Prince of Wales / Omāroro Reservoir consultation

Submissions received

July 2017

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Submitter Details

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Wishes to be heard:
- ○ Yes
- ◉ I do NOT wish to speak in support of my submission and ask that the following submission be fully considered.

Correspondence to:
- ◉ Submitter
- ○ Agent
- ○ Both

Submission

What is your overall level of support for this proposal?

- ○ Not at all supportive
- ○ Unsupportive
- ○ Neutral
- ○ Supportive
- ◉ Very supportive

What are your key concerns or issues with this proposal?

Comments
The disruption to the surrounding neighbourhood during construction, particularly as Wallace St/ Taranaki St is already very busy, particularly during peak times. There would have to be work to mitigate these risks without disrupting the residents with heavy vehicle traffic at night, or if there must be heavy traffic offer compensation (to the residents, not necessarily the home owners as a lot of these houses are flats or apartments) or other remedies to those that are most affected. Also maintaining walking/ running tracks around the construction site during this time would be important as well as this cane be a popular recreation area, or access way to recreation areas.

What do you see as the main benefits of this proposal?

Comments
Giving Wellington a more secure, resilient water supply system.

Attached Documents

File
Prince of Wales/Omaroro Water Reservoir Project

Submitter Details

First Name: **Joel**
Last Name: **George**
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Wishes to be heard:
- ○ Yes
- ◉ I do NOT wish to speak in support of my submission and ask that the following submission be fully considered.

Correspondence to:
- ◉ Submitter
- ○ Agent
- ○ Both

Submission

What is your overall level of support for this proposal?

- ○ Not at all supportive
- ○ Unsupportive
- ○ Neutral
- ○ Supportive
- ◉ Very supportive

What are your key concerns or issues with this proposal?

Comments
If the project does not go ahead the risk to Wellington citizens are greatly increased.

What do you see as the main benefits of this proposal?

Comments
Earthquake preparedness. This is a vital project.

Attached Documents

File
Prince of Wales/Omaroro Water Reservoir Project

Submitter Details

First Name: **Marc**
Last Name: **Rands**
Street: **6 Perth Street**
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City: **Wellington**
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Wishes to be heard:
- ○ Yes
- ◉ I do NOT wish to speak in support of my submission and ask that the following submission be fully considered.

Correspondence to:
- ◉ Submitter
- ○ Agent
- ○ Both

Submission

What is your overall level of support for this proposal?

- ○ Not at all supportive
- ○ Unsupportive
- ○ Neutral
- ○ Supportive
- ◉ Very supportive

What are your key concerns or issues with this proposal?

Comments
I support the proposal.

What do you see as the main benefits of this proposal?

Comments
It is an important development to improve the resiliance of Wellington Hospital in the event of a natural disaster.

Attached Documents

File
Prince of Wales/Omaroro Water Reservoir Project

Submitter Details

First Name: **Simone**
Last Name: **Riginelli**
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Suburb: **Mount Cook**
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Wishes to be heard:
- ○ Yes
- ◉ I do NOT wish to speak in support of my submission and ask that the following submission be fully considered.

Correspondence to:
- ◉ Submitter
- ○ Agent
- ○ Both

Submission

What is your overall level of support for this proposal?

- ○ Not at all supportive
- ◉ Unsupportive
- ○ Neutral
- ○ Supportive
- ○ Very supportive

What are your key concerns or issues with this proposal?

Comments
Living just below the construction site worries me in case of an earthquake. I'm concerned in case of a big earthquake that it may brake the water reservoir resulting in a massive flooding with potential deadly result for the resident living on the roads below it. Second , I don't think it's fare for the people leaving on Salisbury avanue to have the sport field lifted by a meter or more. It will result in a invasion of their privacy, cause people on the field will be able to look inside their property, All of this to save money of the builders, not caring about the people living there, which are already paying the cost of having their peace disturbed by 2 or more years of working.

What do you see as the main benefits of this proposal?

Comments

Attached Documents

File
Prince of Wales/Omaroro Water Reservoir Project

Submitter Details

First Name: **Sarah**
Last Name: **Jardine**
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Wishes to be heard:
- ○ Yes
- ◉ I do NOT wish to speak in support of my submission and ask that the following submission be fully considered.

Correspondence to:
- ◉ Submitter
- ○ Agent
- ○ Both

Submission

What is your overall level of support for this proposal?

- ○ Not at all supportive
- ○ Unsupportive
- ○ Neutral
- ◉ Supportive
- ○ Very supportive

What are your key concerns or issues with this proposal?

Comments
Nothing really.

What do you see as the main benefits of this proposal?

Comments
I'd appreciate it if this proposal ensures that the area above and around the new reservoir can be kept gorse-free. The gorse at the moment gets very large. I'm also pleased to see that the pathway will be constructed so that it is better than the pathways are at the moment.

Attached Documents

File
Prince of Wales/Omaroro Water Reservoir Project

Submitter Details

First Name: **Chris**
Last Name: **Gower**
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Wishes to be heard:
- ○ Yes
- ◉ I do NOT wish to speak in support of my submission and ask that the following submission be fully considered.

Correspondence to:
- ◉ Submitter
- ○ Agent
- ○ Both

Submission

What is your overall level of support for this proposal?

- ○ Not at all supportive
- ○ Unsupportive
- ○ Neutral
- ○ Supportive
- ◉ Very supportive

What are your key concerns or issues with this proposal?

Comments
1) Access and safety to the club rooms (AKA Scottish harriers club rooms). The main concern is school holidays and ensuring there is traffic management to allow drop off in the morning and pickup in the afternoon via Salisbury Terrace entrance to the main drive along the lower field. We also use the rooms every night and every weekend. Having a plan to mage access for these time would be helpful. 2) No outside area where groups and programs can be held as field will be fenced. Suggest looking at a small retaining wall adjacent to club rooms and infill from the project that would allow a landing at the bottom of the hill to allow groups usage. 3) Improve the lighting and path for foot traffic from Westland Ave to offer an alternative way to the tracks and club south end of POW park & club rooms

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What do you see as the main benefits of this proposal?

Comments
Happy with the rational to implement a new water reservoir in the Mt Cook area. Supportive of the project taking place albeit no outdoor area restrictions for 3 years if this can be mitigated by

creating an alternative as stated above.

Attached Documents

File
Prince of Wales/Omaroro Water Reservoir Project

Submitter Details

First Name: **Euan**
Last Name: **Galloway**
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Wishes to be heard:
- ○ Yes
- ◉ I do NOT wish to speak in support of my submission and ask that the following submission be fully considered.

Correspondence to:
- ◉ Submitter
- ○ Agent
- ○ Both

Submission

What is your overall level of support for this proposal?

- ○ Not at all supportive
- ○ Unsupportive
- ○ Neutral
- ○ Supportive
- ◉ Very supportive

What are your key concerns or issues with this proposal?

Comments
Potential disruption to Town Belt environment and access through the Park, but a necessary consequence of providing essential water to Wellington users

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What do you see as the main benefits of this proposal?

Comments
more resilience in time of disruption. Using the excavated soil to raise the sports fields is a good idea

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Attached Documents

File
Prince of Wales/Omaroro Water Reservoir Project

Submitter Details

First Name: **Victoria**
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Suburb: **Te Aro**
City: **Wellington**
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eMail: **victoria.mcewan@gmail.com**

Wishes to be heard:
- ○ Yes
- ◉ I do NOT wish to speak in support of my submission and ask that the following submission be fully considered.

Correspondence to:
- ◉ Submitter
- ○ Agent
- ○ Both

Submission

What is your overall level of support for this proposal?

- ○ Not at all supportive
- ○ Unsupportive
- ○ Neutral
- ○ Supportive
- ◉ Very supportive

What are your key concerns or issues with this proposal?

Comments

What do you see as the main benefits of this proposal?

Comments
I see this as being absolutely crucial to the city's future-proofing and emergency resilience infrastructure.

Attached Documents

File
Prince of Wales/Omaroro Water Reservoir Project

Submitter Details

First Name: **Judy**
Last Name: **Hutt**
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eMail: **judyhutt@paradise.net.nz**

Wishes to be heard:
- (•) Yes
- ( ) I do NOT wish to speak in support of my submission and ask that the following submission be fully considered.

Correspondence to:
- (•) Submitter
- ( ) Agent
- ( ) Both

Submission

What is your overall level of support for this proposal?

- (•) Not at all supportive
- ( ) Unsupportive
- ( ) Neutral
- ( ) Supportive
- ( ) Very supportive

What are your key concerns or issues with this proposal?

Comments
I'm a NIMBY. I live at the top of Rolleston Street and own the property next door which is tenanted. So I would probably be the most affected party in the area. I'm concerned about the noise, dust, traffic disruption and all other aspects associated with a project of this size for a three year duration. The area is rich in birdlife and I'm concerned about the potential effects of the disruption - particularly on the fairly large population of Morepork. My tenants have already said that they will be moving out if the project goes ahead and I'm concerned that it would be difficult to re-let my rental property. I'm not convinced that the site selected is the best one because of its proximity to a densely populated residential area and would like to see a peer review of the site selection process. I'm aware that the reservoir needs to be sited on high ground but I'm certain there are less populated high ground areas available close to the hospital and CBD. In addition, the Bell Road Reservoir is scheduled for replacement at the same time as the Prince of Wales Reservoir is scheduled to be constructed. A double whammy to me in particular because I would have massive earthworks being carried out at the front AND the back of my properties. Rolleston Street is narrow and has a sharp bend - difficult to maneuver large trucks back and forth. So far, Wellington Water has been hopeless at public consultation. I've never received anything in my letterbox about the project and despite requesting on numerous occasions to be updated via email, so far have received exactly nothing. The public consultation meetings that I've managed to find out about through other sources haven't really been very helpful. Mainly because Wellington Water have no way of knowing whether or not the levels of the two parks will be raised and the subsequent impact

of heavy machinery and heavy traffic in my front (and back yard). However, a couple of weeks ago a sign about the proposal appeared on the entrance to the Upper Field of Prince of Wales Park . Maybe things are looking up in the notification department.

What do you see as the main benefits of this proposal?

Comments
I support the idea of a new reservoir in principle but as a total NIMBY would prefer that it was sited elsewhere.

Attached Documents

File
Prince of Wales/Omaroro Water Reservoir Project

Submitter Details

Wishes to be heard:
- ○ Yes
- ◉ I do NOT wish to speak in support of my submission and ask that the following submission be fully considered.

Correspondence to:
- ◉ Submitter
- ○ Agent
- ○ Both

Submission

What is your overall level of support for this proposal?

- ○ Not at all supportive
- ○ Unsupportive
- ○ Neutral
- ◉ Supportive
- ○ Very supportive

What are your key concerns or issues with this proposal?

Comments
My first concern is the fact that heavy vehicles are going to be travelling up and down Rolleston Street on Saturdays. I'm sure most residents work Monday to Friday and appreciate having both Saturday and Sunday free of major noise, disruption and early rises. Many people will also want to do weekly washing on a Saturday (Sundays might not be an option due to the weather or personal circumstances). If you have trucks moving up and down Rolleston St on a Saturday creating dust from earth both on the road and from the load they are carrying, residents are going to end up with dirty sheets, clothes, towels etc, having just gone to the trouble of washing them. Also, the proposed start time for trucks on a Saturday is 7.30am !! This is both unreasonable and irrational. In the middle of winter (like now) it's still dark at 7.30am, and many people will still be in bed (the sun rises at around 8.00am, if there is any - if not, it's darker for longer still). We need some common sense here ! Then there is the question of hours lost by not having trucks working on a Saturday. In my opinion, the operating hours proposed for weekdays are too short. It would make more sense for trucks to start at 8.00am, when people are already up and about and leaving for work, and continue until 4.00pm. Rush hour traffic along Wallace St does not start building until 4.30 or 5.00pm, so why not add an extra hour at the end of the day as well to make maximum use of the time available from Monday to Friday ? The extended operating times on week days (a total of 10 hours) would therefore replace the time proposed for Saturday operations. If Wellington Wate

considers that these extended times will interfere with rush hour traffic in the mornings and afternoons, I think it's a case of 'so be it'. The new reservoir is going to benefit all of Central Wellington, therefore everyone in this area should be prepared to put up with a bit of inconvenience during the construction period - it's unfair for most of the burden to fall on the residents of just one street. Everybody in Central Wellington should make some sacrifice in one way or other.

What do you see as the main benefits of this proposal?

Comments
A secure (hopefully) supply of water to service the Central City in the event of a major earthquake, especially for the hospital and the CBD. Businesses and Govt Agencies will have to try to restart operations again quickly if at all possible. The supply of water, electricity and communications will be vital for that to happen - without any of these 3 x factors, thousands of workers would have to relocate which could prove either costly, impractical or both. By the way, I support the RAISING and STOCKPILING of soil on both fields - it may cost a little more but will greatly reduce the number of trips required to transport soil away from the site. Thank you

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Attached Documents

File
Prince of Wales/Omaroro Water Reservoir Project

To Wellington City Council and Wellington Water

Consent under the Town Belt Act for the proposed Prince of Wales / Omāroro Reservoir

Submission

Kendall Gibson and Hugh McPhail
7 Westland Road, Mt Cook, Wellington 6021
Tel: 970 9851 Mobile: 021 705 817 Email: hugh.mcphail@paradise.net.nz

We do not wish to make an oral submission to the Council.

This submission is made by Hugh McPhail and Kendall Gibson, owners and residents at 7 Westland Road Mt Cook, which is adjacent to Prince of Wales Park. We have lived at this address since 1995 and the lower field is an every day part of our lives.

Thank you for the opportunity to comment on the proposed Prince of Wales/Omāroro Reservoir. We attended one of the open days organised by Wellington Water, and found it to be useful in clarifying a number of matters.

In general terms we support the submission made by Mt Cook Mobilised, and this submission addresses particular matters of importance to us with regard to this proposal, using the same subject headings as used by Mt Cook Mobilised.

1. Wellington's need for more stored water

The availability of adequate water supplies, including in times of emergency, is a key responsibility for the Council and Wellington Water, but it is not clear that the construction of a major reservoir as envisaged provides a sufficiently resilient reponse.

2. External peer review of designs

We endorse Mount Cook Mobilised's call for external peer review of the reservoir design, and would add to that the impact of the proposed solutions for the disposal of fill, in both the short-term, i.e. temporary storage on the playing fields, and the longer-term, i.e. raising the level of the playing fields.

3. Scale of the project and implications for our neighbourhood

This is a major project that has a significant impact for the lengthy construction period and more permanently. In particular, the reservoir and its construction affects the Town Belt, affects the local ecology, and affects the surrounding residents.

Of particular concern to us is the proposal as it concerns the use of the Prince of Wales playing fields for storing fill on a temporary basis, and more permanently by using fill to raise the heights of the fields.

The location of mountains of fill on the lower field in particular will inevitably have adverse effects on the environment, including the Papawai stream and its flora and fauna, and the risks to effective drainage associated with the high rainfall events we are continuing to experience. There will also be an adverse impact on local residents from the dust, mud and noise associated with the creation and management of the fill mountains and any park level raising, which is likely to continue for a period of years.

For those of us living alongside the parks, raising the park levels by 1 – 1.5 metres would significantly change our relationship to the park and its users. The proposed solution of a higher bank and a fence along the lane running alongside the lower park would adversely impact on our outlook, while the higher level of the playing field would have implications for our privacy.

At the very least, any fence level at the southern end of the field does not need to be above around a metre with planting to a similar height.

Lower Prince of Wales Park - Wetland Area

There has been some discussion about the possibility of the lower Prince of Wales Park being turned into a wetland, to mitigate effects on Papawai Stream. We endorse the in principle support by Mt Cook Mobilised for this suggestion, which would help preserve the ecological values of this part of the Town Belt.

A wetland approach could incorporate a smaller grass recreation area than is required for a full-sized rugby or cricket field, but would continue to provide an excellent recreation space for schools, children and other more informal activities.

4. Protection of surrounding bush eco-system and native fish

We also share the concerns of Mt Cook Mobilised for the surrounding bush eco-system to be protected, including the Papawai Restoration Area, the tree ferns and the native fish species which live in Papawai Stream and in the Waitangi Stream tributary.

