



Memorandum of Understanding on Responsibilities for the Construction, Maintenance and Renewal of Flood Protection Related Infrastructure at Balgownie and Kowhai Park, Wanganui

1.0 Introduction and Scope

This Memorandum of Understanding (Memorandum) records an agreement reached between Horizons Regional Council Operations Group (HRC) and Wanganui District Council – infrastructure (WDC), as regards their respective roles in the construction, maintenance and renewal of flood protection and related infrastructure located between Balgownie Avenue and Wharf Street, Balgownie, and between Geogetti Road and Helmore Street, Wanganui East.

The Memorandum reflects the interface between flood protection, stormwater, roading, parks, reserves and recreational walkway infrastructure owned and operated by the two parties and the consequent need for clarity as to responsibility for specific components of each system.

The Memorandum does not cover infrastructure owned by parties other than HRC and WDC.

This Memorandum replaces an earlier version executed by the parties in November 2011 and in particular is extended to include flood protection infrastructure at Kowhai Park.

2.0 Background

HRC has formally accepted responsibility for the provision of flood protection to defined floodable areas within the Wanganui 'City' area. Specifically, HRC has agreed to provide protection to the 0.5% AEP standard (plus freeboard) to the Balgownie floodable area, and has agreed to upgrade the existing stopbanks at Kowhai Park to provide flood protection to the 2% AEP (without freeboard) standard. The works at Balgownie were completed between January 2010 and December 2011, while the works required at Kowhai Park are scheduled for completion by June 2014.

3.0 Responsibilities of Each Party

3.1 Capital Works

HRC is responsible for the design and construction of the flood protection works. Such works may comprise earth embankments, concrete flood walls, concrete block walls, timber flood walls, demountable flood barriers, and directly associated fences, paths, vehicle crossings, handrails, bollards, floodgates and other miscellaneous components required to fulfill the flood protection function. Those works are to be funded through the Lower Whanganui River Scheme.

Where the execution of capital works necessitates the alteration of any infrastructure owned by WDC, then HRC will, in design collaboration with WDC, make such alterations at full cost to the flood protection project. This provision will include the installation of floodgates or valves to existing stormwater outlets where required to prevent back flows during elevated river conditions, and thereby ensure the integrity of the flood protection system.

However where it is agreed between the parties to take an opportunity, during construction of the flood protection works, to enhance an existing WDC asset, for example to install a new culvert or upgrade an existing one, or to upgrade or extend a walkway, then a proportion of costs that reflects the degree of improvement shall be met by WDC. The cost of installation of any new non-flood protection related asset, that involves disturbance of the flood protection works following their completion, will be met in full by WDC. The design and construction methodology in respect of those works will require HRC's prior approval.

3.2 Maintenance and Operation

HRC will be responsible for the ongoing maintenance and operation of all flood protection assets including floodgates, back flow valves and manholes that provide access to those devices, (but not pipes that are part of an existing stormwater reticulation system) that are located to the riverside of the landward stopbank toe (refer Figure A). The floodgates/valves are generally externally mounted, however in some instances they may be located in manholes.

WDC will be responsible for the operation and maintenance of all components of its stormwater network, including those parts that are located within the flood protection works footprint.

The removal of silt from pipes will be the responsibility of WDC where it affects the functionality of its stormwater system and of HRC where it prevents the proper operation of its floodgates and back flow valves. In practice however, there are likely to be situations where siltation impacts on the functioning of assets owned by both parties, and where costs should accordingly be shared.

As at the date of this Memorandum, any improvements required to bring existing flapgates and valves within the Balgownie flood risk compartment to an appropriate standard, prior to HRC assuming responsibility for ongoing maintenance, has been completed. Within the Kowhai Park flood risk compartment, some deferred maintenance is required and it is agreed that WDC will attend to that work prior to maintenance responsibility transferring to HRC.

WDC will be responsible in all respects for the maintenance of its services other than stormwater, i.e. water supply and wastewater that are located within the flood protection works footprint.

