1770859 Y:5576335

End NZTM X: 1770925 Y:5576262

Start NZTM X:1770956 Y:5576200

End NZTM X:1771064 Y:5576208

Start NZTM X:1771319 Y:5576062

End NZTM X:1771828 Y:5575859

Start NZTM X:1771923 Y:5575830

End NZTM X:1772259 Y:5575676

Start NZTM X:1772421 Y:5575630

End NZTM X:1773293 Y:5575645

## Legal Description(s)

Lot 1 DP 11021 - John & Majella Madams

Lot 69 DP 248 - Whanganui District Council

Sec 1 SO 448153 – Whanganui District Council

Notice of Requirement by local authority (Manawatu-Wanganui Regional Council) for designation under Sections 168(1), (2) and 181 and clause 4 of First Schedule, Resource Management Act 1991

To: Wanganui District Council

P O Box 637 Wanganui 4540

From: Manawatu-Wanganui Regional Council

Operations Group Private Bag 11025 Manawatu Mail Centre Palmerston North 4442

 Manawatu-Wanganui Regional Council (trading as Horizons Regional Council) gives notice of a requirement for a designation for a public work namely the

Anzac Parade/Kowhai Park Flood Protection Works.

2. The sites to which the requirement applies is as follows:

Wanganui River stop bank: true left bank from approximately NZTM X:1775598 Y:5579781 (opposite 144 Anzac Parade) to approximately NZTM X:1776063 Y:5577970 (opposite Georgetti Road).

#### Refer to:

- i. ANNEX 1A Legal Descriptions; and
- ii. ANNEX 5B Site Map

#### 3. The nature of the proposed public work is:

The purpose of the designation is "Flood Control – Lower Whanganui River Scheme Anzac Parade/Kowhai Park Flood Protection Works."

The public work is the existing Anzac Parade/Kowhai Park Flood Protection Works on the true left bank of the Lower Whanganui River. It is a nearly continuous system of earth stopbanks. These have been in place for a many years and were originally constructed by the Wanganui District Council.

The public work also includes flood protection improvements planned for summer 2013-14. This includes upgrading existing stopbanks downstream from Dublin Street and constructing new stopbanks at and to the north of Dublin Street. These improvements will bring the flood protection works up to 50 year protection (without provision of freeboard) for the Anzac Parade/Kowhai Park area.

The Anzac Parade/Kowhai Park Flood Protection Improvements were brought forward by Manawatu-Wanganui Regional Council in response to Wanganui District Council's

submission to Manawatu-Wanganui Regional Council's Annual Plan 2013-14. This was approved by the Regional Council at its meeting on 25 June 2013 and will be completed in the summer of 2013-14. The timing of the improvements means that they will be "in existence" by the time this Notice of Requirement is finalised. This is assumed to be the case in this documentation, although reference is made to the Improvements where this provides context for this Notice of Requirement.

Manawatu-Wanganui Regional Council will undertake ongoing repairs and maintenance to ensure the integrity of the Flood Protection Works is sustained into the future.

#### 4. The nature of the proposed restrictions that would apply are:

The Anzac Parade/Kowhai Park Flood Protection Works were constructed by Wanganui District Council. Manawatu-Wanganui Regional Council assumed responsibility for the works in April 2006. There are no known restrictions covering the existing works.

Manawatu-Wanganui Regional Council is planning to undertake flood protection improvement works at Anzac Parade/Kowhai Park that will achieve protection to a level of the 50 year flood event without freeboard. No designation is currently held for the Flood Protection Works so the activity will need to comply with the normal requirements of the Wanganui District Plan. The Improvements will also need to comply with the relevant rules in Manawatu-Wanganui Regional Council Regional Plans having legal effect. The restrictions applying to the Improvements will be specified in the conditions of any Permitted Activity standards or resource consent conditions.

The planned improvements will be completed before the approval process for this Notice of Requirement is finalised, so they can be considered "existing" works for the purposes of this Notice of Requirement.

On-going activities required to repair and/or maintain the Anzac Parade/Kowhai Park Flood Protection Works will be subject to the provisions of relevant regional plans having legal effect in the Manawatu-Wanganui Region. Such repair and maintenance of the Works are likely to be in response to normal "wear and tear" and damage done during flood events. These may be a permitted activity or require a resource consent application if permitted activity standards cannot be complied with.

## The effects that the public work will have on the environment, and the ways in which any adverse effects will be mitigated, are:

The Anzac Parade/Kowhai Park Flood Protection Works has both beneficial and adverse effects on the environment. The biggest potential for adverse effects is during the Flood Protection Improvement Works which will be completed by the time this Notice of Requirement has legal effect. The effects related to this Notice of Requirement are ongoing repairs and maintenance of the completed Works.

