

## Non-notified resource consent application report and decision

### Summary of decision

|                             |  |
|-----------------------------|--|
| <b>File Reference:</b>      | WGN170312  |
| <b>Date Granted:</b>        | 23 November 2017   |
| <b>Applicant:</b>           | Wellington Water Limited   |
| <b>Decision made under:</b> | Sections 104, 104B and 108 of the Resource Management Act 1991 (the Act)   |
| <b>Consents Granted:</b>    | <p><b>Operative Regional Plans</b><br/><b>[34755]: Discretionary Activity</b><br/>To undertake one off works and ongoing repairs and maintenance to sites along Spicer Stream, Tawa</p> <p><b>Proposed Natural Resources Plan</b><br/><b>[34755]: Discretionary Activity</b><br/>To undertake one off works and ongoing repairs and maintenance to sites along Spicer Stream, Tawa</p>                             |
| <b>Activity:</b>            | Undertake streamworks to modify two culverts, remove debris build up, install debris catchers, undertake bank stabilisation and repairs to erosion protection structures for the purpose of flooding and bank erosion protection, and to undertake repairs and maintenance when necessary, to designated sites along Spicer Stream in Tawa, including associated disturbance, diversion, dewatering and discharge. |
| <b>Location:</b>            | 50-64 The Drive, 56, 56C Kiwi Crescent, Lyndhurst Park, 1 Roy Street and 179 Main Street, Tawa   |
| <b>Map Reference:</b>       | At or about map reference NZTM 1752183.5440441 to 1753046.5440712  |

**Legal Description:**

|                          |                     |
|--------------------------|---------------------|
| Part Lot 35 DP 24478     | (56C Kiwi Crescent) |
| Lot 1 DP 27188           | (56 Kiwi Crescent)  |
| Lot 13 DP 16081          | (64 The Drive)      |
| Part Lot 12 DP 16081     | (62 The Drive)      |
| Lot 2 DP 304194          | (60A The Drive)     |
| Lot 1 DP 304194          | (60 The Drive)      |
| Lot 11 DP 20212          | (58 The Drive)      |
| Lot 1 DP 20555           | (56 The Drive)      |
| Lot 2 DP 20555           | (54 The Drive)      |
| Lot 120 DP 9950          | (52 The Drive)      |
| Lot 119 DP 9950          | (50 The Drive)      |
| Lot 112A DP 9950         | (Lyndhurst Park)    |
| Lot 3 DP 20555           | (Lyndhurst Park)    |
| Lot 112A DP 9950         | (Lyndhurst Park)    |
| Lot 341 DP 10265         | (Lyndhurst Park)    |
| Sec 160 Porirua DISTRICT | (Lyndhurst Park)    |
| Lot 2 DP 358750          | (1 Roy Street)      |
| Part Lot 27 DP 10265     | (179 Main Street)   |

**Duration of Consent:** 10 years to expire on 23 November 2027

**Consent conditions:** Attachment 1

**Processing timeframes:**

|   |                                    |   |          |
|---|------------------------------------|---|----------|
| <b>Application lodged:</b>                      | 28/04/17                           | <b>Application officially received:</b>   | 28/04/17 |
| <b>S91 Application stopped:</b>                 | 03/03/17                           | <b>Application started:</b>               | 03/03/17 |
| <b>S37A(5) extension</b>                        | 127 working days (mutually agreed) |   |          |
| <b>Applicant to be notified of decision by:</b> | 23/11/17                           | <b>Applicant notified of decision on:</b> | 23/11/17 |
| <b>Time taken to process application:</b>       | 20 working days                    |   |          |

**Decision:**

|                            |                        |   |   |
|----------------------------|------------------------|---|---|
| Decision recommended by:   | Peggy Cunningham-Hales | Resource Advisor, Environmental Regulation        |  |
| Decision peer reviewed by: | Kirsty van Reenen      | Senior Resource Advisor, Environmental Regulation |  |
| Decision approved by:      | Jeremy Rusbatch        | Team Leader, Environmental Regulation             |  |

# Reasons for decision report

## 1. Background

Wellington Water Limited (the applicant; WWL) has applied for consent to undertake one-off repair works at ten sites in Tawa (identified as Sites A – J) to address flood damage caused by storm events in April 2017, and to undertake future regular maintenance at these sites. The sites are located within Spicer Stream (a tributary of the Porirua Stream), starting from Kiwi Crescent, and running through various sites along The Drive, Lyndhurst Park, Roy Street and Main Road in Tawa. A variety of maintenance and repair activities are proposed, ranging from gravel extraction near culverts, bank regrading and stabilisation, installation of riprap and repairs to structures.

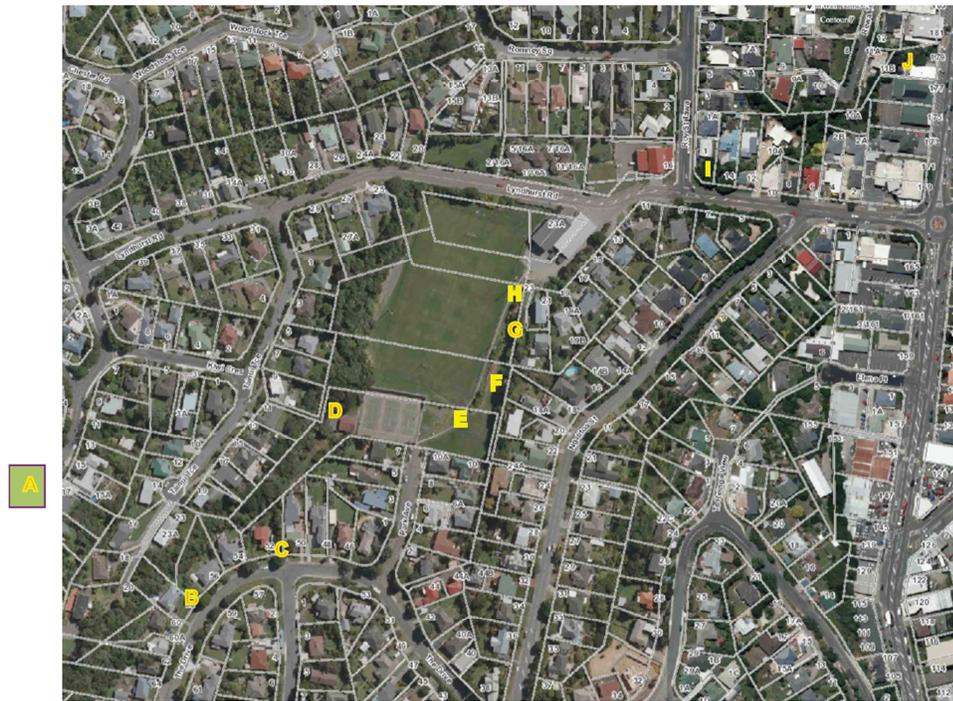


Figure 1: Map showing site locations labelled A-J (from Application)