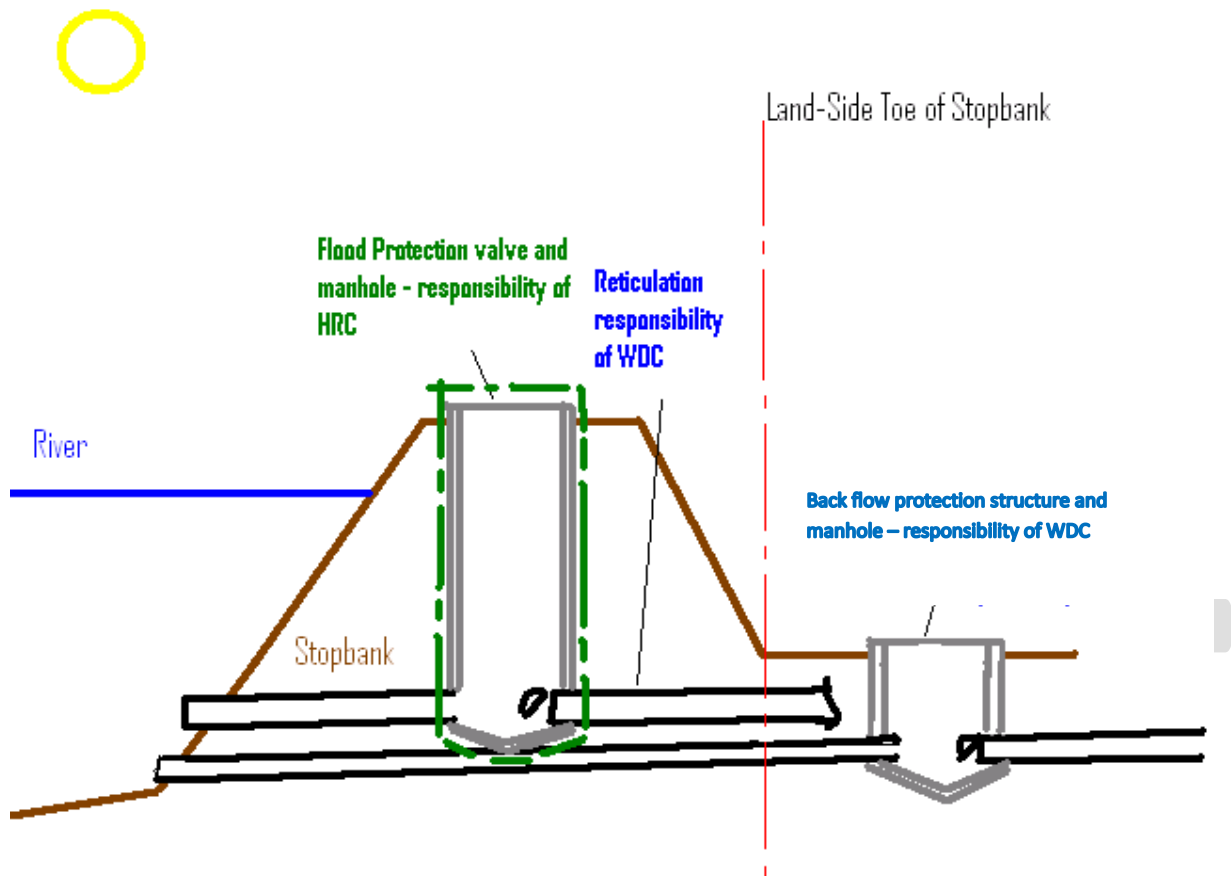


Figure A

All stormwater outfalls and associated floodgates and valves within the flood protected areas covered by this Memorandum are scheduled at Annex A. Maps showing the location of those outfalls are attached at Annex B (Balgownie) and Annex C (Kowhai Park).

It should be noted that six internal stormwater outlets originating from the AFFCO property and passing under the Balgownie stopbank are not part of WDC's stormwater system. While they are recorded in the schedule at Annex A for the sake of completeness, they fall outside the scope of this document. HRC will however, maintain the external floodgates on those outlets and will clarify responsibility for the remaining system components with AFFCO.

HRC will be responsible for the maintenance of shared pathways, walkways and vehicle access ramps, only where they are located on stopbanks, and for fences where they are erected specifically to keep vehicles off stopbanks, e.g. along Karoro Road. A notable exception is that WDC will be responsible for the maintenance of those sections of its internal roading network that cross stopbanks within Kowhai Park.