5. Suitability of the Prince of Wales fields

We share concerns about how well the two fields will withstand the weight of extra fill, the impact on the Papawai Stream and the likelihood of erosion and other drainage difficulties. Experience suggests that it is unlikely that the plans for the fields will, in fact, resolve the drainage problems and could well exacerbate them.

We understand that tests have found heavy metals (cadmium, lead and nickel) and DDT in the soil of the sports fields. The proposal to strip off the topsoil, stockpile it and reuse it will provide opportunities to release contaminants into the environment. Raising the fields could put extra pressure on the fields and could cause the contaminants to be released into the ground water.

6. Car parking

Workers Cars

We endorse the suggestion by Mt Cook Mobilised that an arrangement be made with Te Whaea in Hutchison Road to use their car park for the 40 workers' cars proposed to be parked on the lower Prince of Wales Park. The use of the lower field for 40 cars would add significantly to the vehicular traffic using the narrow lane, adding risks to the high number of pedestrians who use the lane, and adding to the noise, dust mud and nuisance for adjoining residents.

Residents' Car Parking

Clarification is required of the availability of car parks at the southern end of the lower field and outside the Scottish Athletics Club.

7. Ongoing communication with the community

We strongly endorse Mt Cook Mobilised's plea that a high level of communication with residents is maintained throughout the project, particularly during construction. In particular, we agree that during any construction there should be a nominated person available as a contact point for residents,. We would add that a contact point should be available 24x7 and should be aware of and understand the perspectives of the various groups of affected residents.

8. Educational opportunities

We endorse suggestions that educational opportunities should be designed into the project to make the most of a valuable real life learning situation for children in local schools.

9. Weighing up the impacts

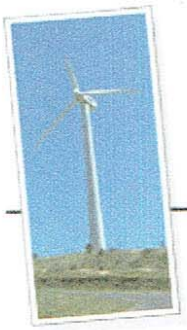
We recognise that in proposing, planning and undertaking a significant project like this, the Council and Wellington Water have an important responsibility to engage with affected communities and to weigh the benefits and impacts for the whole of Wellington as well as the Mt Cook community.

Because we share a boundary with the lower field of Prince of Wales Park, our daily lives will be significantly affected both during the construction phase and by any permanent alteration to the park. If the project is to go ahead, then we would urge that all possible mitigating factors be applied in order to minise the adverse consequences we have identiifed.

Thank you for the opportunity to comment on this proposal.

Kendall Gibson and Hugh McPhail
7 Westland Road
Mt Cook 6021
13 July 2017

Prince of Wales Park – lower field, July 2008



Brooklyn School Est. 1883
Take up the challenge - Mauria te taki

58 Washington Ave, Brooklyn, Wellington - Ph: 389 6758, Fax: 389 6610 - accounts@brooklynprimary.school.nz

1 July 2017

Submission on Town Belt Easement Application by Wellington Water for Prince of Wales Park

We would like to make a submission on the Town Belt Easement Application by Wellington Water for a reservoir in Prince of Wales Park.

While we generally support the application, Brooklyn School is a major user of the Park for both formal and informal activities. Over 200 children (half of the school) do sport at Prince of Wales Park in Terms One and Four for a range of activities. During Terms Two and Three, Prince of Wales Park is the venue for our school cross country and cross-country practices.

Clearly, during the construction process, we will have to relocate these activities to other locations. We would like to work with Wellington City Council to arrange suitable venues. Brooklyn School has very limited outdoor space and no grassed sports fields, so it is important for our children to have access to local open areas and fields.

During the construction period we would like to work with Wellington Water and its contractors on potential opportunities to incorporate the development of the reservoir into our curriculum. A recent example of this is the way Mt Cook School worked with NZTA during the construction of the Arras Tunnel and Pukeahu National War Memorial Park.

We request the opportunity to meet with Wellington City Council to discuss in further detail the effect that their application, should it go ahead, will have on Brooklyn School.

Regards,

Mary-Ann Butterfield
Chairperson, Board of Trustees

July 13 2017

To Wellington City Council and Wellington Water

Consent under the Town Belt Act for the proposed Prince of Wales / Omāroro Reservoir

Thank you for the opportunity to comment on the proposed Prince of Wales/Omāroro Reservoir (POWO).

My concern about the choice of POWP/Omaroro for this large Reservoir is that the ecological values of this site have not been adequately weighed against those of other sites initially looked at.

In my view these values include: (1) **Regenerating native bush**; this has been being enhanced by the voluntary efforts of the Papwai Restoration/Stream Group (PRSG) since 2009, and will inevitably be damaged by excavation work.

(2) **Papawai Stream** (along with the un-named tributary west of the proposed site), are two of the of the few remaining segments of Waitangi Stream branches in Wellington which is open. Furthermore it provides habitat for the galaxid species Banded Kokopu (Galaxias fasciatus), and Koura - freshwater crayfish (Paranephrops planifrons), both of which are declining in NZ. In contrast to the comment in the the Ecological Impact Assessment prepared for Wellington Water (WW), (p24) that Banded kokopu are Not Threatened, other scientific opinions suggest that they are : http://www.radionz.co.nz/national/programmes/nights/audio/201827439/nights'-science-native-fish-ecology .

Additionally it should be noted that the Ecological Assessment newly recorded juvenile Eels (elvers) for the first time I am aware of in Papawai Stream, thus it is possible that this recent discovery is related to improvements in habitat for this/these freshwater species, also known to be in decline throughout NZ, over the last 8 years. Papawai Restoration/Stream Group's ongoing activities include area appropriate riparian planting (eg. native grasses that drape into the stream providing breeding sites for the galaxids), various species improve shade and thus water temperative, and contribute to the removal of nutrients, toxins and silt runoff from stormwater coming from the surrounding builtup and Town belt areas.

(3) Members of the PRSGroup and other local residents regularly monitor the stream and adjacent **Town Belt for rubbish**, which is often left by other recreational users of the area eg. sports teams (well known for leaving behind sock/boot plastic tape which is non-biodegradable!), and drink bottles, food wrappers, along with wind blown litter. We regularly collect & either recycle or transfer such items for landfill disposal. Significant quantities of items from nearby rubbish & recycling containers find their way into the parks, forested areas and the stream, particularly from Connaught Tce. Also there are originally deposited components of "Fill"used when the playing fields were constructed and the stream bed diverted many decades ago, which continue to "emerge" especially from stream banks. Note that such non-biodegradable materials found over many years have included shoes, electrical wire, broken furniture, glass bottles and crockery and food wrappers.

By monitoring and collecting this rubbish, the cleanliness of the Town Belt , its recreational values, the quality of the stream and other flora and fauna habitats are improved, together with reduction

in stream and stormwater flow blockage, flooding and onflow of such pollution into the maraine environment of the Harbour. We report to WCC when rubbish bins are overflowing and when there is extra need for rubbish to be removed from POWP/O.

(4) Papawai Restoration/Stream Group and local Mt Cook residents also monitor the stream and riparian areas for **sewerage overflow.** Unfortunately sewerage pipes follow the open stream routes, and the pipes are deteriorating with age, in part due to tree root compromise. Also they have insufficient capacity with population growth together with increased stormwater overflow with heavier climate change related rainfalls; hence there have been all too frequent raw sewerage overflows polluting the stream and its surrounding areas in the Town Belt. I am personally aware of approximately 6 sewerage sump overflows into the stream since 2009. There sewerage pollution events have been detected by noting faecal and other sewerage odours and discolouration in the stream, and more recently by purposefully checking of (approximately 5-6 accessible) sumps upstream of the lower park bridge after heavy rainfalls. If a sewerage overflow is noted we then contact GWRC and WCC pollution hot-lines so that remedial action can be undertaken as quickly as possible. We are grateful for the usually prompt response to these notifications.

(5) **Avifauna**: improvements in ecological values for POWP/O and Stream branches also positively influence the diversity and numbers of native birds living, feeding in, and passing through this local environment. This section of the Town Belt forms part of the various green corridors of the city and compliments conservation activities occurring in other parts of the Belt, Zealandia and the Southern Coast Marine Reserve.

Of note it is likely that the first successful Kaka breeding outside of Zealandia, since Kaka were re-introduced there, occurred in a tree next to the lower POWP in 2012.

In conclusion, the local restoration, and "citizen science" activities noted above continue to provide invaluable positive contributions to reducing human mediated degradation, pollution and flooding damage in POWP/O local suburban bounded Town Belt environment.

In my view WCC and WW need to be able to scientifically demonstrate that it is beyond reasonable doubt, with our current state of knowledge, that the negative effects on environmental and recreational values of this proposed Reservoir site are going to be less damaging that the alternative site options.

Lastly, I also fully endorse the more extensive Mt Cook Mobilised submission about this project.

Thank you for the opportunity to comment.

I would like to speak when this project is discussed by Councillors.

Mary Hutchinson 44 Wright St, Mt Cook, Wellington 6021.
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WELLINGTON RUGBY FOOTBALL UNION Inc.

Bec Ramsay
Park Planner
Wellington City Council

Delivered by email

11 July 2017

Re: Rugby's Submission on Prince of Wales Reservoir Project

Rugby is in principle supportive of the Prince of Wales Reservoir Project and are understanding of the need to use both playing fields at Prince of Wales Park to assist with the construction for a period of up to three years. However, we do wish to formally raise some issues that will need to be resolved prior to Rugby offering their full support.

In discussions with Lauren Harkness and yourself, Rugby understands that following the construction period the playing surfaces will be approximately 1m higher and both fields will be upgraded before being handed back to the same user groups as pre-construction. In addition, the surrounding areas and fences would also be redone to enhance the environment and ensure balls aren't lost down banks, or into neighbouring properties. Rugby sees this as extremely positive as Rugby fields in the city are at a premium, and these two fields have often under-performed and faced restrictions and closures more than other grass fields.

Losing Prince of Wales park for trainings and matches will however have a significant impact on Rugby throughout this period, impacting the following parties:

1. Wellington Rugby Senior matches (4 matches per weekend)
2. College Sport Wellington College matches (2 matches per weekend)
3. Wellington Rugby Junior matches (equal to 2 senior matches per weekend)
4. Wellington Football Club (Summer training venue)
5. Old Boys University (Pre-Season match venue)
6. Wellington High School (Home Ground for matches, and sole training venue)

In 2016 Prince of Wales Park had 5,810 minutes of use. Prince of Wales #1 had 2,290 and Prince of Wales #2 had 3,520. In addition, Prince of Wales #2 is one of a few WCC grass fields that are setup for Rugby year-round.

In addition to the above, Rugby is in a challenging environment presently with four WCC fields being taken away from Rugby in the past three seasons; Ian Galloway Park #2, Martin Luckie Park #1 & #2, and Newlands Park #1. Over the next 12-24 months Rugby will be impacted with Kilbirnie Park (3 fields), Polo Ground, Evans Bay Park, and Hataitai Park all undergoing upgrades which will affect their availability for Rugby trainings and matches. Rugby is also awaiting an outcome on the certification testing in October of Te Whaea to see if Rugby can continue to play at this heavily utilised venue in compliance with World Rugby regulations for safety on artificial turfs.

Taking all of the above into consideration Rugby would not be able to function without two replacement full sized grass fields, with one of these being Rugby year-round during the planned construction at Prince of Wales. Additionally, considerations would need to be made around trainings, particularly for Wellington High School who don't have any facilities for Rugby at their College.

Yours Sincerely

Michael Langley
Club Rugby Administrator
Wellington Rugby Football Union Inc.

Joint Submission from Wellington Region Chambers of Commerce
to Wellington City Council
on its Prince of Wales / Omāroro Reservoir consultation
July 2017

ABOUT THE CHAMBER

The Wellington Region Chambers of Commerce (the Chamber) has been the voice of business in the Wellington region for 161 years since 1856 and advocates for policies that reflect the interest of Wellington's business community and the development of the Wellington economy as a whole. The Wellington Region Chambers incorporate the Hutt Valley, Porirua, Kapiti Coast and Wairarapa Chambers of Commerce. The respective Chambers are accredited through the New Zealand Chamber of Commerce network.

INTRODUCTION

The Chamber welcomes the opportunity to submit on Wellington City Council's Prince of Wales / Omāroro Reservoir consultation.

We have long supported the efforts of Wellington Water to improve the city and region's resilience, and we are pleased to see progress in this area.

From the Chamber's point of view, the reservoir is one of a range of strategic pieces of infrastructure that need to be in place to improve our ability to recover in the case of a major event, and must go ahead.

RESILIENCE

The possible impact of an earthquake on Wellington City's water supply has been well-documented.

Wellington Water's report, *Toward 80-30-80*, showed that following a deeper understanding of our region's water supply problems, many parts of our region would likely be without drinking water for a number of days following a 7.5 magnitude earthquake. According to the report:

> *"Under the status quo, we expect parts of Wellington to be without drinking water for up to 100 days, Porirua to be without drinking water for up to 40 days and the Hutt Valley to be without water for up to 30 days (and on the Western Lower Hutt Hills, up to 50 days)."*

This primarily due to the fact that Wellington City's water sources are located a distance from the city centre and the eastern suburbs. Wellington Water collects our regions water supplies from the Hutt River at Upper Hutt, the Waiwhetu aquifer at Waterloo and the rivers behind Wainuiomata. At present, these bulk-supply pipelines cross the Wellington Fault at several places, which would be catastrophic to the regular supply of water to Wellington City.

The Prince of Wales / Omāroro Reservoir would provide the extra water storage capacity of 35 million litres that is needed. This would ensure that in the event of a major earthquake, Wellington City residents and major users, primarily in the CBD, will have access to fresh water.

From an economic perspective, it is vital that this reservoir is built. Businesses need to be confident in the area that they operate in, and knowing that strides are being made towards greater resilience in the city, particularly in the areas of water and electricity, contributes greatly to ensuring businesses do not relocate, and new businesses are attracted to the city. Moreover, it is important for the regional economy that the city is functioning, and that business can get back to 'business as usual' as quickly as possible following a large event, because of the reliance on the city for employment, economic growth, connectivity and attraction to the region.

Even if the CBD is unable to function following a large quake, reservoirs such as this one will contribute to prospective employees being willing to move their families and livelihoods to our city. We know anecdotally that some of the media attention around the November 2016 earthquake has detracted from people's willingness to move to Wellington, and progress on the reservoir will play a role in mitigating some of these concerns.

As a city that is well aware of the earthquake risks, it is crucial that strategic pieces of infrastructure are in place to improve our ability to recover in the case of a major event. The Prince of Wales / Omāroro Reservoir is one of these strategic pieces of infrastructure, and from the Chamber's point of view, must go ahead.

FURTHER IMPACTS

We have heard anecdotally that some residents are concerned about the structural failure of the reservoir, and the resulting flooding that may occur. However, given that the reservoir will be built to provide water storage capacity in the event of an earthquake, we are certain that the reservoir would be highly resilient and built to modern construction standards to ensure it would not sustain damage in such an event.

The Chamber also understands that residents in the vicinity of Prince Of Wales Park do not want to experience disruption during the construction period, but in the interests of wider city resilience, believes construction should go ahead. We also believe that Wellington Water and Wellington City Council will make an effort, within reason, to mitigate the concerns of residents throughout construction with respect to noise and construction-related traffic.

Submitter Details

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Wishes to be heard:
- (•) Yes
- ( ) I do NOT wish to speak in support of my submission and ask that the following submission be fully considered.

Correspondence to:
- (•) Submitter
- ( ) Agent
- ( ) Both

Submission

What is your overall level of support for this proposal?

- ( ) Not at all supportive
- ( ) Unsupportive
- ( ) Neutral
- (•) Supportive
- ( ) Very supportive

What are your key concerns or issues with this proposal?

Comments
Mitigation of adverse effects during construction.

What do you see as the main benefits of this proposal?

Comments
An increase in infrastructural resilience.

Attached Documents

File
Submission on PoW reservoir - final
Prince of Wales/Omaroro Water Reservoir Project

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NEWTOWN RESIDENTS' ASSN.