## 2. Proposal

### 2.1 Site A (56 Kiwi Crescent)

The existing grille on the stormwater inlet structure at the back of 56 Kiwi Crescent has been raised up to allow debris to flow under the grille and prevent the grill from blocking. The height of the gap under the grille may be allowing additional debris through in a rain event. This means there is a potential for flood debris to be carried into the stormwater system causing problems further downstream in the catchment. The applicant is proposing to monitor debris build-up downstream, and install a solution if required.

Proposed works:

1. Installation of a new debris grille (approximately 5.5 metres long, set at an angle across the 1.5 metre wide stream affecting a lineal distance of about 4 metres) designed to allow the passage of alluvial bed material. This would be installed about 1.5 metres upstream of the existing 1 metre long inlet structure; and
2. Occasional clearing of the grille and cleaning out the streambed in the vicinity of the grille/inlet structure (approximately 5.5m x 4m).

The proposed works at 56 Kiwi Crescent will only be undertaken if monitoring of debris build up downstream indicates flood debris from this part of the stream catchment is a continual problem.

## **2.2 Site B (58 and 60 The Drive)**

The culvert that runs under 60A and 60 The Drive has surcharged in heavy rain events causing flooding. Accumulation of material in the culvert and the area immediately downstream of the culvert has caused some of the flooding by reducing the capacity of the culvert. Scouring occurring at the culvert outlet is also threatening the stability of the bridge over the stream that provides drive on access for 60 The Drive.

Dimensions of the proposed works in the streambed are 10 metres lineal distance (7 metres in stream and 3 metres under bridge/culvert) by 1.5 metres wide.

Proposed works:

1. A one off removal of gravel from inside the concrete culvert. Its outlet currently stops just before and under the bridge at 60 The Drive;
2. Construction of a culvert extension to SW46010 to bring the outlet beyond the northern edge of the bridge. The apron on the outlet of the culvert will be extended by approximately four (4) metres so that it extends approximately one (1) metre past the downstream end of the bridge. This will protect the bridge from scour and allow debris to be carried in stream flows past the bridge where it can be more easily accessed for removal on an occasional basis (as required); and
3. On-going, future gravel extraction maintenance works beyond the proposed culvert extension in item (2) above by 1.5 metres wide.

## **2.3 Site C (50 and 52 The Drive)**

The stream channel in this location is under capacity in heavy rain events which can cause flooding of nearby properties. This is because originally excavated channel is undersized, and stream flows are further obstructed by vegetation overgrowth, and bank and mesh protection structures encroaching into the channel.

Proposed works include:

1. The removal of trees and other vegetation, stream bank rock removal and repairs to mesh bank protection structures;
2. Retaining of undermined ground on true left bank at outlet structure and filling the cavity with concrete (approximately 4 metres lineal distance), and stabilising the bed of the stream on the downstream side of the culvert (maximum area 1.5 metres width by 1.5 metres lineal distance);
3. Addressing fish passage impediment as mitigation for works in stream, to be undertaken along with work in item 2 by constructing fish ramps during the works
4. Installation of a coloursteel fence along 50 The Drive (consent not required, but included for completeness)
5. The applicant considers that if, on completion of items 1-6, flooding issues continue to occur, consideration will be given to widening the true left side of the channel. If the channel needs to be widened, the work would be undertaken by an excavator to achieve a width of 1.5m at streambed level and the bank above this would be battered to a 45 degree slope (i.e. between 1.1 metres and 0.3 metres of bank would be removed depending on the location along the stream).

#### **2.4 Site D (Asphalt area at Western side of tennis courts)**

The proposed works are required to address the following issues:

- The true right-hand bank of the stream where it flows past the asphalt area has become scoured undermining the high wire-mesh boundary fence and the edge of the asphalt. The true right stream bank has been undermined up to 800mm.
- Opposite the scoured area a small tree and part of the true left bank have slipped into the stream channel.

The channel just downstream from the asphalt area narrows to approximately 1.3 metres wide for a lineal distance of about 2 metres, and it is considered that this may affect the capacity of the stream.

The proposed works in the stream bed affect a lineal distance of 12 metres, where the section affected by direct erosion in the asphalt area is eight (8) metres long (4 metres undercut and 4 metre overhang), and the slipped tree is to be removed and some trimming of the bank is proposed in a four (4) metre long section. The stream is about 2.5 metres wide at Site D, but reduces to 1.3 metres at the downstream end where the bank trimming is proposed. Removing the high fence bordering the stream (it is at risk of falling due to destabilised bank below its foundations);

1. Battering back any unstable ground bordering the existing asphalt area (where fence is currently located);

2. Placing some rip-rap in the undermined cavity on the true right bank;
3. Removal of slipped tree and bank debris on true left; and
4. Trimming the true right bank through the short narrow section of channel to improve stream capacity. This is at the downstream end of the fence repair area and involves removing a section where the stream turns on a tight bend to the right with an approximate lineal distance of 0.5 metre.

## **2.5 Site E (Scouring at the footbridge at Lyndhurst Park)**

The proposed works will repair the abutment of the footbridge over the stream to the east of the tennis courts at Lyndhurst Park (Site E) and address fish passage impediments.