#### Beneficial Effects of Flood Protection

Detailed engineering survey of the existing stopbank, together with flood modeling work shows that there is a big variation in flood protection provided by the existing stopbank. This varies from less than 30 year (without freeboard) protection to about

100 year (without freeboard) protection. Overtopping of the stopbank currently begins at very close to the 20 year flood event.

In larger floods over-topping of localized low sections of stopbanks increases the risk of complete bank failure. The rapid increase in water depth and velocity due to a bank failure represents both a risk to properties and a safety hazard to residents.

There are 57 houses estimated to flood at in the 50 year event and the cost of the flood damage to those house and contents is estimated to be \$10.5 Million. There are also additional costs of clearing silt and debris from the arboretum and other parts of Kowhai Park.

The proposed Anzac Parade/Kowhai Park Flood Protection Improvements are considered by the Manawatu-Wanganui Regional Council to provide a cost-effective way of providing a moderate level of flood protection, not inconsistent with what Wanganui Residents may consider they already have.

#### Adverse Effects of Flood Protection Works

The Flood Protection Improvements will be completed by the time this Notice of Requirement is through the approval process and adverse effects will be avoided, remedied or mitigated by Permitted Activity standards or resource consent conditions as appropriate. It is expected that any adverse effects related to routine repairs and maintenance of the improved Flood Protection Works will be similar, but much less significant than the improvement works themselves. The effects of repairs and maintenance activities after significant flood damage may be at a similar scale to the Improvements, however, it is expected that in this situation there will also be a high probability that damage and consequential disruption in the Anzac Parade/Kowhai Park area would also be significant.

- i. Sediment run-off into the River Appropriate sediment control measures will be undertaken to mitigate this effect during construction of improvements and at the time of any repairs and maintenance involving earthworks. This is or will be a requirement for compliance with any relevant Permitted Activity standards or resource consent conditions that may need to be obtained from Manawatu-Wanganui Regional Council.
- ii. Effects on arboretum Once the Flood Protection Improvements have been completed, the potential effects on the arboretum from repairs and maintenance unlikely to be anything but minor. It is noted that the potential for adverse effects as a result of construction of Improvements on valuable trees in the Wanganui District Council arboretum is identified in engineering design reports and short lengths of "planter box" stopbanks will be used where space is restricted by valuable trees through the arboretum as a mitigation measure.
  - Manawatu-Wanganui Regional Council will provide mitigation by working closely with and seeking advice from appropriate Wanganui District Council staff members during construction of the Flood Protection Improvements and at any time repairs and maintenance activities may have potential effects on the arboretum or any other trees in Kowhai Park.
- iii. Effects on archeological sites Once the Flood Protection Improvements have been completed it is expected that there will be no adverse effects on archeological sites. Upgrading of the existing stopbanks downstream from Dublin Street will be on the same footprint as the existing stopbanks. The proposed new stopbanking upstream of the Dublin Bridge will be within or alongside the existing Anzac Parade road reserve. No archeological sites are listed in the operative Wanganui District Plan for the area designation is sought; however, it is

acknowledged that the Plan does not contain an up-to-date record of identified sites. The presence of any additional sites will be followed up with New Zealand Historic Places Trust in the normal course of setting up the Improvements Project.

In light of the existing nature of the works and the location of new stopbanks, it is believed that the potential for adverse effects on archeological sites during Flood Protection Improvements will be minor. However, Manawatu-Wanganui Regional Council intends mitigate any potential adverse effects by working with New Zealand Historic Places Trust to ensure obligations under the Historic Places Act 1993 are met, especially those related to identified sites and accidental discovery of new sites during construction of improvements.

iv. Effects on Kowhai Park – There will be temporary disruption of the normal use of parts of Kowhai Park during the construction of Improvements and there may be very temporary disruption during any on-going repair and maintenance work required on the Flood Protection Works. The extent of disruption is expected to be minor, except if the repairs and maintenance are required due to significant flood damage. However if there is major flood damage, there is a high probability that damage and consequential disruption in the Anzac Parade/Kowhai Park area would also be significant.

If footpaths, roads or other amenities are affected by construction or repairs and maintenance they will be reinstated after consultation with Wanganui District Council.

#### Alternative sites, routes, and methods have been considered to the following extent:

The Anzac Parade/Kowhai Park Flood Protection Works are existing stopbanks and it is not practical to relocate to alternative sites unless a new stopbank is constructed.