Submission on the Wellington Water application for an easement and licence for constructing and operating the proposed new reservoir at Prince of Wales park

Introduction

The Newtown Residents' Association, an Incorporated Society since July 1963, is the association for the people of Newtown and surrounding suburbs of Wellington. We have worked for many years to make our community a thriving, diverse, and great place to live. We are one of the threads that tie the Newtown area together as a community, not just a suburb.

This association supports the initiative to build the Prince of Wales / Omāroro Reservoir, which will improve the infrastructural resilience of Wellington in the case of a major earthquake. We would like to see this project proceed in a timely fashion, subject to the mitigation of concerns about the impact of construction on the environment and on neighbouring properties. We would like to speak to this submission.

Submission

Awareness of the need for emergency preparedness has increased substantially in the last few years for fairly obvious reasons. At the meeting of the Residents' Association at which there was a presentation on the proposed reservoir, there was a sense of support for an initiative that would assist this community and others, in the case of a substantial natural disaster.

Issues

The concerns we want to raise relate principally to the design and construction of the reservoir. The impact on Mt Cook residents and particularly those in Rolleston St will be substantial over a long period of time. Therefore trucks coming and going from the site should have restricted hours and we suggest 9.00 – 3.00 during the week and on Saturdays. Close liaison with affected residents is critical and will assist them to manage this disruption. The liaison undertaken in relation to the construction of the Arras tunnel and Pukeahu Park provide a good model for what is required.

The Waitangi Stream tributary and the Papawai stream need to be protected from silt, the latter stream is a restoration area where native fish and koura could be at risk.

The excavation and the stockpiling of dirt and the possibility of the presence of DDT in soil in the top field means that these piles of dirt need to be contained and not be subject to run-off. The public also needs to be effectively excluded from this area.

Alternative pedestrian routes through the Town Belt will also be needed along with good sign posting for walkers. This was done reasonably effectively during the construction of the Mt Albert Reservoir but this project will be larger and more complex.

The plan to plant over the buried reservoir is one that we support, however the native bush near the site will need to be protected during excavation and construction.

This reservoir will have an exceedingly large capacity, substantially bigger than that at McAlister Park and Mt Cook Mobilised is keen that its safety during an earthquake should be as guaranteed as is possible. They therefore seek an independent peer review of the design to give this assurance. We support them in this concern.

A related concern

On a separate but related note, we would also like to have confidence in the ability of the reservoir at the north end of Owen St to withstand a large earthquake. We recognise that it is not the responsibility of the City Council but it is an important cog in the water infrastructure and needs to be available in a time of emergency. The impact of its failure on neighbouring properties could also be calamitous. Anything that the Council could do to give us confidence on this matter would be very welcome.

Conclusion

We support the building of this new reservoir on Prince of Wales Park subject to mitigation of the issues raised in the body of this submission. I am the contact person for any follow up on this matter, including speaking to our submission.

Jane Patterson
Treasurer
Newtown Residents' Association
021332237

Submitter Details

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Wishes to be heard:
- ○ Yes
- ◉ I do NOT wish to speak in support of my submission and ask that the following submission be fully considered.

Correspondence to:
- ◉ Submitter
- ○ Agent
- ○ Both

Submission

What is your overall level of support for this proposal?

- ○ Not at all supportive
- ○ Unsupportive
- ◉ Neutral
- ○ Supportive
- ○ Very supportive

What are your key concerns or issues with this proposal?

Comments
The look and character of the area after completion. As locals to the area and high users of this green space we value the wild nature of the park. We are artists who have run various interactive public art projects in the park since 2013 (keminiko.com/rollestonheights). Over this time we have seen the grass growing wild as meadow and seen people making tracks and picnic spots cradled in its natural embrace. It is rare and beautiful to have this opportunity within a city limits. Unfortunately the councils maintenance work meant that this meadow was eventually mowed (admittedly because the gorse had also gotten out of control). This reservoir project seems like the perfect opportunity to plan and make space for this wilder kind of nature space within the city. There are plenty of tended grass playing fields and hills in Wellington but not many (if any) grassy spaces to picnic and play in a natural meadow ecosystem. The reservoir site was one such place for a couple of years at least and the public responded very enthusiastically. We recorded many peoples thoughts and feelings about this spot in our public logbooks, many saying it was their favorite spot in the city and we believe this was due to the untamed and unmonitored nature of the site. We would love to see the land on top of the reservoir seeded in native grasses and left to grow without mowing. We would also like no paths to be made across the top of the hill so that natural desire paths can form from the public's free play. There are plenty of studies that outline how important wild play is to children as they grow and develop and we think this site can be an valuable asset for Wellington's young generation. Not to mention the great natural science learning that would be gained from exploring this meadow and seeing it develop a natural ecosystem. Another great feature of this site is the

naturally regenerated manuka growth. In the few years (8) we have lived next to the park the manuka has grown from nothing into a thick young bush covering much of the knoll that will be dug out. It is unique to see such a natural bush where so much of the native regeneration is actively planted these days. If a meadow was left to develop it would no doubt form back into this native manuka bush.

What do you see as the main benefits of this proposal?

Comments
city resilience.

Attached Documents

File
Prince of Wales/Omaroro Water Reservoir Project

Submitter Details

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Wishes to be heard:
- ○ Yes
- ◉ I do NOT wish to speak in support of my submission and ask that the following submission be fully considered.

Correspondence to:
- ◉ Submitter
- ○ Agent
- ○ Both

Submission

What is your overall level of support for this proposal?

- ○ Not at all supportive
- ◉ Unsupportive
- ○ Neutral
- ○ Supportive
- ○ Very supportive

What are your key concerns or issues with this proposal?

Comments
I'm not supportive of this proposal for the following reasons The massive size, the disruption and the long length of time this project will take and the impact on the Mt Cook community. Over the last decade Mt Cook community has become a close nit connected community through our local group Mt Cook Mobilised and the restoration group Papawai Reserve Group. I have grave concerns about the impact of such a large project in this community area. It has the potential to disrupt and put on hold many of the activities enjoyed in this area of the Town Belt and could ultimately lead to the demise of these activities in there current form. People get fed up with disruption and walk away. Plans are not complete and events could lead the restoration area becoming a no go area. While we were told at a public meeting at Massey University that the access road would be open to the Scottish Harriers on the plans that access route is inside the plans and access will be under WWL control. Compared with the other options POW is very close to many properties. When the choice was made the importance of the stream was disregarded. The stream is one of the few piped areas with stream life left in Wellington and with disabled access to view. Many of the schools and pre-schools in the area have used it as a teaching resource. The collective Arts in Nature also chose to use this area for their successful project engaging children with drama, art and nature. I am also very concerned about the effect on the resident bird population. The last decade has seen considerable growth in the variety and numbers of birds in the area. I am disappointed the resident owls were not mentioned in the reports.

What do you see as the main benefits of this proposal?

Comments
I have been to meetings with Wellington Water and am not convinced this is the best place for the reservoir to be located.

Attached Documents

File
Prince of Wales/Omaroro Water Reservoir Project

Submitter Details

First Name: **Geoff**
Last Name: **Simmons**
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Wishes to be heard:
- (•) Yes
- ( ) I do NOT wish to speak in support of my submission and ask that the following submission be fully considered.

Correspondence to:
- (•) Submitter
- ( ) Agent
- ( ) Both

Submission

What is your overall level of support for this proposal?

- ( ) Not at all supportive
- ( ) Unsupportive
- ( ) Neutral
- (•) Supportive
- ( ) Very supportive

What are your key concerns or issues with this proposal?

Comments
I trust that if the reservoir meets the requirements of due process it is a necessary development to improve Wellington's water security. I would like to see the lower Prince of Wales field turned into a wetland following the project. More detail on the proposal is attached in the supporting documents.

What do you see as the main benefits of this proposal?

Comments
The opportunity for a wetland which would improve water quality, provide valuable habitat and reduce the risk of flooding.

Attached Documents

File
Prince of Wales Reservoir submission
Prince of Wales/Omaroro Water Reservoir Project

Prince of Wales / Omaroro Reservior project

Submission from Geoff Simmons (geoffsimmonz@gmail.com) in regard to an application by Wellington Water Ltd to construct a new water reservoir at Prince of Wales Park on the Wellington Town Belt.

I wish to be heard at the hearing for this application.

Current situation

I acknowledge that there is a need to ensure an adequate supply of water for Wellington City for general purposes and at times of emergency and accept that a new reservoir above the Prince of Wales upper field, could be a suitable site if the design meets required engineering criteria and standards.

I have attended the information day set up by Wellington Water and have a general understanding of the proposal including Wellington City Council requiring the applicant to reinstate the playing fields to a suitable standard for sport. The notion of using excavated material from the reservoir site to raise the upper and lower playing field has the advantage of reducing the amount of fill material being transported from the site through the Mt Cook community to a dump site as well as possibly improving the drainage issues that have plagued the fields (particularly the bottom one); making them unplayable for long periods over many years.

I think that Wellington City Council should be considering a wider range of development options as part of the reservoir construction and remediation of the surrounding area rather than reinstating the status quo.

The Papawai Stream that is directed around the lower field has had an earth bund formed along the stream's eastern edge in an attempt to control surface stormwater during peak events when flood water sheds across the field and down onto residential properties on Salisbury Terrace and Salisbury Avenue. Wellington Water has constructed a swale along the eastern edge of the field and made improvements to the stormwater pipes in Salisbury Avenue to intercept and manage stormwater. While this has addressed some of the concerns of stormwater flowing into to residential properties, there is still a risk of a flooding stream overwhelming the system. Nor does it address water seepage from under the bund.

As the soils of the stream upper catchment are being eroded through water pipes discharging into the stream and natural processes, the stream bed level has risen when it loses velocity and meets the south west corner of the field. Here water is seen to be seeping under the earth bund that was installed to control it, making the edge of the field extremely wet to an extent that the playing field is marked out with mini rugby fields, rather than a full size one. The wet edge is difficult to mow and the area unusable.

Further downstream past the clubrooms, the stream floor has been significantly lowered through erosion and significant stormwater events. During the work beside the stream, the Papawai Stream Group have noticed the stream of the bed and bank undercutting and collapse over the past few years. It is this aggradation of sediment and erosion of the bed from increased water velocities and sediment loads that has overwhelmed the stream environment and stormwater infrastructure.

A new purpose

Why not consider a holistic approach to improve the stream environment and a multi-use model for the lower field, as part of its reconstruction when the reservoir is constructed?

This is a time to consider if we should recognise the natural processes and work with them rather than channelling the stream to a limited course, flooding over the playing field and contributing to very wet conditions that have plagued the ground for years.

In the south west corner, why not create a wetland environment with a meandering water course with shallow sloping sides with plants for native fish habitat and spawning areas; broad shallow sloping areas that can be used to detain water during peak storm events? Create an environment that increases biodiversity; an environment for exploring across boardwalks and play; an environment for education and learning.

For the rest of the of the ground, we could keep some mown grassed areas for casual recreation, exercise, running the dog, flying a kite or throwing a ball. Undulating earth mounds along the eastern edge could give another natural play environment as well as protect neighbouring properties from any potential flooding.

A new purpose for the lower field of Prince of Wales Park, given that it is being considered for reconstruction as part of the new reservoir, could include:

- A realigned Papawai Stream from the bridge to the clubrooms with wetlands (for increased biodiversity), a debris clearance zone (to manage the silt deposition from the hillside) and a basin (to detain stormwater during peak events).

- A grassed area that caters for casual recreation, maybe mini rugby or soccer field, dog run

- Undulating landforms and elements for natural play

- A wider range of planting for education and environment for developing ecological awareness of the importance of wetland environments

Environmental and community benefits

The environmental and community benefits would be:

- Increased biodiversity that provides a wider range of fish and avian habitat and plant types along the stream and in the Town Belt

- A variety of areas for multiple uses
- A greater range of recreation options
- A greater awareness of the ecology and natural processes
- A resource for local schools and environmental programmes as an open air classroom
- Management of flooding issues by acting as a detention basin on peak storm events and reducing peak loads on the stormwater infrastructure
- Management of sediments and contaminants in the stream that ultimately discharges into the harbour

Wellingtonians are rightly proud of our environmental credentials, but stormwater management is one major environmental issue we are behind the rest of the country. You only have to look at the harbour after a big rain event to see a toxic cocktail of soil, human waste and heavy metals. Turning the Prince of Wales Park into a wetland would be an example of Water Sensitive Urban Design (WSUD). Wellington is behind on this issue, with Hamilton now touted as the leader.

The park's location close to an urban population is important and for this reason the playing fields are seen as a valuable asset. But this value applies to the wider community for other reasons, not just those involved in active recreation. With the field being out of commission during construction (often being unplayable at present) the discussion on where the sports clubs and changing rooms are accommodated during the construction period needs to be had. Ideally these alternative locations could continue if the field is repurposed. Presumably the improved status of the upper field will also reduce the need for fields in the Capital.

Summary

My submission is that given a significant area is going to be redeveloped as part of the reservoir construction, it is worth looking holistically at the Papawai stream catchment and developing a sustainable solution that ultimately improves the ecology of the Papawai Stream, recognises the natural processes and develops an environment that meets the needs of the local and wider community.

Geoff Simmons

121 Wallace Street tel 021 2419251

geoffsimmonz@gmail.com

Submitter Details

First Name: **Anna**
Last Name: **Williams**
On behalf of: **myself and Ian Logie**
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Wishes to be heard:
- ○ Yes
- ◉ I do NOT wish to speak in support of my submission and ask that the following submission be fully considered.

Correspondence to:
- ◉ Submitter
- ○ Agent
- ○ Both

Submission

What is your overall level of support for this proposal?

- ○ Not at all supportive
- ○ Unsupportive
- ○ Neutral
- ◉ Supportive
- ○ Very supportive

What are your key concerns or issues with this proposal?

Comments
Ecological: that before, during, and after the construction and associated works that the health and viability of the two streams in the area are maintained; and that the bird-life in the area are protected. I maintain the traps in the Bell Road area (between the Bell Rd reservoir and the northern end of Prince of Wales park). I regularly see kaka, tui, fantails, silvereyes, grey warblers, morepork, kereru, and kingfishers both in the reserve area, and in our own backyard (which backs onto the town-belt). We also see NZ falcons relatively regularly in the area. We also see rosellas regularly, as well as other introduced birds. Furthermore, the regenerating bush (both natural and replanted) must be retained and protected, and improved (i.e., weeds removed) if possible. Pedestrian access: throughout the construction process, the pedestrian access from Dorking Rd to Scottish Athletics Club needs to be maintained. Once construction is complete, pedestrian access from Dorking Rd to both Rolleston St, and off the knoll to Hargreaves St should be reinstated. Further, the drainage instated in the Prince of Wales park must be improved so that pedestrian access to Rolleston St does not involve navigating a large muddy area. Impact on residents of Dorking Road/Asquith Tce: during construction this must be kept to a minimum. We are concerned about parking and use of Dorking Rd to access the site, and strongly suggest that neither parking nor access to the construction site occur through Dorking Road. We are also concerned about noise, and dust, etc. Visual impact: after construction, the natural form of the landscape must be returned as close to possible to that which it is now, and landscape planting with appropriate

natives completed. The inclusion of a grassed area on the knoll is requested: it is well used by a cross-section of the community as a picnic-space, place to sit and enjoy the view, etc.

What do you see as the main benefits of this proposal?

Comments
We understand the need for another water reservoir, for resilience reasons.

Attached Documents

File
Prince of Wales/Omaroro Water Reservoir Project

Submitter Details

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On behalf of: **Elizabeth and Crispin Kay**
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Wishes to be heard:
- ○ Yes
- ◉ I do NOT wish to speak in support of my submission and ask that the following submission be fully considered.

Correspondence to:
- ◉ Submitter
- ○ Agent
- ○ Both

Submission

What is your overall level of support for this proposal?

- ○ Not at all supportive
- ○ Unsupportive
- ○ Neutral
- ○ Supportive
- ◉ Very supportive

What are your key concerns or issues with this proposal?