HRC will be responsible for the mowing of grass within the flood protection footprint at Balgownie. In general, mowing will extend one pass beyond the actual stopbank toe where practicable. WDC will be responsible for mowing the adjoining reserve area in Wharf Street; the berm area at Wanganui Sailing Club; on the road reserve in Karoro Road; and all areas, including the stopbanks at Kowhai Park.

The rationale for the above division of responsibilities is that infrastructure required irrespective of the flood protection works should be maintained by WDC, while infrastructure required expressly to provide flood protection should be maintained by HRC.

3.3 Asset Renewal and Damage Reinstatement

All flood components of the flood protection infrastructure as described in 3.1 above are recorded as assets within the Lower Whanganui Scheme Asset Management Plan. That Plan sets out the asset management principles and practices that will ensure the system provides the agreed level of flood protection service in perpetuity. HRC is responsible in all respects for the implementation of that Plan. HRC has also made provision through its risk management policy, for the reinstatement of any flood damage.

Similarly, WDC has made provision through its Stormwater Asset Management Plan for repairs and renewals of those parts of the system that are referred to in this memorandum.

4.0 Wanganui Flood Action Plan

HRC, through its Emergency Management function, will be responsible for developing and periodically reviewing a Wanganui Flood Action Plan in close consultation with WDC Emergency Management officers. The Plan will clearly identify response tasks to be undertaken by both HRC and WDC at prescribed river levels at Pipiriki. Those tasks will generally reflect the respective responsibilities recorded in this Memorandum of Understanding.

Signed:

_____ **For Horizons Regional Council**

_____ **Date**

_____ **For Wanganui District Council**

_____ **Date**

Lower Wanganui River Scheme

Schedule of floodgates and valves associated with flood protection works

HRC REF No.	AREA	LOCATION	ASSET No.	STRUCTURE	WFAP** MAP No.	GPS	RESPONSIBLE AUTHORITY	CONFIRMED	REASON FOR RESPONSIBILITY	COMMENTS
1	Balgownie	610m Q West	HRC 906500	300 RC		0982/6188	HRC	YES	Between SB and River	F/g at outlet
2	Balgownie	690m Q West	HRC 906501	450 RC		1060/6198	HRC	YES	Between SB and River	F/g at outlet
3	Balgownie	790m Meat Packers	WDC	Nil		1149/6174	WDC	YES	WDC to Decommission	WDC to confirm status- to be decommissioned
4	Balgownie	850m West End of Gilbert St	WDC	Twin 1350 RC		1205/6138	WDC	YES	New not Commissioned	Not complete- for future needs
5	Balgownie	875 West End of Gilbert St	HRC 906502	F/g in Manhole		1210/6502	HRC	YES	Located in SB Planterbox	M//h in planterbox
6	Balgownie	950m u/s of Planterbox		150 PVC		1289/6070	WDC	YES	Unknown - Investigating	Uncertain of source. WDC investigating
7	Balgownie	1240m Rogers St- opp. Recycling Centre	HRC 906504	1050 RC		1527/5940	HRC	YES	Between SB and River	Wastop in pipe end
8	Balgownie	1490m d/s of Sailing Club	HRC 906505	600 RC		1769/5852	HRC	YES	Located on SB	F/g in m/h (in s/b at vehicle ramp)
9	Balgownie	1730m u/s of Sailing Club	HRC 906506	600 RC		1988/5762	HRC	YES	Located on SB	F/g in m/h(in s/b). Grill protecting outlet
10	Balgownie	2290m near Gasline River Xing Karoro Rd	HRC 906507	750 RC		2491/5617	HRC	YES	Between SB and River	F/g at outlet
11	Balgownie	2480m Beach Rd	WDC SWM 8081	900 RC		2687/5609	WRC	YES	In MH in Road	Wastop inst .May 2013
12	Balgownie	2725m d/s of end AFFCO	HRC 906511	450 RC		2924/5592	HRC	YES	Between SB and River	No protection. M/h in s/b. HRC to investigate f/g installation in m/h
13	Balgownie	2760m AFFCO	HRC 906512	525 RC		2962/5577	HRC	YES	Between SB and River	f/g at outlet behind grill
14	Balgownie	2870m AFFCO	HRC 906513	750 RC		3078/5561	HRC	YES	Between SB and River	F/g at outlet behind grill
15	Balgownie	2970m AFFCO	HRC 906514	150 RC		3170/5594	HRC	YES	Between SB and River	F/g at outlet behind grill
16	Balgownie	2970m AFFCO	HRC 906515	525 RC		3165/5594	HRC	YES	Between SB and River	F/g at outlet behind grill
17	Balgownie	3080m u/s of end AFFCO	HRC 906516	450 RC		3295/5635	HRC	YES	Between SB and River	F/g at outlet - drains AFFCO yard
18	Balgownie	3090m u/s of end AFFCO		150 PVC		3302/5635	?AFFCO	NO	Private	Investigating culvert source
1	Kowhai Park	Opp. Geogetti St	WDC SWM 07895	Flap		6048/9693	HRC	YES	Between SB and River	Flap in MH FV1
2	Kowhai Park	d/s of Park Entrance	WDC SWM 05460	Flap		6022/9768	WDC	YES	Park side of SB	Flap but winding handle on shaft
3	Kowhai Park	d/s of Park Entrance	WDC SWM 07901	Flap		6007/9754	HRC	YES	Between SB and River	Flap in MH
4	Kowhai Park	Alum Flap	WDC SWM 07892	Flap			HRC	YES	Between SB and River	Flap in MH
5	Kowhai Park	Exposed, in thru Bamboo	WDC SWM 05438	Wastop		5808/0171	HRC	YES	Between SB and River	Wastop in MH FV3
6	Kowhai Park	d/s of Park Bridge	WDC SWM 07897	Wastop		5760/0254	HRC	YES	Between SB and River	Wastop in MH FV4
7	Kowhai Park		WDC SWM 05441	Wastop		No	HRC	YES	Between SB and River	Wastop in MH
8	Kowhai Park	u/s of Park Bridge SV6	WDC SWM ?	Knifegate		5771/0377	?	?	Unsure of Outlet	Full of water at inspection
9	Kowhai Park	Exposed ex Moat FV5	WDC SWM ?	Knifegate		5734/0362	HRC	YES	Between SB and River	Knifegate in MH
10	Kowhai Park	Exposed, Top of s/b	WDC SWM ?	Knifegate		5603/0501	HRC	YES	Between SB and River	Knifegate in MH
11	Kowhai Park	In m/h, Riverside of Toilets	WDC SWM ?	Flap		5675/0554	WDC	YES	Park side of SB	Flap in MH
12	Kowhai Park	u/s of Dublin Bridge FV7	WDC SWM 04571	Flap		5499/0773	?	?	Between SB and River	Flap in MH FV7. Not protected by SB but in flood zone. Logical for HRC responsibility
13	Kowhai Park	u/s of Go Carts,2xFV's (WDC SWM 4284+8070)	WDC SWM 04284	Wastop		5531/0988	WDC	YES	Park side of SB	Wastop in MH. Not protected by HRC SB. MH in WDC embankment
14	Kowhai Park	u/s of Go Carts,2xFV's (WDC SWM 4284+8070)	WDC SWM 08070	Flap		5531/0988	?	?	Between SB and River	Flap in MH. Not protected by SB but in flood zone. Logical for HRC responsibility
15	Kowhai Park	Halfway to Motor Boat Club	WDC SWM 07902	Flap		5504/1192	HRC	YES	Between SB and River	Flap in MH FV9
16	Kowhai Park	Exposed in Slipway	WDC SWM 04234	Knifegate		5547/1285	HRC	YES	Between SB and River	Rear of Boat Club. Riverside of new HRC SB
17	Kowhai Park	Halfway m/b and Baldwin Bldg FV10	WDC SWM ?	Flap		5552/1383	HRC	YES	Between SB and River	Flap in MH FV10
18	Kowhai Park	Pvc Flap	WDC SWM7905	Flap		5562/1425	HRC	YES	Between SB and River	Flap in MH FV11
19	Kowhai Park	Riverside of Baldwin Bldg	WDC SWM 7906	Flap		5577/1464	HRC	YES	Between SB and River	Flap in MH FV12
20	Kowhai Park	Pvc Flap	WDC SWM 04291	Flap			WDC	YES	Above SB Construction	Above SB protection zone

**WFAP = Whanganui Flood Action Plan