Proposed work:

1. Filling the undermined cavity with protective rock (400D50). This is an alcove shaped void approximately 1.5 metres wide, 1.5 metres deep, and 1.5 metres high. The shape of this recess in the bank will help to stabilise the rock, and the rock will dissipate the energy of stream flows across the abutment and thereby protect the bank further downstream.
2. *Note: This approach was selected in preference to use of retaining walls and gabion baskets, which are more intrusive on the stream environment and would have interface issues with the surrounding bank.*
3. Packing concrete between the rock infill and the underside of the footpath above the filled cavity to support the footpath.
4. Fish passage improvement work beneath the footbridge and an upstream pipe.

“Tuna hotels” are also proposed to be installed in the bank under the footbridge and mussel spat ropes (to enable fish to climb) at the footbridge and upstream culverts.

## **2.6 Site F (Scouring at the Eastern bank of stream, north of footbridge)**

The proposed works are to re-grade the true right stream bank at the eastern side of Lyndhurst Park.

The proposed works area occurs in a kink in the stream opposite mature trees, approximately 10 metres downstream of the footbridge at Site E. The true right stream bank has become scoured in this location. While the lower portion of the bank has scoured to form a stable shape comprised of stable material, the top section of the bank is overhang. The overhang is approximately 8 metres long and 2.5 metres high. The scouring is recent so the scoured area has no vegetation present.

The dimensions of the works area affect a lineal distance of 11 metres of the stream bank, of which 4 metres is on the bridge angled side of the kink in the stream, and 7 metres is on the straight out of the bend. The stream has an

average width of 2.3 metres in this location. The average height of the slipped face to be repaired is two (2) metres, with a maximum height of 2.5 metres.

The proposed work at Site F includes battering back the bank to remove the steep surcharge to a safer, more stable grade. Wellington City Council Parks and Gardens staff will then replant the bank.

## **2.7 Site G (Retaining wall repairs north of footbridge)**

The proposed works to repair the retaining wall supporting the true left side of the stream at the eastern side of Lyndhurst Park (Site G) and address fish passage impediment are shown on the plan/photos at Appendix A.

A 1.5 metre diameter (approximately) sinkhole has developed behind the retaining wall that borders the true left bank of the stream at Site G, approximately 15 metres upstream of the inlet structure at Site H. Scouring of the streambed below the bottom timber board of the railway iron/timber sarking retaining structure has allowed material behind the wall to fall down and be washed away by stream flows. The gap below the bottom timber board is approximately 300mm high and 7 metres long.

It is proposed to repair the retaining wall by filling the sinkhole with filter material (rocks) that will not be washed away from behind the wall. The proposed work area dimensions behind the retaining wall are 2.5 metres wide by one (1) metre away from the top of the wall, and 10 metres along the retaining wall edge. The streambed has an average width of 2.3 metres in this location.

If considered necessary, additional timber sarking will be used to fill the gap at the bottom of the retaining wall. A concrete filler would be used to seal the gap if sarking is not practical.

The work methodology for further repairs would be determined at the time, based on the work solution considered to be most appropriate for protecting the stream bank, and submitted to GWRC for approval prior to works commencing. It is requested that this be permitted through suitably worded consent conditions.

Tuna hotels are also proposed for this location, and mussel spat ropes at the outlet of the culvert as the culvert is perched in this location.

## **2.8 Site H (Debris grille replacement north of footbridge)**

Replacement of the debris grille at the northern end of the stream flowing along the eastern side of Lyndhurst Park is proposed, if required. Blockage of the existing inlet grille appears to have caused some of the flooding problems at Lyndhurst Park. The applicant proposes to monitor the existing inlet grille and maintain it to keep it clear of debris.

If capacity issues at the existing inlet grille remain, consideration will be given to increasing the size of the grille.

The proposed works area affects a lineal distance of 4 metres, and the streambed in this location is 2.5 metres wide.

If flooding problems still occur after upsizing the inlet grille, as a “last resort” solution, consideration will be given to installing a debris grille slightly upstream of the inlet grille, where the stream channel is bordered on both sides by retaining walls. The debris grille would be installed on a long gradual angle to maximize its cross-sectional area. It would collect debris before it could reach the inlet grille, and normal alluvial flow of bed material will be allowed to flow under it. If a debris grille is to be installed, occasional clearance of the grille and the streambed in the area of the debris grille would be necessary.

## **2.9 Site I (Culvert at 1 Roy Street)**

The proposed works at 1 Roy Street are shown on the plan/photos at Appendix A, and involve clearing the culvert and streambed of built up material.

The exit of the 1.8 metre diameter round culvert at Site I is currently filled with approximately 800mm of bed material, and its capacity has been substantially reduced.

The proposed works include:

1. Removal of about 50% of the material from within the culvert (by flushing); and
2. Lowering the streambed on the downstream side of the culvert by approximately 400mm and tapering to the present level at the boundary of 1 Roy Street with 14 Lyndhurst Road.

The culvert clearance work affects inside the culvert needs to remove about 400mm depth of built up gravel. It is not known how far inside the culvert this work will need to be undertaken. Grading back the streambed will lower the bed at the outlet end of the culvert by 400mm next to the culvert and taper to 0m change approximately 10 metres distance downstream. The average stream width in this location is 2.5 metres.

## **2.10 Site J (Culvert at 179 Main Road)**

The proposed works at 279 Main Street are intended to address problems associated with debris blocking the inlet grille at the site during heavy rain events.

The initial plan is to monitor and maintain (clean out as required) the existing grille as part of the bi-monthly rounds undertaken by the contractor. If it appears that there are issues with the capacity of the grille, a larger grille will be installed. The design of the larger grille would ensure increased cross-sectional area and maintain the flow of alluvial bed material.

The streambed upstream of the grille may need to be cleaned out occasionally, typically after a heavy rain event.

## 2.11 Methodology

The methodology for the work at each site varies. A step by step process for each site is outlined in the application, and discussed further in Section 6 of this report.

Temporary diversions are required at Sites A, E, F, G, H, J (sandbagging) and Sites B, C, D (fluming and sandbags)

Dewatering of the work area is required at Sites A, B, C, D, G, H and J. This will be discharged to a local sewer main. The consent holder has stated that fish will be prevented from entering the dewatering pipe by burying the suction point in gravel.