Comments
No concerns regarding the construction of the new reservoir. Disruption will be minor and far outweigh long term benefit. We think the success of the project will be good landscape restoration to enhance the park and make the facility acceptable to the community. We would ask that all-weather paths be included, to allow for all year round walking access from the Dorking Road entrance down to Rolleston/Hargreaves streets.

What do you see as the main benefits of this proposal?

Comments
We acknowledge the highly essential nature of this project to provide resilience to Wellington city and the need to upgrade the Bell Road reservoir in a similarly environmentally acceptable manner. We think the idea of raising the playing fields in a properly engineered manner is an excellent solution to reducing the impact of disposing of the excavated material. The project has our total support.

Attached Documents

Submitter Details

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Wishes to be heard:
- (•) Yes
- ( ) I do NOT wish to speak in support of my submission and ask that the following submission be fully considered.

Correspondence to:
- (•) Submitter
- ( ) Agent
- ( ) Both

Submission

What is your overall level of support for this proposal?

- ( ) Not at all supportive
- ( ) Unsupportive
- ( ) Neutral
- (•) Supportive
- ( ) Very supportive

What are your key concerns or issues with this proposal?

Comments
As a Brooklyn resident I am supportive of the new proposed Prince of Wales (PoW) reservoir and support the location and buried design located in Prince of Wales Park. I have no issue with the temporary construction effects of the proposal on the Town Belt. However, I have serious concerns regarding the effects the construction traffic will have on the residents of Rolleston Street which has been chosen as the main site access. Page 3 of the Transport Assessment for PoW Reservoir states ' Rolleston Street will be the primary point of access for all construction activities for the duration of the project. Other access points were considered, such as Bidwell Street, Hargreaves Street and Bell Road, but Rolleston Street provided the most convenient (my italics) route to the construction site and the mitigation measures were more workable utilising Rolleston Street than the alternatives'. Page 2 of the report also states that staff vehicles and some smaller service vehicles will generally access the site by way of Wright Street and Salisbury Terrace. When we consider that this will be one of the largest reservoirs built in the Wellington area I do not consider that sufficient detail is recorded in the Transport Assessment which in one paragraph concludes that Rolleston Street will provide the most convenient route to the construction site. The enclosed Google map of Rolleston Street shows there are 69 houses and 21 apartments that will be affected by construction traffic over the 2 to 3 year period of reservoir construction. This is a total of 90 dwellings housing a minimum of at least 200 people. By comparison the MacAllister reservoir in Berhampore built in 1991 was accessed via Finnimore Terrace but only 8 dwellings on this street were affected by construction traffic and this reservoir was only half the capacity of the proposed

PoW reservoir. I note that the construction noise assessment for vehicle noise in Rolleston Street is likely to slightly exceed the allowable noise limit of 70dBA. This will affect all 90 dwellings especially on a Saturday when many people like to sleep in. I consider there are two alternative site access points which have significantly less affects on dwellings in generally quiet streets: Alternative Access 1 Access via Wright Street and Salisbury Terrace This route has already been proposed for site access for light vehicles but it has several advantages over Rolleston Street if access is via Wallace Street, right turn into Hutchinson Road and then right turn into Wright Street as follows: * Only 39 dwellings affected in Wright Street and Salisbury Terrace (see map) * Flatter gradient going up Wright Street (less truck noise) * Wider streets and less parking restrictions required * Shorter distance from main roads may allow construction traffic to operate longer hours than the 9am to 3pm suggested for Rolleston Street This option would require a 4 metre deep excavation into the lower sports field and excavation of a temporary 1 in 5 gradient access road to the reservoir platform shown on the enclosed marked up plan. There would be some minor loss of vegetation cutting this track but in my view the benefits of this route outlined above are significant and the track could be remediated at project completion. Alternative Access 2 Access via Hutchinson Road and Westland Road This route is a steep 1 in 5 route which would need further investigation as to feasibility. It would require excavation beyond the current dead end road to link with the end of the road on the Lower Playing Field. The construction of this route would involve the removal of some Pohutakawa trees. However the main benefit of this route is that only 3 dwellings are affected. This is a significant advantage. This option would then traverse the lower playing field and then use the same temporary access road as Option 1 above. Although this route has a steep 1 in 5 gradient it is no steeper than the 1 in 5 access road shown in the extent of excavation drawing. If trucks are going to have to drive up a 1 in 5 access road there is no reason why they cannot drive up a 1 in 5 street to access the site as well. Combination of Options To mitigate the effects on individual households there could be benefit in having a route into the site and a separate route out of the site. For example the greatest truck noise is going uphill loaded. The Westland Road route would be the most suitable for uphill traffic as only 3 houses are affected. Trucks exiting the site could use Salisbury Terrace + Wright Street and as they are going mainly downhill would make significantly less noise. Application For Town Belt Easement Although I totally support the construction of the new reservoir at Prince of Wales Park I do not consider the applicant has taken enough consideration of the effects on the residents of up to 80 heavy vehicle movements per day going up and down Rolleston Street for 2 to 3 years. The alternative routes I have suggested need further investigation and as they also have effects on the Town Belt a decision on granting an Easement should not be deferred until further information has been submitted on access options. I therefore request that Council defer a decision on approving this application for a Town Belt Easement and instead ask them to revise the transport assessment. This should include a detailed analysis of alternative site access options and the pros and cons of these accesses both from a traffic network perspective but more importantly the effects on the local residents of each option.

What do you see as the main benefits of this proposal?

Comments
Increased water storage for Wellington suburbs and hospital in event of natural disasters such as a m

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Attached Documents

File
Prince Of Wales Reservoir Access options
Prince of Wales Reservoir-- MacAllister comparison
Prince of Wales Reservoir Alternative Access street views
Prince of Wales/Omaroro Water Reservoir Project

Google Maps

Rolleston Street—90 Dwellings affected by proposed site access

Salisbury Terrace—Alternative Access 1-only 39 dwellings affected

Westland Road---Alternative Access 2—only 3 dwellings affected

Drawing Plotted: 28 Mar 2017 9:07 a.m.

UNNAMED TRIBUTARY (PAPAWAI STREAM)

UNNAMED TRIBUTARY (PAPAWAI STREAM)

PAPAWAI STREAM

UNNAMED TRIBUTARY (WAITANGI STREAM)

PRINCE OF WALES PARK UPPER FIELD

PRINCE OF WALES PARK LOWER FIELD

PAPAWAI STREAM

Legend

- Construction boundary (approximate)
- Extent of reservoir excvation (approximate)
- Watercourse

Westland Road---Alternative Access 2

Salisbury Terrace—Alternative Access 1

PRELIMINARY
NOT FOR CONSTRUCTION

No	Revision	By	Chk	Appd	Date
+	UNDER REVISION				

Drawing Originator: CH2M BECA www.ch2mbeca.com

Original Scale (A1) / Reduced Scale (A3)

Design | Drawn | Dsg Verifier | Dwg Check

Approved For Construction* Date

* Refer to Revision 1 for Original Signature

Client: Wellington Water

Project: OMARORO RESERVOIR

Title: EROSION AND SEDIMENT CONTROL SITE OVERVIEW

Discipline: ESCP

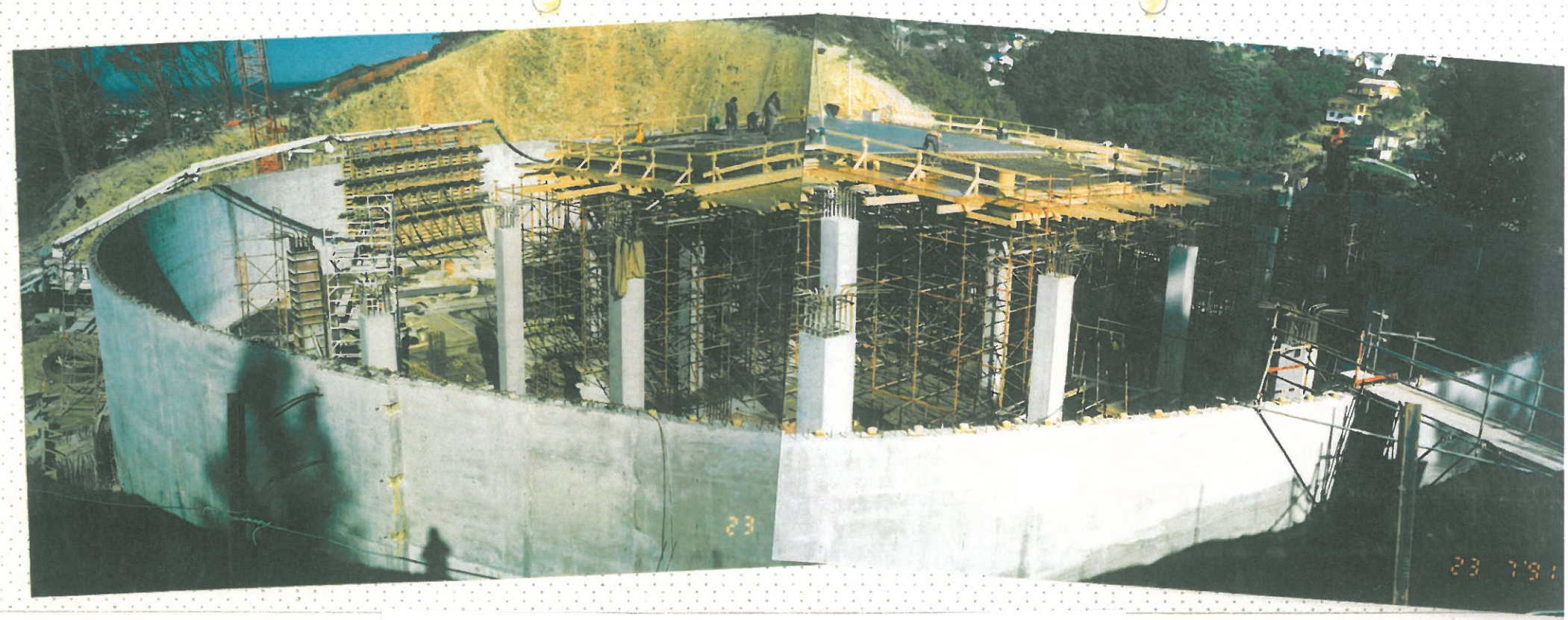
Drawing No: ESCP 1

Rev: A

DO NOT SCALE

Document No. 651391-CK-1200.DWG

www.ch2mbeca.com



MacAllister Reservoir Construction 1991 Berhampore

Proposed PoW Reservoir is nearly double the size of MacAllister


07/10/2017 14:15


07/10/2017 14:10

Westland Road---Alternative Access 2

Submitter Details

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Wishes to be heard:
- ○ Yes
- ◉ I do NOT wish to speak in support of my submission and ask that the following submission be fully considered.

Correspondence to:
- ◉ Submitter
- ○ Agent
- ○ Both

Submission

What is your overall level of support for this proposal?

- ◉ Not at all supportive
- ○ Unsupportive
- ○ Neutral
- ○ Supportive
- ○ Very supportive

What are your key concerns or issues with this proposal?

Comments
My key concerns ? I do not like the fact that we have a 35 million man made reservoir built on the top of the hill above the place where I reside. I did not buy to be near a lake . I think this is a COMPLETE HAZARD to the PUBLIC (the numerous houses) that are below this line. In the event of a NATURAL DISASTER even though we may survive, the FLASH FLOODS of the RESEVOIR BREAKING will take unnecesarry lives. TELL ME why do COUNTRIES AND GOVERMENTS BUILD DAMS outside the Major POPULATION boundaries. In the event of an earthquake around 8.5 or above YOUR RESEVOIR will BREAK. Considering we are on top of the hill and this is supposed to be a DISASTER RECOVERY ZONE or protected Youll will create a REAL HAZARD in the event this is built. Here are some links to sites that have had issues. I DO NOT SUPPORT THIS AT ALL. Have a look at the below videos that show major DAM /Resevoir breaks and the catastrophe that follows https://youtu.be/bfW5MqT7CSA https://youtu.be/emrHoz2XyBQ

What do you see as the main benefits of this proposal?

Comments
YOULL NEED TO CONSIDER THE RISKS more than the Benefits FIRST. My proposal. 1. City council should spread the risk in case there is a major disaster . Multiple smaller resevoirs are build on different areas. A breakage of one of these will not affect the whole area. Consider making 10 - 12 smaller resevoirs built on land that has no or less population below. in different areas. The

amount of water the reservoir holds is small enough that a natural disaster does not harm the population around. some places the reservoir can be built 1. Near Hosipital near area above hospital (lots of land there)-- 2. -Above Govt house... (Lots of land there) 3. Land near SPCA ? (Lots of land there) 4. Island Bay ...area 5. Mount Vic Area 6. Botanical Gardens area 7. Lyall bay area 8. other places away from major population Each one holding a smaller quantity of water . So in the case of a major natural disaster the breakage of the reservoir will not add to harming more lives 2, MY QUESTIONS TO THE COUNCIL 2. HOW ARE you GOING TO MAINTAIN THE INTEGRITY and SAFETY of this reservoir in the next 20 - 30 years???? And post 30 years what is your plan and what are your resources or amount of money that youll have in your budget for the next 50 years? 3. UNDERGOUND RESEVOIRS ARE difficult to maintain or IDENTIFY PROBLEMS AS SOON AS THE OCCUR. compared to an open easy to access building site ? 4. I DO NOT SEE ANY MAIN BENEFITS in this proposal. I SEE HUGE RISKS that the COUNCIL is taking in terms of LIVES of people living around this area. 5. The councils proposals should ensure people are safe. This proposal does not give me a 100% satisfaction that it is safe in case of a major earthquake. wellington and NZ being an earthquake prone place.

Attached Documents

File
PrinceOfWalesPark_Resevoir
Prince of Wales/Omaroro Water Reservoir Project

by email: reservoir@wcc.govt.nz

by letter to:
Freepost 2199
Prince of Wales / Omāroro Reservoir 178
Open Space and Recreation Planning
Wellington City Council
P O Box 2199
Wellington 6140

R Braganza
106 Wallace St
Mount Cook
Wellington 6021

Sub: Prince of Wales Park proposed Reservoir

To

Freepost 2199
Prince of Wales / Omāroro Reservoir 178
Open Space and Recreation Planning
Wellington City Council
P O Box 2199
Wellington 6140

Email to : reservoir@wcc.govt.nz

SUB: I DO NOT SUPPORT THIS BUILD of RESEVOIR at PRINCE OF WALES PARK.

My key concerns :

I do not like the fact that we have a 35 million man made reservoir built on the top of the hill above the place where I reside. I did not buy to be near a lake . I think this is a COMPLETE HAZARD to the PUBLIC (the numerous houses) that are below this line. In the event of a NATURAL DISASTER even though we may survive the FLASH FLOODS of the RESEVOIR BREAKING will take unnecesarry lives. TELL ME why do COUNTRIES AND GOVERMENTS BUILD DAMS outside the Major POPULATION boundaries. In the event of an earthquake around 8.5 or above YOUR RESEVOIR will BREAK. Considering we are on top of the hill and this is supposed to be a DISASTER RECOVERY ZONE or protected Youll will create a REAL HAZARD in the event this is built. Here are some links to sites that have had issues. I DO NOT SUPPORT THIS AT ALL.

Have a look at the below videos that show major DAM /Resevoir breaks and the catastrophe that follows

https://youtu.be/bfW5MqT7CSA

https://youtu.be/emrHoz2XyBQ

YOULL NEED TO CONSIDER THE RISKS more than the Benefits FIRST.

What can be better done to provide a lesser risk situation ?

1. City council should spread the risk in case there is a major disaster . Multiple smaller resevoirs are build on different areas. A breakage of one of these will not affect the whole area. Consider making 10 -12 smaller resevoirs built on land that has no or less population below. in different areas. The amount of water the reservoir holds is small enough that a natural disaster does not harm the population around.

some places the reservoir can be built

1. Near Hosipital near area above hospital --
2. -Above Govt house...
3. Land near SPCA ?
4. Island Bay ...aread
5. Mount Vic Area
6. Botanical Gardens area
7. Lyall bay area
8. other places away from major population

Each one holds a lesser quantity of water. So in the case of a major natural disaster the breakage of the reservoir will not add to harming more lives

MY QUESTIONS TO THE COUNCIL

2, HOW ARE you GOING TO MAINTAIN THE INTEGRITY and SAFETY of this reservoir in the next 20 – 30 years???? And post 30 years what is your plan and what are your resources or amount of money that youll have in your budget for the next 50 years?