During the Flood Protection Improvement Works the existing stopbank upstream of Dublin Street will be abandoned in favour of:

- i. A short section of new stopbank along the downstream side of Dublin Street; and
- ii. A new section of stopbank along the river side of Anzac Parade about 300m upstream of Dublin Street. (Note that approximately 300m of Anzac Parade above Dublin Street is already at the 50 year design level and will form part of the stopbank without any construct work being require to raise its height. [Refer to ANNEX 5B Site Map. Since the Flood Protection Improvements will be completed by the time any designation resulting from this Notice of Requirement has legal effect it can be considered to be "existing" for the purpose of the Notice of Requirement.

Alternatives considered for the Anzac Parade/Kowhai Park area were:

- i. Flood Protection Improvements (described in this Notice of Requirement);
- ii. Relocation of the affected properties (This would avoid the flood risk, however, it has not been successfully done in any community in New Zealand. There was a general reluctance to pursue a proposed managed retreat at Whangaehu and a fully funded "managed retreat" in Christchurch is being resisted);
- Raising existing buildings (Many houses would need to be raised more than 0.8 metres and even if the houses could be raised to comply, access, egress and aesthetic issues are likely to make the option impracticable); and

iv. Do nothing (The need for flood protection was identified when Wanganui District Council constructed the existing Flood Protection Works many years ago. The existing Works provide variable protection and the Improvements will bring below specification sections of stopbank up to a consistent 50 year level which is supported by Wanganui District Council).

The planned Anzac Parade/Kowhai Park Flood Protection Improvements are considered by Council to provide a cost-effective way of providing a moderate level of flood protection. Affordability was a major concern received from previous consultation. The location and design of the structures were determined as the most efficient and effective way of responding to the flood protection needs of the Anzac Parade /Kowhai Park area. The Improvements and ongoing repairs and maintenance will be funded and managed by the Manawatu-Wanganui Regional Council under the Lower Whanganui River Scheme.

7. The public work and designation (or alterations) are reasonably necessary for achieving the objectives of the requiring authority because:

The Manawatu-Wanganui Regional Council has a statutory mandate to undertake river control and drainage activities to ensure the safety and economic wellbeing of communities in the Region. This statutory mandate is generated from its powers and responsibilities under the Soil Conservation and Rivers Control Act 1941, the Local Government Act 1974 the Land Drainage Act 1908, and the Resource Management Act 1991.

Under the Soil Conservation and Rivers Control Act 1941[s126(1)], it is the Council's function to: "...minimise and prevent damage within the district by floods and erosion."

It is acknowledged that by the time this Notice of Requirement is finally approved that the Anzac Parade/Kowhai Park Flood Protection Improvements will be completed. This means the primary purpose of the designation is to ensure the on-going integrity of the Works are not compromised. It is critical that the Works perform as designed by protecting the Anzac Parade area from up to a 1 in 50 year flood event. Manawatu-Wanganui Regional Council has two requirements for successful flood protection:

- To be able to make timely repairs and maintenance in response to damage of the flood protection works; and
- To prevent damage by others that may compromise the integrity of flood protection structures.

A designation for the Anzac Parade/Kowhai Park Flood Protection Works is a necessary and appropriate mechanism to achieve both these requirements because:

- It enables Manawatu-Wanganui Regional Council to undertake works within the designated area, subject to any conditions applied in the designation and any resource consents from the Regional Council (if required).
- It restricts anyone from carrying out work on the designated land that may adversely affect the integrity of the Anzac Parade/Kowhai Park Flood Protection Works without first obtaining permission from Manawatu-Wanganui Regional Council.

# 8. The following resource consents are needed for the proposed activity and have been applied for:

The Anzac Parade/Kowhai Park Flood Protection Works, including the Flood Protection Improvements will be in existence by the time this Notice of Requirement is finalised.

Resource consent requirements under the Wanganui District Plan and Manawatu-Wanganui Regional Council regional plans are being currently evaluated and will be complied with. Any resource consents required will be obtained and implement during the Flood Protection Works which will be completed by the time a designation arising from this Notice of Requirement is finalised.

#### The following consultation has been undertaken with parties likely to be affected:

The Anzac Parade/Kowhai Park Flood Protection Works are in existence and have been so for many years.

Consultation was been carried out about options for flood protection improvements in the Anzac Parade/Kowhai Park area in late 2011 for a design that would have provided 200 year flood event protection. There was strong feedback from the community that major stopbank upgrades were unaffordable at that time. This prompted a study into low cost alternatives to maximize the benefits of the existing flood protection works.