Concrete pouring is required at Site A, B, E, G, H and J. Concrete will be isolated from stream flows (usually using sandbags and dewatering).

Silt fences will be installed downstream where gravel extraction is required.

## 2.12 Ongoing maintenance/repair works

The applicant would like to have consent to also undertake repair work and maintenance on an on-going basis within the same catchment, as may be required from time to time, especially after a heavy rain event.

The main work would be focussed on remedying and protecting from erosion and scour effects. If the proposed maintenance works at Sites A to J are undertaken, the likelihood of additional sites requiring such work will be lessened.

The applicant is therefore seeking certainty for future events and suggests consent conditions to allow an interactive approach between the applicant and the Council officers and ensure an efficient and effective response to stormwater and flood management in the Tawa catchment. The methodologies and mitigation provided in this application could be refined and presented to the Council for specific work at specific sites as a condition of consent, thereby ensuring certainty for the Council that the environmental effects will be addressed appropriately and for the applicant that they can get on and do the work as quickly as possible without the need for a consent application process.

## 3. Reasons for resource consent

### 3.1 Operative Regional Freshwater Plan

| RMA section                                       | Rule           | Status        | Comments   |
|---|----------------|---------------|--|
| S13 – uses of beds of rivers and S15 - discharges | 22, 36, 40, 42 | Permitted     | The application thoroughly assesses the permitted activity rules in relation to each site and I concur with their assessment of the rules.<br><br>As there are a variety of proposed works at each site there are various relevant permitted rules to consider relating to the maintenance of structures, removal of |
|   | 43             | Controlled    |  |
|   | 49             | Discretionary |  |

| RMA section | Rule | Status | Comments  |
|-------------|------|--------|---|
|             |      |        | <p>vegetation flood debris clearance and urgent works.</p> <p>In summation, some aspects of the proposal meet these permitted activity requirements (such as repairs to existing structures and vegetation removal), while some cannot (this is true both within and between sites). As a default, the activities as a whole fall to Rule 49 as a Discretionary activity for all remaining uses of river and lake beds.</p> |

The proposed activity is not located in, near or adjacent to a site listed in an Appendix of the operative Regional Freshwater Plan (RFP).

### 3.2 Proposed Natural Resources Plan

The Proposed Natural Resources Plan (PNRP) was publicly notified by the Council on 31 July 2015. All rules in the PNRP have immediate legal effect under section 86B(3) of the Act.

The Proposed Natural Resources Plan (PNRP) was publicly notified by the Council on 31 July 2015. All rules in the PNRP have immediate legal effect under section 86B(3) of the Act. As the application was lodged after 31 July 2015, the PNRP is relevant to determining the resource consents required, activity status, the notification decisions and the substantive assessment of the proposal under section 104 of the Act.

| RMA section                                       | Rule                    | Status        | Comments   |
|---|-------------------------|---------------|--|
| S13 – uses of beds of rivers and S15 - discharges | 112, 117, 119, 120, 122 | Permitted     | The application thoroughly assesses the permitted activity rules in relation to each site and I concur with their assessment of the rules.   |
|   | 129                     | Discretionary | <p>As there are a variety of proposed works at each site there are various relevant permitted rules to consider relating to the maintenance of structures, removal of vegetation flood debris clearance and construction of new structures.</p> <p>In summation, some aspects of the proposal meet these permitted activity requirements (such as repairs to existing structures and vegetation removal), while some aspects cannot (this is true both within and between sites). As a default, the activities as a whole fall to Rule 49 as a Discretionary activity for all remaining uses of river and lake beds.</p> |

The proposed activity is located within the Spicer Stream, a tributary of the Porirua Stream, which is a site identified as river with significant indigenous ecosystems in Schedule F1 of the PNRP, with banded kokopu, common bully, common smelt, giant kokopu, inanga, koaro, longfin eel, redfin bully, shortfin eel and upland bully recorded in the catchment. The tidal reach of Porirua Stream has been recognised as inanga spawning habitat under Schedule F1b, although the sites are upstream of this location.

### 3.3 Overall activity status

Overall, the activity must be assessed as a Discretionary Activity under the operative Regional Freshwater Plan and a Discretionary Activity under the Proposed Natural Resources Plan.

## 4. Consultation

| Iwi authority                               | Comments   |
|---|--|
| Te Atiawa ki Whakarongotai Charitable Trust | No comment provided, therefore it is assumed they have no concerns.  |
| Other parties or persons                    | Comments   |
| Department of Conservation                  | In accordance with the <a href="#">GWRC EReg and DoC MOU</a> DoC were not consulted as an interested party.  |
| Wellington Fish and Game Council            | As the application is not within a waterbody list in Appendix 4 of the RFP or Schedule I of the PNRP, Fish & Game were not consulted as an interested party.   |
| GWRC Flood Protection Department            | <p>James Flanagan assessed the proposal and provided comments in relation to the methodology.</p> <p>Mr Flanagan was relatively satisfied with the information provided, but asked for photographs, cross sectional drawings, details on how scour will be taken into account (for the footbridge and retaining wall) and the size/location of material to be placed in the stream to prevent scour.</p> <p>The applicant provided the information requested as outlined in the revised application.</p> <p>Mr Flanagan also had general concerns that there are a couple of locations where the channel has the potential to become perched downstream of the culverts once works have occurred. The applicant responded to this that:</p> <p>The channel downstream of the culverts at Sites B, C, and I has a well-established bed. The outlet of the culvert at 60 The Drive (Site B) has a negative hydraulic grade to the downstream bed. This tends to maintain a water level above the outlet of the culvert. The proposed work at the culvert outlets is unlikely to promote a perched channel.</p> <p>If the channel does become perched at any of the proposed work sites, due to the culvert, remedial work would be carried</p> |

|   |   |
|---|---|
|   | <p>out to ramp the perched part of the channel.</p> <p>Mr Flanagan also queried the widespread use of concrete (as this removes available habitat) and recommended natural alternatives where possible. The applicant has responded that the proposed use of concrete is limited to small isolated areas of the stream at Sites A, B, C, G and H, and this will only occur at sites A and H if a new debris grided is determined as necessary if other solutions fail.</p> <p>The requirements of the design solutions include: hard wearing, self-cleaning, and providing support to banks. Consideration was given to alternatives other than concrete but their properties did not satisfactorily meet all of the design criteria.</p> <p>It is proposed to use concrete at sites that have other existing concrete structures present (i.e. the proposed works will improve the utility of an existing structure in a modified environment rather the forming a new concrete structure in a pristine stream environment).</p> <p>The methods of work where concrete is proposed include measures for isolating the works from the stream flows and testing the pH of the flows before removing sandbagging to protect the quality of the stream environment. These methods are based on the advice and recommendations of senior consultant ecologist Frances Forsyth of Wildlands Limited.</p> |
| <p>Owner or adjacent landowner of properties where works are taking place</p> | <p>All relevant parties have given their written approvals on the correct forms in relation to the proposal (see Table 1 below).</p>  |