3. UNDERGOUND RESEVOIRS ARE difficult to maintain. compared to an open easy to access building site ?

4. I DO NOT SEE ANY MAIN BENEFITS in this proposal. I SEE HUGE RISKS that the COUNCIL is taking in terms of LIVES of people living around this area.

5. The councils proposals should ensure people are safe. This proposal does not give me a 100% satisfaction that it is safe in case of a major earthquake. wellington and NZ being an earthquake prone place.

Look forward to your reply.

Regards

R Braganza

Submitter Details

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eMail: **tina.reid@clear.net.nz**

Wishes to be heard:
- (•) Yes
- ( ) I do NOT wish to speak in support of my submission and ask that the following submission be fully considered.

Correspondence to:
- (•) Submitter
- ( ) Agent
- ( ) Both

Submission

What is your overall level of support for this proposal?

- ( ) Not at all supportive
- (•) Unsupportive
- ( ) Neutral
- ( ) Supportive
- ( ) Very supportive

What are your key concerns or issues with this proposal?

Comments
I am a member of Mt Cook Mobilised, and have attended meetings with Wellington Water presenting this proposal, attended one open day, and been at the meetings at which we have discussed it. I am submitting in support of the Mt Cook Mobilised submission. I live of Tasman Street, ad do not expect to be directly affected by this project. However, I have strong connections with the area of the Town Belt; as a frequent volunteer at Papawai reserve, and as a walking route to and from Brooklyn, I have a significant interest in this proposal. I understand and support the need for water storage in Wellington city. My major concerns are about storage and disposal of the fill for this size project on this site. The size of the storage mounds seem to me to pose great risks of dust, mud and possibly being washed away in any storm conditions, and could have major impacts on local residents. Raising the playing fields as a solution to use of some fill is problematic, and I do not think the impacts have been sufficiently investigated. As noted on reports, Papawai stream is a very vulnerable system, and there are issues with significant erosion at the north end of the lower field which we are not convinced have been resolved with recent work. I fear that further development of the park may only exacerbate flooding problems in this area. Because of these factors, a discussion about a proposal to consider a wetlands project on the lower Prince of Wales park is very interesting. I note that the area at the foot of the path from Brooklyn is frequently wet, despite the bank developed to manage the stream, and so a wetlands area could assist in managing flood flows of the stream. I would like this proposal to be investigated as an option, realising that it would probably mean that the field would not be raised - and it may mean that

temporary storage is not practical. I think its important to see only solutions that will improve rather than further degrade the area, and urge further investigation prior to any decision to raise the playing fields. I agree with Mt Cook Mobilised submission that concerns about this proposal largely relate to teh size of the project, and I come back to considering the selection of sites for this reservoir. With earthquakes our major emergency risk, the concept of several smaller reservoirs, rather than one very large one, has appeal , as risk would be spread over several sites. The proximity to Bell Road reservoir, as one that requires upgrading in the near future, seems a perfect opportunity to consider this site as well. The reports outlining site selection identify several other sites where perhaps three or four projects on a smaller scale would provide better resilience planning, and not be so disruptive in an area which is as highly populated as this one.

What do you see as the main benefits of this proposal?

Comments
Emergency water provision for Wellington city Landscaping at this project to bury the reservoir and improve the appearance of the area. Although I have always rather liked the rather wild nature of this hillside.

Attached Documents

File
Prince of Wales/Omaroro Water Reservoir Project

Submitter Details

First Name: **Robert**
Last Name: **Ayson**
On behalf of: **Catherine and Robert Ayson**
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eMail: **randcayson@gmail.com**

Wishes to be heard:
- (•) Yes
- ( ) I do NOT wish to speak in support of my submission and ask that the following submission be fully considered.

Correspondence to:
- (•) Submitter
- ( ) Agent
- ( ) Both

Submission

What is your overall level of support for this proposal?

- ( ) Not at all supportive
- (•) Unsupportive
- ( ) Neutral
- ( ) Supportive
- ( ) Very supportive

What are your key concerns or issues with this proposal?

Comments
Please see attached submission.

What do you see as the main benefits of this proposal?

Comments
Ditto

Attached Documents

File
Ayson_POWReservoir_TownBelt
Prince of Wales/Omaroro Water Reservoir Project

Application for Town Belt Easement
for Proposed Prince of Wales/Omāroro (POWO) Reservoir

Submission from: Catherine and Robert Ayson, 16 July 2017

Overview

Main Recommendation 1: That the Town Belt easement application for a 35 million litre reservoir on the POWO site be **rejected**.

Main Recommendation 2: If a reservoir is to be constructed in the POWO area it should be a **smaller structure** which creates fewer unwanted effects on the local area. This should be one of several new reservoirs which together are better able to meet Wellington's water supply resilience needs.

We detail our reasons for these and other recommendations below.

We also wish to have an opportunity to **speak to our submission**.

A: Local Effects of the Proposed Reservoir

1. As residents our central concern relates to the effects that the proposed reservoir, including its construction, will have on the local area. We are concerned about effects on local residents and properties and on the POWO and surrounding areas (including downstream effects). Simply put, the proposed project is of such a scale that its effects are too great for the local area to absorb. Our concerns include the following main points:

2. Residents with properties close to the work site are expected to deal with **noise vibration dust and visual effects** for the construction period which is expected to last 'approximately two years'[1] (and which may perhaps extend to three years). The Construction Noise Report indicates that:

> 'without mitigation measures implemented, construction noise levels at most assessment points are predicted to be within, or marginally exceed the NZS 6083 limit for the hours of 0730-1800 (70 dBA L_{eq}). Outside these hours, the exceedance for such activities would be higher, as the relevant noise limits reduce.'[2]

3. As the construction plans involve a six-day week[3] we think more than 10 hours per day at six days per week of construction noise within or marginally

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[1] Wellington Water, Prince of Wales/Omāroro Reservoir, *Application for Town Belt Easement*, p. 3.
[2] Marshall Day Acoustics, *Prince of Wales/Omāroro Reservoir*, *Construction Noise Assessment*, Rp 001 RO3 2016849 Prepared for CH2M Beca, 18 April 2017, p. 13. L_{eq} is equivalent continuous sound level.
[3] The Easement Application proposes working hours 'between 7:00am and 6:00pm Monday to Saturday'. Wellington Water, Prince of Wales/Omāroro

exceeding noise limits presents residents with an unacceptable set of direct effects.

4. We need to emphasise the **directness of these effects** for residents because readers of the documentation on the POWO reservoir proposal may have been led to believe otherwise. In identifying its preferred site, the 2011 MWH report argued that the POWO site was not 'immediately adjacent to residential properties.'[4] We believe that this judgement, which is repeated in subsequent documentation[5], including in the Easement Application under consideration by Councillors, needs to be revised.

5. We acknowledge that the MWH report noted that 'The closest neighbours are 60 metres from the excavation and appropriate management of dust and noise would need to be considered.'[6] However, as knowledge of the fuller extent of the project has become available, **it is clear these impacts are much closer to and more significant for surrounding (and immediately adjacent) residential properties**. More than four years ago, for example, CH2M reported to Wellington City Council that:

> 'The existing residential amenity for houses that are located in close proximity will also be adversely affected by the storing and transporting of materials to and from the site. Other environmental effects like dust and noise may also affect existing residential and open space/ Town Belt amenity during the construction period.'[7]

6. It is a mystery to us why more recent documentation, including the 2017 Easement Application itself, has stuck to the argument that the POWO site benefits from not being immediately adjacent to residential properties. This alone, we believe, is sufficient reason for the Easement Application to be rejected. But there are several other reasons to do so.

7. As well as medium term effects during the construction phase we are also concerned about long-term direct effects for nearby properties and residents. The **proposal to place fill from the excavation on the POWO fields is a significant concern**. We believe that a permanent 1m to1.5m addition to field

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Reservoir, *Application for Town Belt Easement*, p. 63. Elsewhere in the Application construction hours are listed as 0730 to 1800. Ibid, p. 40.

[4] See MWH, *Wellington City Council Proposed CBD Reservoir Options Assessment*, Prepared for Capacity Infrastructure Services Ltd, 24 March 2011, p. 28.

[5] We raise concerns about documentation and process in Section B below.

[6] MWH, *Wellington City Council Proposed CBD Reservoir Options Assessment*, p. 16.

[7] CH2M Beca Ltd, *Hospital Prince of Wales Reservoir – Preliminary Design Report*, Prepare for Wellington City Council, May 2013, p. 11.

height is unacceptable for **privacy** reasons and also because of **visual effects**[8] and light problems for some properties[9].

8. We also question this fill placement proposal because of our concerns about the **stability** of the playing fields. We note that a Geotechnical survey has not been undertaken for the lower field, and yet Councillors are expected to consider an Easement Application which proposes that significant fill be placed in that location. Too many assumptions are being made here. **For example, we encourage Councillors to question the validity of the following logic in the Landscape and Visual Effects report**:

> 'Both the Upper and Lower Park were formed through previous excavation and filling. Proposed changes to playing field levels must therefore be assessed in the context of the existing cut and batter slopes which exist. Given this context, an increase in the level of playing fields by up to 1.5 metres will be able to be readily absorbed within the existing modified slopes.'[10]

9. We believe we have very good reason to be concerned about the suitability of the lower field for receiving a large amount of fill. Existing **fill** behind the clubrooms on the lower field has been subject to **serious erosion** when significant rain events occur.[11] Some of this material includes rubbish (which appears after rain events) suggesting it came from a refuse centre of some sort or that the area was simply a dumping ground for accumulated household waste. We do not know how far the rubbish extends or know what the quality is of the fill underneath the field as a whole.

10. Additionally, some of this **unstable and eroding fill** is likely to come under extra weight pressure which we believe will be a trigger for erosion harming Papawai Stream and downstream residences. The Preliminary Erosion and Sediment Plan prepared for Wellington Water acknowledges that 'heavy vehicle access is required between the upper and lower sports fields to facilitate stockpiling on the lower field and raising of the lower field (should either of these activities be required depending on the scenario…)'. It then argues that 'The existing access between the two fields will be upgraded and appropriately

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[8] These are laid out in Boffa Miskell, Prince of Wales/Omāroro Reservoir, *Landscape and Visual Effects Assessment*, Report Prepared for Wellington Water, 18 April 2017, pp. pp. 21-25,

[9] On these, please see Wellington Water, *Prince of Wales/Omāroro Reservoir Landscape strategy and visualisations*, Figure 5, Simulation: Salisbury Street, 22 May 2017 [please note there is no Salisbury Street in Mt Cook; this image is taken at the end of Salisbury Terrace].

[10] Boffa Miskell, Prince of Wales/Omāroro Reservoir, *Landscape and Visual Effects Assessment*, p. 18.

[11] This 'significant erosion damage' is noted in CH2M Beca Ltd, *Prince of Wales/Omāroro Reservoir – Stormwater Assessment,* 20 April 2017, p. 5.

stabilised to provide an all- weather access route.'[12]

11. Unfortunately, one of the edges for this proposed heavy vehicle route is the uphill bank of part of Papawai Stream. This includes an area behind the lower field clubroom where the unstable fill (including rubbish) is located. It is from this area that so much of the erosion has been occurring with significant downstream consequences[13]. Significant remedial work has been carried out very recently behind the clubrooms to reduce flooding and depositing of fill downstream. But these efforts are still to stand the test of repeated severe rain events. **We recommend that Councillors insist on a peer reviewed study to test the effects of heavy vehicle traffic as an erosion trigger**, and to confirm that stabilisation of the route is indeed possible without unintended effects, including the pushing of erosion problems onto banks further downstream.

12. The proposal to create temporary stockpiles of several metres in height for the construction period is also a serious concern for us. We simply don't understand the logic of doing this when we have seen this significant erosion and the depositing of eroded fill further downstream, including into streets and properties. The Preliminary Erosion and Sediment Control Plan prepared for Wellington Water concludes that:

> 'It is considered that the implementation of this plan and the required phase-specific ESCPs [Erosion and Sediment Control Plans] (required to be certified by GWRC and WCC) constitutes good erosion and sediment management and effects on the receiving environment will be less than minor.'[14]

13. We have not been able to locate in this preliminary plan or other documentation associated with the Easement Application an especially persuasive argument as to why this conclusion about 'less than minor' effects holds. **We recommend Councillors subject these preliminary assessments to independent peer review.** That review need to be informed by a more detailed knowledge of the record of erosion near the Papawai Stream (whose effects have not been 'less than minor' in recent years) than is demonstrated in the documentation provided in association with this Easement Application.

14. We worry that in a **significant rain event** and especially with repeated significant rain events, these stockpiles will prove to be unstable and subject to significant runoff of muddy water, sediment, and quite possibly of large amounts

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[12] CH2M Beca, *Prince of Wales/Omāroro Reservoir – Preliminary Draft Construction Erosion and Sediment Control Plan*, Report Prepared for Wellington Water Ltd, 30 March 2017, p. 9.

[13] For one media report from 2015, see Audrey Seaman, 'Dangerous Wellington stream exposed by floods', *The Dominion Post*, 21 May 2015, http://www.stuff.co.nz/dominion-post/news/68685403/dangerous-wellington-stream-exposed-by-floods

[14] CH2M Beca, *Prince of Wales/Omāroro Reservoir – Preliminary Draft Construction Erosion and Sediment Control Plan*, p. 23.

of the stockpiled fill itself. We are concerned about flooding and mudslide risks for residences immediately adjacent to POWO, and for Papawai Stream and downstream properties. In this regard, **we would like Wellington City Council to indicate who has legal liability** in the event of damage to property or injury/loss of life as a result of the movement of fill material and water associated with either the larger stockpiles in the medium term or the long-term field raising. We request details on insurance arrangements and their suitability for covering this sort of event.

15. However we do not see the avoidance of placing fill on the lower field as a solution which then allows for the project to proceed. The excavated fill needs to go somewhere. This would mean either an even more unacceptable situation for the upper field (where fill placement is of concern for some of the same flooding, material movement, privacy and profile issues mentioned above). Or it means transporting by truck a greater proportion of the excavated fill out through Rolleston Street. We regard this as an unacceptable outcome for Rolleston Street residents who are already slated for very **significant noise, vibration, visual and traffic issues** in the current proposal.[15]

16. Constructing a 35 million litre reservoir will create **too much fill for the area to absorb**. If a reservoir is to be constructed on this site it needs to be smaller with a significantly smaller amount of fill produced.

B: Problems with Documentation and Process

16. A number (but by no means all) of the local effects which concern us have received attention in the documentation associated with Wellington Water's Easement Application. But we have been concerned by **omissions** in some of these documents which suggest a lack of attention to important detail. Given the effects this proposed project will create for residents, a lack of attention to detail at this stage is worrying not least because of what it may foreshadow in the event that construction begins. We detail a number of these **problems with attention to detail and process** below.

17. As we have already mentioned MWH submitted in 2011 that the POWO reservoir site was not immediately adjacent to residential properties. A Report seeking approval of the POWO location from the Wellington City Council's Strategy and Policy Committee in June 2011 repeats the MWH report's formula that 'The preferred Prince of Wales site has reasonable construction access, working area and is not immediately adjacent to residential properties.'[16] **But maps provided in 2017 by Wellington Water confirm that the proposed**

[15] Even with significant fill left on site, BECA estimates that Rolleston Street residents should expect over 2000 heavy truck movements during the construction period. CH2M Beca, *Prince of Wales/Omāroro Reservoir Transport Assessment*, Report prepared for Wellington Water Ltd, 5 April 2017, p. 14.
[16] Wellington City Council, Strategy and Policy Committee, *Approval to Locate Proposed Reservoir on Town Belt (Prince of Wales Park)*, Report 5, 1215/52/IM, 23 June 2011, Paragraph 5.3.

construction area extends to the back fences of several residential properties.[17] This should be seen as more than a 'temporary' area (the terminology used by Wellington Water). Placing fill on the upper and lower fields, which are both immediately adjacent to residential properties, will have permanent effects (concerns about which we have indicated above).