Manawatu-Wanganui Regional Council's decision to proceed with the Anzac Parade/Kowhai Park Flood Protection Improvements was made as a result of submission made the Annual Plan 2013-14 during the Special Consultative Procedure prescribed by s83 of the Local Government Act 2002. The Improvements are supported by Wanganui District Council which is the landowner affected by this Notice of Requirement.

The Flood Protection Improvements will be carried out after the requirements of the Wanganui District Plan and Manawatu-Wanganui Regional Council regional plans are complied with. If a resource consent process is triggered in the future they may be further opportunity for affected parties to participate.

- Manawatu-Wanganui Regional Council attaches the following information required to be included in this notice by the District Plan, Regional Plan, or any other regulations made under the Resource Management Act 1991:
  - i. ANNEX 1A Legal Descriptions; and
  - ii. ANNEX 5B Site Map

Barry Gilliland POLICY ADVISOR HORIZONS REGIONAL COUNCIL

Date: 30 June 2013

## ANNEX 1A

#### DESIGNATION FOR FLOOD CONTROL PURPOSES

#### Site Annex 1A

Wanganui River Stop bank – true left bank adjacent to Anzac Parade and Kowhai Park

From approximately: NZTM X:1775598 Y:5579781 opposite 144 Anzac Parade

To approximately: NZTM X:1776063 Y:5577970 opposite Georgetti Road

Legal Description(s)

Parcel id: 3935382

Wanganui District Council

Section 492 Left Bank Whanganui River

Parcel id: 3833635

Wanganui District Council

Legal description: Lot 1 DP34222

Parcel id: 3953844

Wanganui District Council

Legal description: Lot 2 DP34222

Parcel id: 4010590

Wanganui District Council

Legal description: Pt Lot 2 DP12357

Parcel id: 33976796

Wanganui District Council

Legal description: Pt Lot 3 DP12357

Parcel id: 3852035

Wanganui District Council

Legal description: Pt Lot 4 DP12357

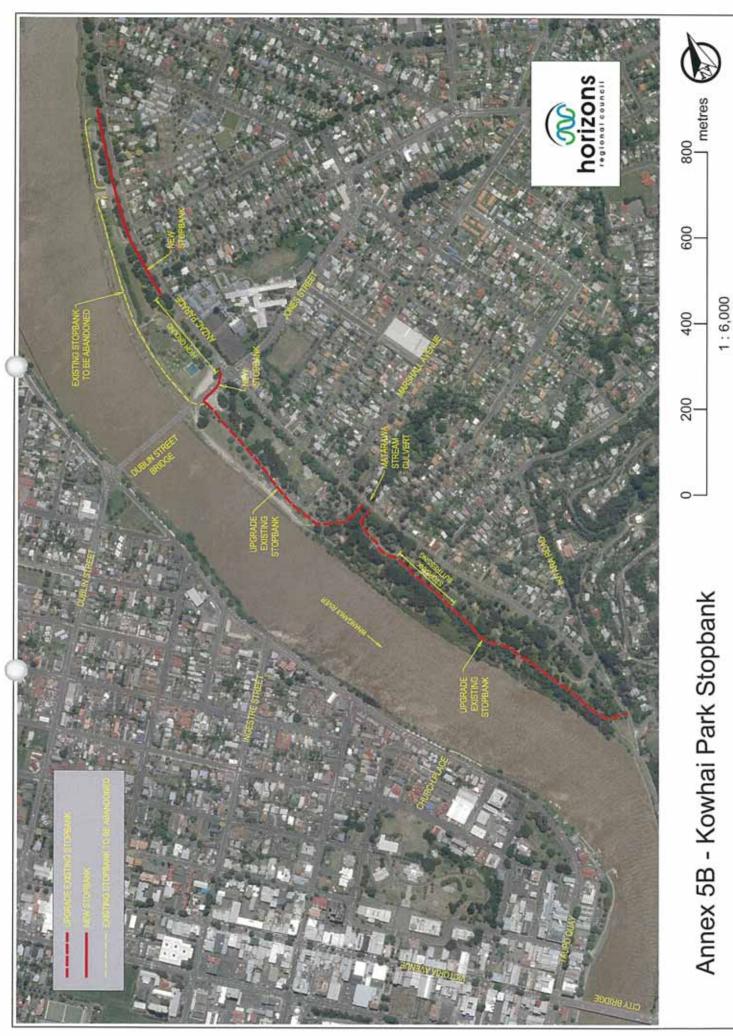
Parcel id: 4012858

Wanganui District Council

Legal description: Lot 5 DP12357

Wanganui District Council Anzac Parade Road Reserve between Dublin Street

and 144 Anzac Parade



Annex 5B - Kowhai Park Stopbank