**Table 1: Showing the affected party approvals sought from direct and adjacent landowners (from Application).**

| Name  | Address                    | Registered Owner ? | Legal Description  |
|---|----------------------------|--------------------|--|
| Len Young (Leonard Kwo Shan Young)                    | 60 Kiwi Crescent           | Yes – See note 2.  | Lot 34 DP 24478  |
| Wellington City Council (formerly West Tawa Land Ltd) | 56C Kiwi Crescent (Site A) | Yes – See Note 1   | Part Lot 35 DP 24478   |
| Ido Peter Davia                                       | 56 Kiwi Crescent (Site A)  | Yes                | Lot 1 DP 27188   |
| Shane Mather  | 64 The Drive               | Yes                | Lot 13 DP 16081  |
| Ron Ratcliffe   | 62 The Drive               | Yes                | Part Lot 12 DP 16081   |
| Kathryn Schimanski                                    | 60A The Drive (Site B)     | Yes                | Lot 2 DP 304194  |
| Rhonda Marshall (nee Kula) and Chris Marshall         | 60 The Drive (Site B)      | Yes                | Lot 1 DP 304194  |
| Eden Currey   | 58 The Drive (Site B)      | Yes                | Lot 11 DP 20212  |
| Diane Wilson  | 56 The Drive               | Yes                | Lot 1 DP 20555   |
| Ronel Steynberg                                       | 54 The Drive               | Yes                | Lot 2 DP 20555   |
| Gail Annette Singer                                   | 52 The Drive (Site C)      | Yes                | Lot 120 DP 9950  |
| Gillian and Nigel Bates                               | 50 The Drive (Site C)      | Yes                | Lot 119 DP 9950  |
| Wellington City Council                               | Lyndhurst Park             | Yes - See Note 1   | Section 160 and Part Section 162 Porirua District, Lot 112A DP 9950 and Lot 340-341 DP 10265 |
| Harry Barnes  | 1 Roy Street (Site I)      | Yes                | Lot 2 DP 358750  |

|  |                          |                  |                      |
|--|--------------------------|------------------|----------------------|
| Leonard Kwo Shan Young   | 179 Main Street (Site J) | Yes - See Note 2 | Part Lot 27 DO 10265 |
| <p>Notes:</p> <ol style="list-style-type: none"> <li>1. The applicant is acting on behalf of Wellington City Council as the organisation responsible for maintenance and repairs of stormwater infrastructure. The City Council as the asset owner has given written approval to the proposal in and around Lyndhurst Park, signed by Matt Robertson the WCC Park Ranger who manages that area and the area near 56 Kiwi Crescent.</li> <li>2. The owner of Site J has provided written approval with reference to their ownership of the land adjacent to Site A. No works are proposed on their land at 60 Kiwi Crescent.</li> </ol> |                          |                  |                      |

## 5. Notification decision

A decision was made to process the application on a non-notified basis on 8 November 2017. Further information on the notification decision is provided in document #170312-467361341-63.

## 6. Environmental effects

The applicant provided an Assessment of Environmental Effects (AEE) with the application.

I concur with parts of the matters discussed in the AEE, particularly those relating to environmental effects (ecological report by Frances Forsyth of Wildlands), methodology and mitigation measures associated with the “one off” repair works, and therefore adopt these parts of the AEE in accordance with section 42A(1B)(b) of the Act. Remaining matters not adopted are discussed below.

### 6.1 Ongoing repairs and maintenance

The scope of “ongoing repairs and maintenance” required for the Spicer Stream is left somewhat open in the application.

The scope of these works is restricted by what can be authorised under this consent because:

- Further works cannot be undertaken on properties who have not given their written approval, which restricts work in Spicer Stream to the locations described in the application.
- If the environmental effects of the proposed works are more than minor, a new resource consent is required in order to assess the effects.
- Installation of any new structures such as gabions, concrete block walls, bridges etc. will require a new consent. New structures have not been assessed as part of this consent application, aside from the three potential debris grilles required at site A, H and J. This is because a separate land use consent for each structure is required, and the effects of each structure has to be assessed based on its individual requirements.

The scope of repairs and maintenance and expected effects is limited to those occurring just outside of permitted activity limits including minor gravel extraction to protect structures and erosion repair works.

I have suggested a consent condition (Condition 5) which requires a methodology of works for any additional works on sites A-J to be submitted, with notes relating to the restrictions on any “repairs or maintenance” works. During the approval process, the works will either be approved under this consent, or the consent holder will be asked to submit a separate consent application.

I have also suggested a condition (Condition 22) requiring a construction log that details all work undertaken under this consent.

## **6.2 Non-standard conditions on managing effects**

Several non-standard conditions have been recommended which relate to managing effects from the works. In particular, as Spicer Stream is a tributary of the Porirua Stream (Schedule F1 of the PNRP, for a range of native fish, I have added the following conditions:

- Condition 16 – Restricting works outside of the key recruitment migration period for native fish species between 1 August to 31 December inclusive.
- Condition 17 – Ensuring that the consent holder conducts an instream search of instream substrate for fish prior to works, and relocates any fish found stranded as a result of works.
- Condition 20 – Requiring the installation of fish caverns at sites E, F and G with an appropriate design.