18.**This shortcoming is not rectified** in the more recent BECA Site Selection Report, which simply reiterates the MWH finding that the POWO site is 'not immediately adjacent to residential properties.'[18] Given the extent of the construction site, this is clearly a troubling conclusion for any 2017 report to be making. Yet Wellington Water's Easement Application argues that the conclusions of the 2011 short list ranking 'are still considered to be valid' including the problematic assessment that the site 'was not immediately adjacent to residential properties.'[19]

19.We are aware that at least one other submission deals with the validity of site selection assessments in the 2011 MWH report which are still being relied on. We encourage Councillors to pay close attention to these concerns. They might wonder, for example, if any developments and knowledge about resilience, natural disasters, water storage and supply, and seismic stability have come to light over the last six years which might give rise to adjustments to the 2011 assessments. This includes important knowledge which has come to light in the years since the Christchurch Earthquake of 2011 and the 2016 earthquake centred on Kaikoura which had significant direct implications for Wellington. We recommend Councillors require that **relevant findings of the original MWH assessment are retested against more recent knowledge of risks and vulnerability and a deeper understanding of the full effects of the reservoir's construction.**

20.Given the impact that the proposed project will have on areas and residents adjacent to the POWO site, it is disheartening to see that **street names have been incorrectly identified and omitted in documentation produced in conjunction with the Easement Application**. For example, CH2M Beca's Feasibility Study for the Raising of the Playing Fields incorrectly identifies properties which back onto the Lower Playing Field as being part of Salisbury Terrace[20]. These are part of Salisbury Avenue, which receives no mention at all in the Scenario 1 and 2 listings of Benefits and Dis-benefits of stockpiling on and

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[17] Wellington Water, Prince of Wales/Omāroro Reservoir, *Application for Town Belt Easement*, Appendix A: Site and Construction Site Maps, Figure 2, Temporary Construction Site Area, p. 3.
[18] See CH2M Beca, *Central Wellington Bulk Water Supply – Prince of Wales Site Selection Summary*, Report, 24 April 2017, pp. 11, 14.
[19] Wellington Water, Prince of Wales/Omāroro Reservoir, *Application for Town Belt Easement*, p. 31.
[20] See CH2M Beca, *Prince of Wales/Omāroro Reservoir: Raising of Playing Fields Feasibility Study*, Prepared for Wellington Water Ltd, 31 May 2017, Appendix A, Drawings, Concept Design Sketch Stockpiles, Sediment Control and Parking.

raising the Upper and Lower Fields. Neither do these lists refer to properties on Westland Road which are also immediately adjacent to the lower field.[21]

21.We note that the final report of the Raising of The Playing Fields Feasibility Study was completed, reviewed and approved by CH2M Beca on 31 May 2017.[22] Wellington Water's website records the date of its Easement Application as 1 June 2017.[23] This suggests that Wellington Water had a maximum of 24 hours to look carefully at what this final Feasibility Study report meant for its Easement Application. Do Councillors believe that this is enough time to allow for a careful process with significant effects for residents and a price tag of more than $2million for raising and stockpiling? **We recommend that Councillors establish whether Wellington Water was allowed sufficient time to receive and consider these various studies and to produce an Easement Application which carefully reflected upon their findings.**

22.The Easement Application confirms that about 25,000 cubic metres of fill will be stored 'temporarily' on the upper and lower POWO fields. In addition it notes its understanding that 'both the upper and lower fields will potentially be raised up to 1.5m using approximately 20,000 m^3 of excavated in situ material from the reservoir construction sites'. The Easement Application also claims that 'Remediation of the upper and lower playing fields will be to a like-for-like or better condition.'[24] The Benefits and Dis-Benefits summary which appears to support this positive assessment was also originally completed by CH2M Beca on 31 May 2017, again just a day before the Easement Application was released. But the assessment of the benefit stemming from the re-use of material (presumably to raise the fields) was completed and approved by CH2M Beca on 6 June 2017. In other words, **this supporting information appears to have been provided after the Easement Application** was completed even though that Application appears to rely on such reporting for its findings. **We recommend that Councillors consider whether this is best practice.**

23.We wonder if more time would have allowed a proper assessment of the discrepancies between the reports which have been provided in association with the Easement Application. For example, in its assessment of the Benefits and Dis-Benefits of field stockpiling (without field raising), the CH2M Beca Report

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[21] See CH2M Beca, *Prince of Wales/Omāroro Reservoir: Raising of Playing Fields Feasibility Study*, Appendix C, Report –Prince of Wales Park – Raising Playing Fields – Summary of Benefits/Dis-benefits, Prepared for Wellington Water Ltd, 6 June 2017.

[22] See CH2M Beca, *Prince of Wales/Omāroro Reservoir: Raising of Playing Fields Feasibility Study*, Prepared for Wellington Water Ltd, 31 May 2017, p. i.

[23] This is revealed on the Wellington Water website. See 'Prince of Wales/Omāroro Reservoir', Related Documents, https://wellingtonwater.co.nz/work-in-your-area/pow-reservoir [accessed 16 July 2017]. Hard copies of the Easement Application provided by Wellington Water to residents were undated.

[24] Wellington Water, Prince of Wales/Omāroro Reservoir, *Application for Town Belt Easement*, pp. 12, 13.

indicates that 'Impacts of construction activities (including visual noise and dust) would potentially be brought closer to residents of Salisbury Terrace (in the absence of appropriate mitigation).[25] We presume this applies to residents of Salisbury Avenue and Westland Rd (which are omitted in this report as we mentioned earlier) in addition to parts of Salisbury Terrace. And there is no corresponding assessment in these Benefits and Dis-Benefits lists of visual, noise, and dust effects for scenario 2 – where additional material is used to raise the height of the fields.

24. Several months earlier, Marshall Day Acoustics had prepared the Construction Noise Assessment Report for CH2M Beca which specifically states that 'the construction activities associated with the Scenario 2 lower playing field proposal would result in comparatively higher construction noise levels received at the closer properties in Salisbury Terrace, Salisbury Avenue, Dorking Road and Asquith Terrace.'[26] **We recommend that Councillors arrange for a complete list to be drawn up of discrepancies and omissions in the documentation associated with this Easement Application. We would like this list to be published so as to inform residents of gaps in the analysis.**

25.What might most kindly be depicted as a 'confusion' over street names (as mentioned above) was raised at Wellington Water's Open Day in June at Massey University. But once this problem was pointed out, it was repeated in at least one of the subsequent oral presentations at that event. This adds to our sense that the concerns of residents are not being fully understood.

26.The report on Landscape and Visual Effects provided for Wellington Water **makes no mention of visual effects for Salisbury Terrace** properties even though some of the most obvious such issues will affect residents who live at the end of that street.[27]

27.If this project goes ahead, attention to detail issues can and will have serious and damaging consequences for POWO, for nearby residents and for their properties. On the basis of what we have seen so far, **we have very little confidence that the necessary attention to crucial points of detail will be a feature of the construction process**.

C. Resilience Questions Relating to the Proposed Reservoir

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[25] CH2M Beca, *Prince of Wales/Omāroro Reservoir: Raising of Playing Fields Feasibility Study*, Appendix C, Report –Prince of Wales Park – Raising Playing Fields – Summary of Benefits/Dis-benefits.

[26] Marshall Day Acoustics, *Prince of Wales/Omāroro Reservoir*, Construction Noise Assessment, Rp 001 RO3 2016849 Prepared for CH2M Beca, 18 April 2017, p. 12.

[27] Boffa Miskell, *Prince of Wales/Omāroro Reservoir, Landscape and Visual Effects Assessment*, p. 18. These properties are most likely to have light effects mentioned above with reference to the improperly named 'Salisbury Street' photograph.

28.As residents and ratepayers **we endorse the need for greater water supply resilience** for Wellington, including in the event of a major natural disaster (such as a large earthquake). But **we fail to see how the proposed reservoir meets these resilience needs**.

29. WWL's Easement Application cites a 2009 GNS study which estimates that 'for a magnitude 7.5 Richter scale earthquake, there would be about 30 breaks on the main trunk pipeline and 60 breaks on the smaller branch lines. Wellington City could have as many as 8,000 breaks on its local supply network'.[28] It is difficult to see how a severe earthquake would allow supply via pipelines to continue from the new reservoir. We acknowledge that the seismic resilience of the reservoir itself has been a significant area of focus in the planning that has been undertaken to date. For example, we note that a 2013 report from CH2M Beca indicates the following geotechnical parameters:

> 'This structure has a base isolation system and a design requirement that the building is fully operational within 6 hours after a major earthquake. The return period for this major earthquake has been selected as 1000 years.'[29]

30. Assuming the reservoir structure itself remains intact after such a severe natural disaster, this will leave **storage but not supply** unless there is a separate way to access the water and distribute it to residences. This in turn assumes that the earthquake will not have made it difficult (or impossible) for water supply trucks (or other forms of transport) to get to the new reservoir. In short, from what we can surmise, seismic resilience of the reservoir (and the storage it provides) does not amount to seismic resilience of supply.

31. We believe that the focus on constructing a single 35 million litre reservoir at one location reservoir risks creating **one point of supply failure**. It is, as one example of the documentation suggests, a 'one-shot'[30] approach to resilience. The Easement Application can state that 'The Prince of Wales/Omāroro Reservoir will ensure sufficient local water storage capacity exists in-zone to assist with supporting the local community following a disaster event.'[31] But in the event of pipeline damage and access issues, we cannot see how this *storage* necessarily contributes to maintaining *supply*.

32. If part of Wellington water supply resilience is to come from new reservoir construction, Wellington City Council should not proceed with a single 35 million litre reservoir, either on the proposed site (POWO) or anywhere else in the city

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[28] Wellington Water, Prince of Wales/Omāroro Reservoir, *Application for Town Belt Easement*, p. 7.
[29] CH2M Beca Ltd, *Hospital Prince of Wales Reservoir Geotechnical Basis of Design*, Report Prepared for Wellington City Council, 1 February 2013, p. 3.
[30] Anthony Wilson to Councillors, 'Hospital Prince of Wales reservoir', Email, 10 September 2013.
[31] Wellington Water, Prince of Wales/Omāroro Reservoir, *Application for Town Belt Easement*, p. 23.

area. It should instead opt for **a set of smaller reservoirs, which provide a range of supply options**, so that in the event of a major natural disaster, failure at one point does not imperil the availability of all of the extra storage for supply purposes.

33. We encourage Councillors to consider the opening page of the 2011 MWH report which states that:

> 'The size of the proposed reservoir has been advised by Capacity [Infrastructure Services Ltd] as 35ML…No consideration of alternative sizes of schemes has been made in this report. Capacity has noted that any future storage would be better constructed elsewhere, for geographic distribution of stored water for emergency use.'[32]

34. We believe this last point also serves as a warning against the geographic concentration that a single 35 million litre reservoir on the POWO site would involve. If a reservoir is to be built on the POWO site it should be a significantly smaller structure than the one currently proposed, and one of several such smaller structures in different locations.

35. But even this mix of smaller reservoirs is unlikely to satisfy supply resilience needs. In our view extra encouragement to residents to develop their own on-site water storage is still going to be needed. Wellington Water's Easement application dismisses this sort of thinking:

> 'Alternative 'methods', such as promoting and supporting the development and installation of a dispersed network of publicly and privately owned micro water storage facilities (i.e. local community water tanks, and privately owned onsite water storage tanks and bladders) within the zone, are not capable of delivering the cost efficiencies, service reliability, integrated network operation benefits, and community health and safety monitoring and management requirements demanded of a modern urban water storage and supply network.'[33]

36. But this dismissal is symptomatic of the one-shot approach that is a central weakness of the Easement Application's logic for 35 million litre reservoir at POWO. Unless residents have been wasting their time filling bottles and purchasing residential water tanks from Wellington City Council, some of these other approaches can make contributions to water supply disaster resilience. We are not suggesting that residential storage options are the *whole* answer. We simply believe that risk needs to be spread, not concentrated.

<u>Conclusion</u>

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[32] MWH, *Wellington City Council Proposed CBD Reservoir Options Assessment*, p. 1.
[33] Wellington Water, Prince of Wales/Omāroro Reservoir, *Application for Town Belt Easement*, pp. 25-6.

37. Wellington needs a more resilient water supply situation, especially in the event of a major natural disaster. But we are not convinced the proposed reservoir is a good answer to these resilience requirements. We are convinced that **the negative effects of the construction of a 35 million litre reservoir are too great for POWO and neighbouring residential areas to absorb**. Moreover, we are not reassured that the documentation associated with the Easement Application provides Councillors and residents with a sufficiently robust assessment of the risks and effects associated with the proposal. Nor do they offer a clear sense that the writers of some of these documents share a consistent and deep understanding of those parts of the Mt Cook neighbourhood which are most likely to be directly affected.

38. For these reasons we argue that this application for easement be rejected, and that alternative water supply resilience options, with reduced negative effects in any single area, be advanced.

39. We wish to thank the Strategy Committee for the opportunity to make this submission and Wellington Water for their community engagement efforts.

* * *

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Wishes to be heard:
- (•) Yes
- ( ) I do NOT wish to speak in support of my submission and ask that the following submission be fully considered.

Correspondence to:
- (•) Submitter
- ( ) Agent
- ( ) Both

Submission

What is your overall level of support for this proposal?

- ( ) Not at all supportive
- ( ) Unsupportive
- ( ) Neutral
- (•) Supportive
- ( ) Very supportive

What are your key concerns or issues with this proposal?

Comments
Ecological values of the stream reaches affected Protection of the ecological reaches of the stream Balancing need for protection of stream with reducing amenity effects of truck movements on Rolleston St residents See submission attached

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What do you see as the main benefits of this proposal?

Comments
Support for a reservoir for greater resilience Long term benefits for ecology and recreation and Town Belt values See submission attached

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Attached Documents

File
Submission on Prince of Wales Park reservoir 07_17
Prince of Wales/Omaroro Water Reservoir Project

Submission on Prince of Wales/Omaroro Water Reservoir Project

Dr Paul Blaschke

17 July 2017

Introduction

1. I am an independent environmental ecologist working in Wellington. I have worked extensively on urban green spaces, including ecological and health values. I am involved with a number of South Wellington ecological restoration and environmental groups. I am also an immediate local resident, having lived in Vogeltown above the Town Belt adjacent to Prince of Wales Park (POWP) for the last 13 years. I walk very frequently through this part of the Town Belt and am very familiar with the proposed reservoir site and its surroundings. This is a personal submission.

General

2. I am strongly in favour of the water storage project in general. There is no doubt that this part of Wellington City needs additional water storage, and also that the project will add to the city's resilience strategies in a number of ways.
3. I have not examined the analysis of alternative sites and therefore I do not have a view on whether the POWP site is the *best* site of those investigated. The following comments are therefore made on the merits of the application as it stands and without reference to the merits or otherwise of alternative sites.
4. I have read the application and the ecology, CEMP and "raising of fields" feasibility study appendices most thoroughly, and the landscape and recreation reports superficially. Most of the comments are made around stream ecology and erosion and sedimentation risk, both areas I have professional expertise on.
5. I agree with the conclusions of the above three reports and I think they have been carried out in a thorough and professional manner.

Significance of the stream reaches

6. I agree that both stream sections affected by the proposal, the uppermost Papawai Stream reaches above the lower POWP surface, and the upper unnamed Waitangi Stream reach above the upper POWP surface, have at least moderate to high ecological values, as some of the last remaining unpiped fragments of the original Waitangi Stream catchment and "a remnant of a once much larger system" as described in the ecology report.
7. The presence of banded kokopu in several reaches of the Papawai Stream and and elvers in the lowest reach is also of great significance. There are very few places in Wellington City where fish occur so relatively high in the catchment, or have arrived through such a long length of piped reach. The record of elvers in Reach 1 is, as far as I know, the first record of eels in any part of the Waitangi Stream other than at the mouth. So the presence of native fish in the upper Waitangi Stream is of great pride to many local residents and a powerful signal of the persistence of native biodiversity in our cities.