I have also included Condition 12, which states that the consent holder shall ensure that no dry cement product, unset concrete, concrete wash water or any water contaminated with concrete enters the flowing channel of any stream during, or as a result of the works authorised by this consent. This aims to prevent any change in pH that may occur in the stream channel, and burning of aquatic life, which may occur if unset concrete is released to the stream.

## **6.3 Summary of effects**

Given the assessment above, it is considered that the proposed activity will not result in any more than minor effects when undertaken in accordance with the recommended consent conditions.

# **7. Statutory assessment**

## **7.1 Part 2**

Part 2 of the Act outlines the purposes and principles of the Act. Section 5 defines its purpose as the promotion of the sustainable management of natural and physical resources. Sections 6, 7 and 8 of Part 2 define the matters a consent authority shall consider when achieving this purpose.

I am satisfied that the granting of the application is consistent with the purpose and principles in Part 2 of the Act.

## **7.2 Matters to be considered – Section 104-108**

Section 104-108 of the Act provides a statutory framework in which to consider resource consent applications. The applicant has provided a thorough consideration of Section 104-108 of the Act, and I adopt this in accordance with Section 42(A)(1B)(a) of the Act.

## **7.3 Weighting of the Proposed Natural Resources Plan**

As the conclusion reached under the Regional Freshwater Plan assessment is consistent with that reached under the Proposed Natural Resources Plan there is no need to undertake a weighting exercise between the two Plans.

## **8. Main findings**

In conclusion:

1. The proposed activity is consistent with the Purposes and Principles of the Resource Management Act 1991.
2. The proposed activity is consistent with the relevant objectives and policies of the Regional Policy Statement and the Regional Freshwater Plan and the Proposed Natural Resources Plan.
3. The actual or potential adverse effects of the proposed activity on the environment will be or are likely to be no more than minor.
4. Conditions of the consent(s) will ensure that the effects of the activity on the environment will be appropriately avoided, remedied or mitigated.
5. The proposal incorporates appropriate mitigation measures, to ensure the adverse effects are or are likely to be no more than minor.

## **9. Duration of consent**

The applicant has not proposed a duration for the consent. As the works relate to both one-off works and ongoing maintenance, I proposed a duration of 10 years for consent [34755], which will comprise all works. 10 years is the standard duration for ongoing stream work consents and I consider it appropriate in this situation.

## **10. Monitoring**

GWRC's Strategic Compliance Programme focusses on monitoring resource consents of higher risk and importance. Unless special circumstances apply, streamworks consents are not monitored under our Strategic Compliance Programme.

Accordingly, no monitoring inspection is required for the proposed works I have recommended a condition of consent requiring the consent holder to take and submit photographs during and following the works. The costs associated with the monitoring of this consent are included with the consent application fee.

## Attachment 1: Consent conditions [34755]

*Undertake streamworks to modify two culverts, remove debris build up, install debris catchers, undertake bank stabilisation and repairs to erosion protection structures for the purpose of flooding and bank erosion protection, and to undertake repairs and maintenance when necessary to designated sites along Spicer Stream in Tawa, including associated disturbance, diversion, dewatering and discharge.*

### Standard conditions

1. The location, design, and implementation the streamworks shall be in general accordance with the consent application and its associated plans and documents lodged with the Wellington Regional Council on 28 April 2017 and further information received via email on:
  - 3 May 2017 (additional information); and
  - 11 October 2017 (revised consent application, with the inclusion of new sites and a revised methodology of works)

Where there may be contradiction or inconsistencies between the application and further information provided by the applicant, the most recent information applies. In addition, where there may be inconsistencies between information provided by the applicant and conditions of the consent, the conditions apply.

*Note: Any change from the location, design concepts and parameters, implementation and/or operation may require a new resource consent or a change of consent conditions pursuant to section 127 of the Resource Management Act 1991.*

2. The consent holder shall ensure that a copy of this consent and all documents and plans referred to in this consent, are kept on site at all times and presented to any Wellington Regional Council officer on request.
3. The Manager, Environmental Regulation, Wellington Regional Council, shall be given a minimum of **two working days (48 hours)** notice prior to the one off works and any future repairs and maintenance commencing.

*Note: Notifications **must be** emailed to [notifications@gw.govt.nz](mailto:notifications@gw.govt.nz). Please include the consent reference WGN170312 and the name and phone number of a contact person responsible for the proposed works.*

### Methodology for one-off works

4. The consent holder shall undertake the works at sites A to J in general accordance with the construction methodology provided in the updated application dated 11 October 2017.  
If any changes are proposed to the methodology listed above the consent holder shall provide a final plan that has been prepared in consultation with the contractor undertaking the works to the Manager, Environmental Regulation, Wellington Regional Council prior to the works commencing. No works shall commence until the consent holder has received written notification that the

final Construction Methodology is to the satisfaction of the Manager, Environmental Regulation, Wellington Regional Council.

*Note: The final construction methodology can be emailed to [notifications@gw.govt.nz](mailto:notifications@gw.govt.nz).*

### **Repairs and maintenance of sites**

5. If further repairs or maintenance is required at any of the specified sites labelled A-J in the consent application, which are beyond the scope of the permitted activity rules in the Regional Plans, the consent holder shall provide a Construction Methodology for works that has been prepared in consultation with the contractor undertaking the works to the Manager, Environmental Regulation, Wellington Regional Council prior to the works commencing. The Construction Methodology shall include, but not be limited to:
- A detailed description of the proposed works;
  - Details of how long the works will take;
  - A plan clearly showing the location and scale of works;
  - The name and contact details of the person responsible for the works;
  - Details of any diversions to be put in place to separate construction activities from flowing water, and confirmation on the diversion duration;
  - Details of the amount of gravel to be extracted (if extraction is required);
  - Details on how fish passage will be maintained during works, and if fish passage cannot be maintained then an explanation as to why;
  - Details of any measures to be put in place to mitigate effects on the environment and ensure the conditions of this consent are complied with.

No works shall commence until the consent holder has received written notification that the final Construction Methodology is to the satisfaction of the Manager, Environmental Regulation, Wellington Regional Council.

Repairs or maintenance of sites does not include the construction of new structures in the stream, which will require a separate resource consent. The exception is if additional structures are required to repair erosion at sites F or G as indicated in the application.

*Note: This condition does not include works **already permitted** by a rule in a Regional Plan, for example the maintenance of existing structures within their original profile, flood debris clearance, and removal or planting of vegetation.*

*Note 2: It is expected that future maintenance or repairs will relate to removing gravel buildup around structures and repairing erosion and scour caused by flood events. This condition allows for the additional erosion protection works for site F or G as indicated in the application, should the initial works be insufficient to address the existing erosion issue at this site.*

*Note 3: The intent of GWRC's assessment of the construction methodology is to ensure that the effects of any proposed repair and maintenance work are appropriately managed and are no more than minor. Any works with effects that are more than minor will require a separate resource consent application.*

6. The consent holder shall undertake the works in general accordance with the construction methodology provided in the application and any additional methodology provided and approved under Condition 5.

#### **Temporary diversion of the channel**

7. The consent holder shall ensure the water diversion bund is in place prior to any in stream works (excavation and construction) commencing within the stream channel at each site. This shall be implemented and maintained in accordance with the methodology outlined in the application, dated 11 October 2017, or any subsequent methodology submitted under Condition 5, and be implemented to the satisfaction of the Manager, Environmental Regulation, Wellington Regional Council.

The maximum period that the diversion shall be in place for each site is 5 days.

#### **Reducing effects on water quality**

8. The consent holder shall take all steps to minimise sedimentation and increased turbidity of the streams in Spicer Stream during the works, including but not limited to:
  - a) Completing all works in the minimum time practicable,
  - b) Undertaking works in dry weather conditions, as far as practicable,
  - c) Avoiding the placement of construction or excavated material in the wetted channel,
  - d) Separating all construction activities from flowing water, and
  - e) Installing appropriate sediment control and treatment measures (e.g., silt fences) prior to works.
9. The consent holder shall ensure that:
  - a) All machinery is thoroughly cleaned of vegetation (e.g., weeds), seeds or contaminants at least 10 metres away from any watercourse, water flow channel or stormwater system, prior to entering the site,
  - b) All machinery shall be regularly maintained in such a manner to ensure no contaminants (including but not limited to oil, petrol, diesel, and hydraulic fluid) shall be released into water, or to land where it may enter water, from equipment being used for the works,
  - c) All contaminant storage or re-fuelling areas are bunded or contained in such a manner so as to prevent the discharge of contaminants to water or to land where it may enter water, and

- d) No machinery is cleaned, stored or refuelled within 10 metres of any waterbody, water flow channel or stormwater system.
10. The consent holder shall ensure that prior to entering any steam vehicles, mobile plant, or machinery is inspected for the presence of invasive or pest aquatic plants including 'didymo'. In the event that an invasive or pest aquatic plant or 'didymo' is discovered upon the vehicle, mobile plant, or machinery it shall be cleaned, to the satisfaction of the Manager, Environmental Regulation, Wellington Regional Council.

*Note: The machinery shall be cleaned in accordance with the Ministry for Primary Industries cleaning methods which can be found at <http://www.biosecurity.govt.nz/pests/didymo/cleaning>.*

11. In the event of a spill of fuel, hydraulic fluid, or other potential liquid contaminants, immediate steps shall be taken to contain the spilt contaminant. The spilt contaminants and any material used to contain it shall be removed from the site and disposed of at authorised landfill. The consent holder shall also immediately notify the Manager, Environmental Regulation, Wellington Regional Council of the spill and actions to be taken.
12. The consent holder shall ensure that no dry cement product, unset concrete, concrete wash water or any water contaminated with concrete enters the flowing channel of any stream during, or as a result of the works authorised by this consent.
13. Upon completion of the works all unused material from the works shall be immediately removed from the bed and banks of the tributary streams in Wellington and Porirua and disposed of in an appropriate manner that is to the satisfaction of the Manager, Environmental Regulation, Wellington Regional Council.

#### **Gravel extraction and bank reshaping**

14. The amount of gravel extracted at each site shall be in general accordance with the Methodology for works at each site outlined in the application dated 10 October 2017, and any subsequent methodology submitted under Condition 5.
15. The works shall not deepen or widen the stream channel to a greater extent than that which is necessary, in the opinion of a Professional Chartered Engineer, to remove gravels accumulated in the stream and/or to mitigate the effects of the works authorised by this consent at each site.

#### **Freshwater fish**

16. No instream works shall be carried out in the active channel (ie, flowing water in the stream bed) during the key recruitment migration period for native fish species between 1 August to 31 December inclusive.

17. The consent holder shall ensure that any fish found stranded as a result of the works are collected with a soft meshed net or wet hands, and placed in a bucket before being transferred at least one hundred metres upstream of the works site into a clear flowing section of the Spicer Stream. The collection process shall incorporate:
- An instream search of large (and easily moved) substrate to check for aquatic fauna located underneath rocks, cobbles, woody debris; and
  - A search of spoil/gravels removed from the stream within 1 hour of extraction.

18. The consent holder shall ensure that fish passage is maintained during construction, unless a valid reason is provided in the construction methodology as to why fish passage cannot be maintained during works.

*Note: it is expected that there will be a short block to fish passage while the diversions are established.*

19. Once construction works are complete fish passage must be maintained past the work sites authorised by this consent at all times. If fish passage is impeded by the works in the opinion of an Enforcement Officer, Environmental Regulation Wellington Regional Council, the consent holder must take immediate action to ensure fish passage is restored to the satisfaction of the Manager Environmental Regulation Wellington Regional Council.

20. The consent holder shall ensure that pipes are included at sites E, F and G to create fish caverns in accordance with the application and to the satisfaction of the Manager, Environmental Regulation, Wellington Regional Council. The fish tunnels shall be designed to ensure the following:

- Pipes should be positioned so they will always be inundated with water
- Geotextile material should be used to cover off the end of the pipe that is set into the bank (i.e., to stop gravels filling during construction)
- Pipes should be positioned so they are facing slightly downstream
- Pipes should be positioned so they flush with the structure
- Pipes should only be placed on the outside corner of a bend.