8. The significance of native fish in these reaches means that protection of stream habitat during construction and beyond is critical and further measures to ensure this occur are suggested below.

Amenity and recreation values

9. Although my personal recreational use of the POWP will be curtailed during construction, I agree with the recreation assessment that the long-term recreational values of the area will not be negatively affected and are likely to be enhanced. However, I also agree that construction effects on the residents of Rolleston St during construction will be adverse. Therefore, I agree that the use of both upper and lower fields for both temporary stockpiling, and permanent raising of the playing surface, is a reasonable compromise to enable less fill to need removal from the site. However, use of the lower field in this way does raise extra risks for stream ecology, as discussed in the next paragraphs.

Protection of upper Papawai Stream

10. The major potential adverse environmental effect of the proposed works is of increased sedimentation into the upper Papawai Stream, principally arising from the scouring of temporary stream banks or exposed earth stockpiles in high rainfall events during and immediately after construction, until vegetation is well established.
11. Raising the level of the lower POWP playing surface, and using it for temporary stockpiling during construction, will have the benefit of reducing flood risk on the playing field and on Salisbury Terrace properties, but it carries a higher risk of scouring the existing and new bunds and/or other bare surfaces, and therefore of sedimentation into the stream.
12. Current erosion and sedimentation into the uppermost reaches of the Papawai Stream (just below the bottom of Connaught Terrace) is high, so it is even more important that construction of the reservoir does not add to these erosion and sedimentation rates. Also because of the small size of the catchment above the construction site, catchment response times to high rainfall events are very fast. Therefore, erosion and sediment management as set out in the CEMP must be proactive rather than reactive. Although the provisions of the CEMP are generally sound, I suggest some extra refinements that would increase the assurance provided by the measures, as follows:
    a. Fill height on lower playing surface under Option 3 (p6): Scenario 3 provides that both the sports field will be raised by up to 1.5 m using 15,000-22,000 m3 of additional suitable excavated material. Elsewhere the proposal provides for the lower playing surface to be raised by 1m. I believe that the more conservative height limit of 1 m should be specified, because in general terms, the higher the level is lifted, that greater is the risk of scour and erosion in high flows, especially during construction. (On the upper surface the risks are much lower and a higher raise is reasonable).
    b. Use of super silt fence: A super silt fence *must* be used between the main excavation and the Papawai Stream to minimise the risk of sedimentation, rather than the weaker "*is expected to be required*". (p9 and p13). A super silt fence must be used along the entire construction envelope, i.e. including along the stream edge of the stockpile on the lower playing surface. Consideration should be given to a higher

spec super silt fence, e.g. higher, more closely spaced and deeper sunk supporting posts, longer wings at the ends of the fence.

c. The inspection frequency regime (p16) is adequate but no tolerance of less frequent than thorough weekly inspections should be allowed. Consider higher than 80% vegetation cover to be required before sign-off (p15) and a specified time limit for the sign-off vegetation cover threshold to be reached. These are not difficult sites to re-vegetate so performance standards should be stringent.

Vegetation values

13. I agree with the ecology report assessment of values, with the highest ecological values for the fast regenerating (and planted) native seral scrub. I agree with the assessment of winter flowering eucalyptus vegetation as having significance as bird habitat. I agree with the magnitude of effects assessment and the conclusion that if revegetation is carried out as specified, no addition mitigation should be required. I agree with the species indicated as being suitable for re-vegetation.

Dr Paul Blaschke

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Wishes to be heard:
- ○ Yes
- ◉ I do NOT wish to speak in support of my submission and ask that the following submission be fully considered.

Correspondence to:
- ◉ Submitter
- ○ Agent
- ○ Both

Submission

What is your overall level of support for this proposal?

- ○ Not at all supportive
- ○ Unsupportive
- ◉ Neutral
- ○ Supportive
- ○ Very supportive

What are your key concerns or issues with this proposal?

Comments
Our family appreciates the need to have reliable sources of water for Wellington and support quality and rigorous initiatives to enable this to occur. We have concerns and fears regarding the massive reservoir and fill that will be above our house. There will be major and potentially permanent negative impacts on local residents. We are probably not supportive of the massive reservoir as it currently stands. If it does proceed, we would feel slightly better if the quality of the playing field for recreation was significantly improved (less boggy than current), and if the ecology of the area could be improved. Not just protected but improved. We'd prefer not to have the reservoir there, and certainly not such a massive one, but we could potentially support a reservoir project that also made the area a special ecological zone, an ecological treasure for central Wellington. We would also like to see the community, and especially children, be actively involved in many aspects of the project. If it must proceed, please make it positive and special - and counter any permanent negative impacts, with much better positive permanent impacts. Question: Is this really the best place for such a massive reservoir ? Potentially unstable land, very close to local homes and narrow and steep streets, and next to a precious stream with native species? Are there more suitable places? Could Bell St reservoir be replaced by a larger one? We also support the Mount Cook Mobilised submission. Our concerns include: 1. Both playing fields (upper and lower) have stability issues. we are fearful that a massive amount of fill (temporary while constructing the reservoir, and permanent, by raising the playing fields) will make the land even more unstable. We

worry that there might be a major landslide, onto our house. Key point: Is the land stable enough to cope, especially when it is all so close to our homes? 2. Permanently increasing the height of the playing fields is a significant thing to do instead of removing the fill by other means. I don't see any analysis of other ways of removing the fill other than dumping it on the field next to our house. It is permanent. 1.5m doesn't sound much, and might not look much when standing on the field. But it feels a lot when looking up from the position of our homes. We will feel even more in a dark dip - it may affect our light, our feeling of light, privacy, and potentially our gardens. Can the fill be removed through another means? 3. We need extreme reassurance that this massive reservoir will withstand a massive earthquake. It is a massive volume of water, potentially on unstable land, right above our home. Please can it be independently peer-reviewed by experts qualified in this specialty area. 4. The residential streets in Mount Cook seem ill-equipped to cope with a massive volume of heavy trucks. There is a significant child population. I worry about safety. It will be a miserable couple of years for those most affected by the noise and the movement of the trucks.

What do you see as the main benefits of this proposal?

Comments
If it permanently improves the ecology of the area and turns it into something treasured and special, that would be fantastic. Improving the quality of the fields for recreation would be good. Resilient water supply would obviously be beneficial.

Attached Documents

File
Prince of Wales/Omaroro Water Reservoir Project

Capital & Coast District Health Board
ŪPOKO KI TE URU HAUORA

14 July 2017

Prince of Wales/Omāroro Reservoir 178
Open Space and recreation Planning
Wellington City Council
P.O Box 2199
Wellington 6140

Submission: Application for a Town Belt Easement by Wellington Water Limited

This submission by Capital and Coast District Health Board (CCDHB) is made in response to the release of consultation documents for the granting of the easement requested by Wellington Water Limited (WWL). The easement will support the location, construction and operation of the Prince of Wales/Omāroro Reservoir within the Prince of Wales Park in Mt Cook

WWL's easement request in our opinion clearly and accurately states the need for the easement and reservoir that will be the outcome of this project. This infrastructure is essential for continuity of supply for the Wellington low level water supply zone, which includes critical community facilities including the Wellington Regional Hospital, and will ensure the provision of a resilient potable water supply for the surrounding community following any significant disruption to the local or bulk water supply network

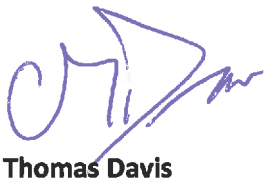
CCDHB recognise the impact the construction and operation of the reservoir may have on this same community however the main disruption is short in term and the long term benefits through provision of resilient infrastructure far outweigh any disruption to recreational activities during this period. We specifically note that the final impact outlined in the easement application is considered to be neutral to low (no more than minor) and that there are other permanent beneficial effects of the development with respect to the raising and resurfacing of the immediate area.

Reports such as the *Lifeline utilities restoration times for metropolitan Wellington following a Wellington Fault earthquake* (Wellington Lifelines Group Nov 2012) and scenarios such as the "seven islands" following a major earthquake, clearly reinforce the need for a large resilient water supply for the low water level supply zone.

Capital & Coast DHB | Private Bag 7902, Newtown, Wellington 6242
Wellington Regional Hospital, Riddiford Street, Newtown, Wellington 6021
www.ccdhb.org.nz | Phone: 04 385 5999 | Fax: 04 385 5856

CCDHB fully supports the granting of the easement that will enable the proposed reservoir project to be completed in a timely manner and deliver a hugely improved level of resilience to the Wellington Regional Hospital and surrounding community. The DHB has since it was originally proposed been a strong supporter of the reservoir including its location and believe that everything that can be done should be done to achieve a successful outcome.

Yours sincerely



Thomas Davis
General Manager
Corporate Services

Capital & Coast DHB | Private Bag 7902, Wellington South
Wellington Hospital, Riddiford Street, Newtown, Wellington 6021
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Wishes to be heard:
- ○ Yes
- ◉ I do NOT wish to speak in support of my submission and ask that the following submission be fully considered.

Correspondence to:
- ◉ Submitter
- ○ Agent
- ○ Both

Submission

What is your overall level of support for this proposal?

- ○ Not at all supportive
- ○ Unsupportive
- ○ Neutral
- ◉ Supportive
- ○ Very supportive

What are your key concerns or issues with this proposal?

Comments
My major concern is that the Mt Cook community will have to bear a huge load for the three years of construction for the sake of the wider community; and as compensation and to improve the attitude of the local community, I would like to see a new or improved community asset provided as a result of the project. In particular I suggest that a natural playground as at the top of Mt Victoria be established on the park after completion. I have eight grandchildren and we use the park continually. It will be a major sacrifice for the three years of construction. At present the only playground closeby is the very poor Mt Cook playground on John St which only has a swing and a slide. It would be wonderful to have an improved playground there or a new nature playground on the hill after the reservoir has been covered.

What do you see as the main benefits of this proposal?

Comments
Long-term safety for Wellington city.

Attached Documents

File	77

Submission on proposed Omaroro/Prince of Wales reservoir (reservoir@wcc.govt.nz)

From: **Graeme Aitken and Pru Dryburgh**
1 Westland Rd, Mt Cook Wellington
Phone 04 3845 854

Date: **15 July 2017**

About Us

Our house backs on to the Prince of Wales park lower playing field. It is the southern-most house at the end of the lane, on a rise which places our property a little higher than our neighbours. We have lived here for 28 years.

During that time, we have enjoyed a constructive relationship with Wellington City Council. Over the years, we have done some projects in partnership with the council, including:

- Planting council supplied native plants in the small reserve outside our property on Westland Rd.
- Jointly funding boundary fences.
- Jointly funding a mural painted on our fence which runs along the walk way between the park and Westland Rd.

How the reservoir project will affect us

The completed reservoir itself will have a modest impact us:

- It will remove a few pine trees from our sky-line. We are in favour of that – see below.
- If the 1 to 1.5 metres of fill is put on the bottom park, there may be an impact on our privacy in that people on the field will have a little more visibility into our back yard.

The process to build the reservoir will be a significant inconvenience, for a lengthy period of time. We anticipate:

- A lot of noise and a lot of dust/dirt from the fill and from vehicle movements. We have already endured a lot of noise, airborne matter, and disruption from the felling of the trees above Hutchison Road, and from regular machinery access past our house. We are the closest house to that activity.
- That our and other houses in vicinity will be pretty much unsellable (or values will be significantly diminished) from now until the construction is completed.

What we think of the reservoir proposal

We support the construction of this and other reservoirs

We understand that the proposed reservoir is part of a Wellington wide plan to have a number of reservoirs to provide resilience/secure water supplies. We acknowledge that the reservoirs have to go in someone's neighbourhood. We understand that Wellington Water have investigated options and have selected this site being suitable.

Whilst we would prefer the reservoir to be somewhere else and to not have the significant inconvenience during the construction period, we acknowledge the process that has been followed and support the construction of this and other reservoirs.

We are concerned about the time it will take and the impact that it will have on residents who may have a need to sell their properties

It will, we assume, take something 6 to 12 months to get consents and do investigations/etc, and then two years to build the reservoir. We can live with something like three years – not because we like the idea, but because we recognise that as a realistic timeline.

However, we are concerned that the timing for constructing the reservoir will get delayed because of potentially endless objections and/or processes. What we would not be able to live with would be two, three, or four years of arguing about whether this is the correct site or not, and then 6 to 12 months for consents/investigations/etc, and two more years to do the construction. That is too long for us and others to have unsaleable properties and is unreasonable.

Name change

We support the name change to Omāroro. We note that there will be a double name and that makes sense for a period – but the Prince of Wales bit could be phased out over time.

The proposal to put fill on the park

We understand the benefits of putting a lot of the fill on the two parks and raising them by 1.5 metres in the centre and 1 metre at the sides:

- Significant reduction in the required number of truck movements down Rolleston St. We agree that this is a significant issue for Rolleston St residents and support finding ways to reduce the impact of the construction project on them.
- Improved quality of the playing fields. The south-western corner of the lower field gets boggy and we assume that lifting the height of the field will help solve this problem. If this is to remain as a playing field, then this makes sense and we support that too.
- Flooding. We have witnessed the periodic flooding and the damage suffered by a succession of owners of houses at the park end of Salisbury Terrace. We support moves to reduce flood risks and understand that raising the level of the lower field will allow for better management of floods.

We also, however, note the impact of raising the field on the privacy and outlook of our neighbours further down the lane. This also needs to be considered.

Opportunities presented by the reservoir project

Opportunities presented by the reservoir project

We believe that the construction project, and the quest to solve the many issues and concerns surrounding it, offers many opportunities for some imagination and creativity. We don't agree that it should just be assumed that "we put things back to what they were before" when opportunities like these present themselves

Wellington Water's exploration of putting some fill on the parks to mitigate truck movements in Rolleston St, to improve the field drainage and to mitigate some flood risks is a good example of a bit of lateral thinking. They have come up with something worth thinking about. We just don't think that the lateral thinking should stop there.

Problems with current uses of the sports fields and possible solutions

We know quite a lot about the lower sports field, so will restrict our comments to that field. There are three particular issues with the lower field at present.

The field may be adequate for the sports teams, but the surrounds are very limited in size. This means players in the stream after balls (not good for the ecology) and also spectator interference with the privacy of our neighbours further down the lane. These two problems are likely to be accentuated if the field is raised.

Second, the bogginess in the south-western corner means the playing surface is problematic. As we say above, putting more fill on the park is likely to fix the bogginess problem.

The third problem is car parking when:

- There are two games on Saturday afternoon (1pm and 2.45pm). This used to happen a lot, with people arriving for the later game before the early game has finished - and parking the early game players and spectators in. This has not been a problem in recent times because there has tended to be just one game in the afternoon. This may, however, be in part because of the bogginess.
- There is a major Scottish Harriers run and a sporting event (rugby or cricket) on at the same time. This only happens on a two or three Saturdays a year.

This is not so much a problem for residents, but it does generate quite a lot of unnecessary aggro amongst different sports teams and their supporters.

At other times (e.g. kids Saturday morning rugby, summer cricket, hurling teams on Sundays, etc), the parking areas are adequate/close to adequate to cope with the numbers.

If the bottom field is to remain a playing field, then a solution to the Saturday afternoon car parking issues is required. If the bogginess problem of the field is sorted by the fill, then we are concerned that we will be having two games on Saturday afternoons again.

There are two options worth consideration:

- Have only one game on Saturday afternoons.
- Space the games out a little to avoid the earlier crowd still being there when the later crowd arrives. Scheduling the games at 12.15 and 3pm would achieve this. This option would be of minor inconvenience to us (another hour of noise over our back fence) but it would mean adequate car parking for the sports people and more harmonious relationships between the various sports teams and their supporters.

On the Scottish Harriers events coinciding with a rugby game, a bit of communication between Parks and Reserves and Scottish Harriers should sort this. It only happens on two or three Saturdays per year, so a why not talk to each other and avoid the clash of events i.e. don't schedule any rugby/cricket on the lower field on that day.