### **Photographic record**

21. The consent holder shall compile photographic records of the area of works authorised by this consent including all repairs and maintenance. These photographic records shall include, but not be limited to, photographs of the following items:

- a) The location of the proposed works: incorporating the works area and the stretches of the Spicer Stream that may be affected by the works (ie, prior to the works commencing)
- b) The site during the works: incorporating the works area and stretches of the Spicer Stream identified in (a); and

- c) The site immediately upon the completion of the works (within one week): incorporating the works area and stretches of the Spicer Stream identified in (a)

The photographic record of items identified in (a), (b) and (c) shall be submitted to the Manager, Environmental Regulation, Wellington Regional Council as soon as possible but within one week of the photographs being taken.

All submitted photographs shall include:

- The date the photographs were taken
- The time the photographs were taken
- A description of the site location (eg, map reference, address) of where the photograph was taken, and
- A description of what aspect of the works the photograph relates to

The photographs and details shall be to the satisfaction of the Manager, Environmental Regulation, Wellington Regional Council.

*Note 1: The photographic record should demonstrate compliance with the conditions of this consent.*

*Note 2: Photographic records, ie, electronic picture files from digital cameras must be emailed to notifications@gw.govt.nz. Please include the consent number WGN170312 date and time photographs were taken and a description of the site location (eg, map reference, address).*

### **Construction Log**

22. The consent holder shall maintain a construction log which will detail all works undertaken in accordance with this consent. The record shall detail but not be limited to the follow;
- Works location identified;
  - Details of volume of extracted bed and/or bank material (if applicable in each case);
  - Details of fish species and number rescued and released;
  - Observations regarding the extent of visible sedimentation related to the in stream works.

The log shall be submitted with the photographic information required under Condition 21 of this consent.

### **Erosion and scour**

23. Any areas of the stream banks that are cut or disturbed as a result of the works shall be stabilised and grassed/replanted as soon as practicable, following completion of the works, to prevent erosion and scour. These works shall be to

the satisfaction of the Manager, Environmental Regulation, Wellington Regional Council.

*Note: For the purposes of this condition, “stabilised” in relation to any site or area means inherently resistant to erosion or rendered resistant, such as by using indurated rock or by the application of basecourse, colluvium, grassing, mulch, or another method to the reasonable satisfaction of the Manager, Environmental Regulation, Wellington Regional Council and as specified in Wellington Regional Council’s Erosion and Sediment Control Guidelines for the Wellington Region, September 2002. Where seeding or grassing is used on a surface that is not otherwise resistant to erosion, the surface is considered stabilised once, on reasonable visual inspection by the Manager, Environmental Regulation, Wellington Regional Council, an 80% vegetative cover has been established.*

### **Maintenance of works**

24. The works shall remain the responsibility of the consent holder and shall be maintained to the satisfaction of the Manager, Environmental Regulation, Wellington Regional Council so that:
- a) Any erosion, scour or instability of the stream bed or banks that is attributable to the works carried out as part of this consent is remedied by the consent holder; and
  - b) Any adverse effects caused by the presence of the structure that limit or restrict fish passage shall be rectified by the consent holder; and
  - c) The structural integrity of the structure remain sound in the opinion of a Professional Chartered Engineer; and
  - d) If the channel becomes perched as a result of the works, remedial work is carried out to repair this.

*Note: Maintenance does not include any works outside of the scope of the application. Any additional works (including structures, reshaping or disturbance to the bed of the watercourse) following completion of the construction works as proposed in the application, may require further resource consents.*

### **Discovery of artefacts**

25. If koiwi, taonga, wāhi tapu or other archaeological material is discovered in any area during the works, work shall immediately cease and the consent holder shall notify Greater Wellington Regional Council, Port Nicholson Block Settlement Trust, Te Rūnanga o Toa Rangatira Inc and Heritage New Zealand as soon as possible but within twenty-four hours. If human remains are found, the New Zealand Police shall also be contacted. The consent holder shall allow the above parties to inspect the site and in consultation with them, identify what needs to occur before work can resume.

Notification must be emailed to:

- Greater Wellington Regional Council, [notifications@gw.govt.nz](mailto:notifications@gw.govt.nz)
- Heritage New Zealand, [information@heritage.org.nz](mailto:information@heritage.org.nz)
- Port Nicholson Block Settlement Trust, [taiao@portnicholson.org.nz](mailto:taiao@portnicholson.org.nz)
- Te Rūnanga o Toa Rangatira Inc, [resourcemanagement@ngatitoea.iwi.nz](mailto:resourcemanagement@ngatitoea.iwi.nz)

Heritage New Zealand must also be contacted by phone on 04 472 4341 (National Office).

No works may resume on site until the consent holder has received written notification that consultation with the parties identified above has been undertaken to the satisfaction of the Manager, Environmental Regulation, Wellington Regional Council.

*Note: Evidence of archaeological material may include burnt stones, charcoal, rubbish heaps, shell, bone, old building foundations, artefacts and human burials.*

### **Review condition**

26. The Wellington Regional Council may review any or all conditions of this consent by giving notice of its intention to do so pursuant to section 128 of the Resource Management Act 1991, at any time within six months of the anniversary of the granting of this consent for the duration of this consent, for the following purposes:
- a) To review the adequacy of any report and/or monitoring requirements, and if necessary, amend these requirements outlined in this consent
  - b) To deal with any adverse effects on the environment that may arise from the exercise of this consent; and which are appropriate to deal with at a later stage
  - c) To enable consistency with any relevant Regional Plans or any National Environmental Standards or Regulations

The review of conditions shall allow for the deletion or amendment of conditions of this consent; and the addition of such new conditions as are shown to be necessary to avoid, remedy or mitigate any significant adverse effects on the environment.

### **Notes:**

1. A resource management charge, set in accordance with section 36(2) of the Resource Management Act 1991 shall be paid to the Regional Council for the carrying out of its functions in relation to the administration, monitoring, and supervision of resource consents and for the carrying out of its functions under section 35 (duty to gather information, monitor, and keep records) of the Act.

2. The Wellington Regional Council shall be entitled to recover from the consent holder the costs of any review, calculated in accordance with and limited to the Council's scale of charges in force and applicable at that time pursuant to section 36 of the Resource Management Act 1991.