If there are to be two games without a gap between them on Saturday afternoons and/or the clash of events between sports and Scottish Harriers, then the option of more car parking should be explored. The site above the Scottish Harriers clubrooms (where the caretaker's house used to be) is an option, although it would probably require a second access way.

We don't favour this because we think that that area should revert to recreational or ecological use and a second access way would be at the expense of ecological values – but, if the council chooses to allow events that there is not enough car parking for, then it should take responsibility for at least removing the extremes of the resulting carparking problems.

We note that there are bike tracks/jumps going in around the area where the caretaker's house used to be. If this is a planned council activity with quality/safe construction, then we are fine with that. If not, then the council needs to take some steps to ensure safety.

Flood control as a driver

We think food control considerations should be more of a driver. This is for two reasons. First, the flooding of properties has been an issue. Second, the recent works below the park's changing sheds do not seem to be a full solution. It appears to us that the houses and new apartments down towards and into Papawai Terrace may be at risk.

So, we think that a more comprehensive consideration should occur. How can the works associated with the reservoir project be designed to find a sustainable solution to the flooding? If you are going to put a massive amount of fill on the park, then please do it to a design that has the best possible impact on flooding. Arrangements that allow the most retention of water and a slower/steadier release over a longer period should be considered.

Ecological area

Given the points above, a more imaginative approach to options for future use of the bottom field is required. What if the bund was moved east (and perhaps raised even higher) with a slope down to the eastern side of the playing field? This might take a similar amount of fill, but would create a water overflow and wetland area, which would also assist flood control.

We understand that others have developed more detailed plans for this, and we support consideration of those plans.

We think a first-class wet land ecological area could be created, with potential predator control (community based project involving neighbours and schools). The parking area and the changing sheds could remain to service the upper playing field. Alternatively, the changing sheds could be converted to a use consistent with an ecological theme e.g. an ecological centre.

The lower park could then become a recreational area for more casual (as opposed to structured and formal) activities. This could include both ecology related activities and training/children's sports which do not require a full-sized rugby/playing field. This fits with the park's location which has numerous schools in the vicinity.

It would, also mean that the ugly high fence in front of our neighbours' properties is no longer required and instead there could be a lower fence and bushes along the eastern boundary of

the lower field. This would mitigate the adverse impact, of raising the side of the field by a metre, on the outlook and privacy of our neighbours further down the lane.

Pine trees

We understand that a small number of the pine trees at the northern end of the ridge above the bottom park will be removed to accommodate the reservoir.

We regard these and the other pine trees in the area as eyesores and some of them take out a lot of sunlight. They are not native trees. Once again, the reservoir project should be seen as an opportunity for some lateral thinking - to do other things that need being done. Heavy machinery is on site and land is being excavated. It is an opportunity (that will not come again) to remove some pines and get regeneration of native trees under way.

We think that the plan should be to regenerate native trees along that ridge line. This would complement what the native tree planting that the council has done over the last 20 years on the western/Brooklyn side of that ridge.

We understand the argument that the tall pines prevent harmful run off down to the stream and offer some safe roosting for some native bird species. Fair enough – but where is the sustainable plan for ensuring that there will be protection from harmful runoff and roosting trees in future. Pines coming down in quick succession (e.g. over 20 years) and natives that take 40+ years to grow to a reasonable size is not consistent with sustainability of water quality, ecological health, or native bird life.

The pine trees have been beginning to drop over the last 10 - 15 years. The pines that stand adjacent to the tracks (to the south of the lower playing field) constitute a danger to the people using those tracks.

We think that the council needs to have a plan for the pines in the area to be removed over time and for native trees to replace them.

Comprehensive investigation/studies/testing

We note Wellington Water's advice that preliminary studie/tests have been done but that more extensive/expensive investigations/studies will follow if/when the easement is granted.

We agree that there needs to be comprehensive investigation/studies on a variety of engineering, land related, ecological and other issues. We also support the views expressed by others that there needs to be proper peer review of investigations/studies.

We do, however, repeat our concerns about timing. Proper studies are required – not endless arguments that will extend the timing by years.

Engagement with the community

We have appreciated the efforts Wellington Water and the council have made to engage with the community and to provide information. We look forward to that continuing throughout the project.

We also acknowledge the work of Mt Cook Mobilised, who have done a lot of work on liaising with local residents and taking into account disparate views in putting together its submission.

Oral submission

We would like to make an oral submission. We believe that our knowledge of the area could be helpful to those needing to establish the factual basis upon which decisions will be made.

Public Submission on WELLINGTON WATER proposal: Prince of Wales/Omaroro Water Reservoir Project Application for a Town Belt Easement.

13th July 2017.

David Tildesley and Masae Ito:
Residents and property owners of:
46 Hargreaves Street,
Mount Cook,
Wellington.
Email: david.tildesley@gmail.com
Phone: 022 678 3854

Summary

The combination of the physical location and the scale of the proposal impose unacceptable risk and impact on neighboring residents and the town belt natural environment.

It is our recommendation that if Wellington Water wish to pursue the building of a water reservoir in this town belt location, that it be scaled back in size to a more appropriate size of under 10 Million Litres capacity which would significantly reduce risk and impact.

We are also broadly in support of the Mount Cook Mobile (MCM) submissions on the same, although while that submission needs to take into account the views of residents across Mount Cook suburb, many of whom will not be directly impacted, our submission on the other hand considers the direct risks and impacts of being an adjacent residential property owner and resident, to the proposed works on the Wellington Town Belt.

Table of Contents

Authors and background

David Tildesley and Masae Ito:

Residents and property owners of:

46 Hargreaves Street,

Mount Cook,

Wellington.

We are owners of the residential property consisting of two units on the site of 46 Hargreaves Street. Our property borders to the town belt boundary and the house is less than 3 metres from the North side fence of the Prince of Wales upper sports field as shown below on the satellite image:

David Tildesley has lived in Hargreaves Street for 40 years. Masae Ito and David Tildesley have lived in 46 Hargreaves St for 24 Years and raised a family there. Our intention is to remain in this property, in this beautiful location, and contribute to the neighborhood community once retired. We also lease out the other residential unit on the same site to a young family.

The positives and negatives of living next to the upper field.

Our property was built around 1900 and existed for many decades before the upper sports field was created by carving it from the ridge.

The southerly outlook from our property is currently very pleasant with the height difference between our floor level and the field level, allowing our views to be mostly unaffected by the wire perimeter fence.

The privacy aspects of having spectators and players next to our property is currently acceptable due to the floor level of the property being over one metre above the current level of the field.

Unusually, our house is within the "drop zone" of punted rugby balls and particularly In a southerly wind it is not unusual to have balls landing on our property and very occasionally causing damage such as a breaking guttering or TV aerial. The wire fence at the field boundary does help to prevent the more direct lower angle kicked balls that could smash a window. This is only a problem when secondary school and senior grade games are played on the field as the junior grades do not have the kicking power to cause an issue.

A set of native bush with mature trees along the perimeter towards Rolleston St attracts bird life.

Pedestrian access to the field is level and safe – requiring no steps or ramps that would also remove area from the field and create a hazard to field users if they existed.

The current rugby field is marginal in terms of area – it is hemmed in by hard constraints of the topography for dead ball area and spectator area, however it is sufficient for the junior and intermediate grade games, but not senior grades.

The impact of raising the level of the upper field

Currently the upper sports field level is at the same road end level of Hargreaves and Rolleston Streets. The WELLINGTON WATER proposal is to raise the level of the top field by 1.5 metres at or around the middle of the field sloping to 1.0 metres at the ends so that surface flooding water will tend to drain to the Rolleston St end or the opposite end.

The impact of this on our property cannot be understated. The following impacts result:

1. The risk of personal injury from descending balls is exponentially greater than current due to the additional 1.5 metres of gravity assisted acceleration.
2. The property damage from descending balls will be significantly greater than current due to the additional 1.5 meres of gravity assisted acceleration.
3. The privacy aspects are adversely affected – spectators and players will be peering directly into our house.
4. The view aspects from the house will be adversely affected by the consequent raise in height of the perimeter fence.
5. The current strip of native bush along the northern boundary will be directly impacted by the proposed retaining wall.
6. The water table level will raise immediately adjacent to the house which will cause an increase of water moisture ingress to the house foundations and sub floor soil, increasing moisture levels in the house and causing long term structural harm. This can only be remedied by either re-building the perimeter foundations of the house with a concrete wall or similar remediation adjacent to the property paid for by Wellington Water.

7. Ramps or steps would have to be created for access to the field which will create health and safety issues for all field users and remove some spectator area from the field.
8. The stability of land immediately adjacent to our property will be compromised by the water sodden weight of the additional 1.5 metres of fill. It will be totally dependent on the effectiveness of retaining walls – which could be compromised and collapse in a significant earthquake – this adds a very significant seismic activity risk to our property and personal safety.
9. The stability of the Eastern end of the field, which was created by sub-standard fill, with an additional loading caused by the raising of level, will be compromised, putting the likelihood of a landslide in an earthquake at a higher probability than current.
10. The result will be profoundly unsightly / ungainly compared with the current synergy with the town belt, fields, road ends and residential properties.
11. It is very likely to have a negative impact on property value for our and other nearby properties.

The following photos show the impacts of the raising of field level:

Figure 1 Current state of the upper field.

Figure 2 The proposed raised height superimposed

Figure 3 Current state of the upper field.

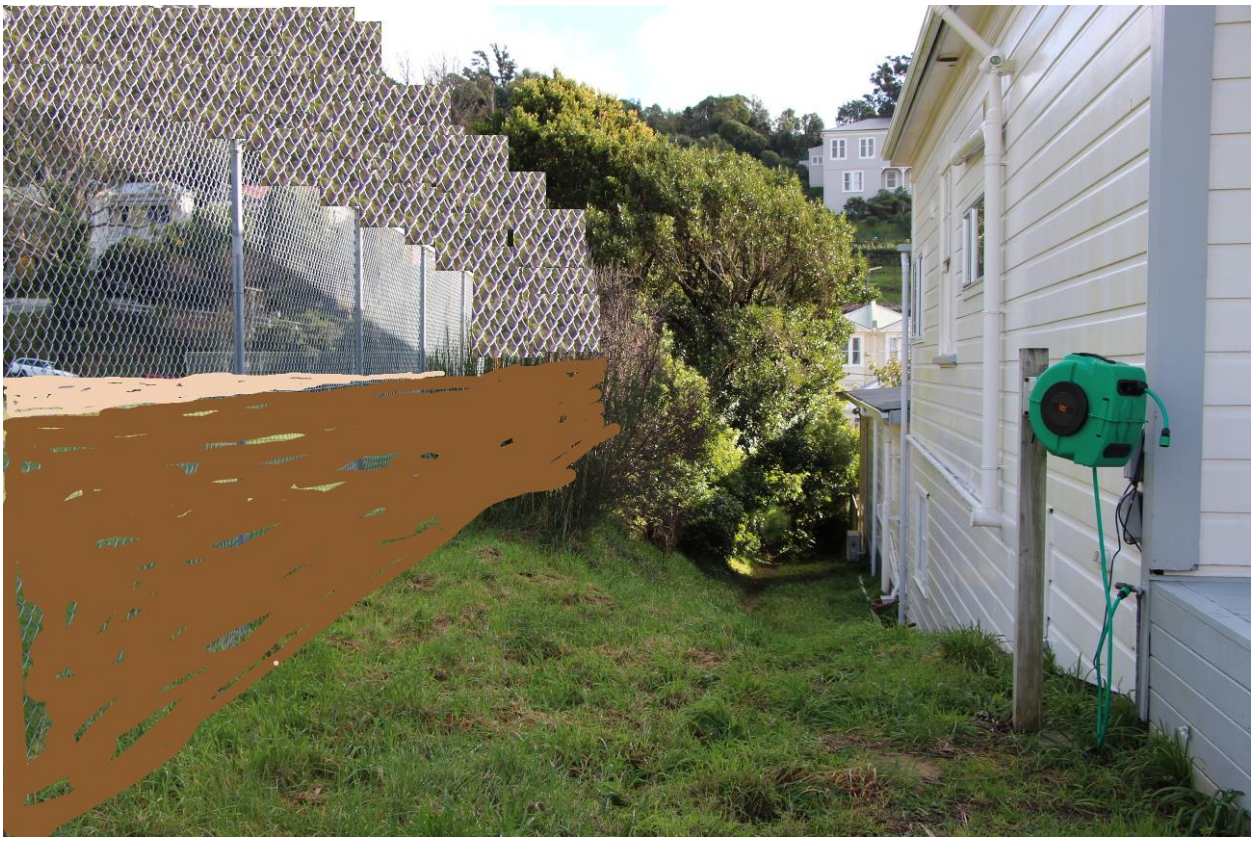

Figure 4 The proposed raised height superimposed.

The risks and impacts of "parking" 35 ML (Million Litres) above residential properties.

The proposed water reservoir size in perspective

To put the size of the proposed water reservoir in perspective, its capacity is equivalent to:

- 14 Olympic sized swimming pools of water.
- 35,000 (metric) Tonnes weight – approx. weight of 18,000 mid-size SUV cars.

The excavation required to construct the underground reservoir is likely to exceed 40,000 cubic metres of material, although a small amount of this will be returned as backfill once the reservoir is completed.

Huntsbury Reservoir failure – 2011 Christchurch earthquake

The failure of the Huntsbury 35M litre reservoir in the 2011 Christchurch earthquake illustrates the higher probability of failure of large water reservoirs vs. small reservoirs. This higher probability is simply the result of an extended area for opposing ground movement to occur combined with a larger mass of water in a buried container and its physical properties and the immaturity of current seismic engineering models for such structures when scaled leading to greater seismic resilience uncertainty factor. Huntsbury reservoir was built in 1952, the reservoir was badly battered. A reinforced concrete structure - measuring 77.4 metres by 63m - with a 7.25m water depth, the roof was overlaid with soil and grassed, and the walls ranged from fully buried to exposed, cut into a sloping site

Perhaps the saving grace of the Huntsbury failure is that the majority of water may have leaked rapidly through broken pipes in the network than leaked underground through the resulting cracks in its concrete base floor (https://scirtlearninglegacy.org.nz/story/huntsbury-reservoir), however the geological nature of the ground under Huntsbury is significantly different from Omaroro site in that large underground natural cavities could absorb the water away from the site quickly. With the proposed seismic activity operated safety valves for Omaroro, pipe leakage is unlikely to occur with the proposed Omaroro reservoir – instead, the 35 thousand metric Tonnes of water will leak through any ruptures adding itself to the surrounding greywacke hillside by seepage which will have already become significantly more unstable or partially collapsed due to the seismic event. The intrusion of the buried reservoir significantly increasing the probability of a very large landslide of in excess of 100's of thousands of Tonnes of mud and debris, burying properties in its path.

Significantly, the Huntsbury reservoir was rebuilt as two smaller 10 ML reservoirs, although the ground stability was cited as the reason for this decision, clearly reducing the base surface area of each reservoir has an exponential decrease in probability of a similar failure occurring in future seismic events.

Seismic forces increase with reservoir size

Earthquake "waves" travel through the ground and are reflected, curved, and partially absorbed by changes in density properties of the ground/terrain/water. An "impedance mismatch" that results in complex standing waves and wave peak intersections that can multiply forces to extraordinary levels. Add to this the peculiar properties of water in a container and the resulting forces on the containing buried reservoir structure are complex and severe. The buried concrete reservoir with its contained water is an "impedance mismatch" – an irregularity in the natural geological structure that has serious implications for the multiplication of seismic forces from seismic wave interference.

Burying a large concrete vessel of water in ground represents a sudden change in ground property that will have profound amplification results of stresses on the container and surrounding earth in a seismic event.

The interaction of such seismic activity induced forces are so complex, all existing engineering models fail to adequately model these interactions to the necessary degree of certainty to avoid rupture and consequent risk to life and property. Engineers admit that current models for such ground buried water reservoirs in earthquake prone areas are relatively simplistic and that experience of such seismic engineering modelling for these structures is very limited and rare, with

the notable exception of the Huntsbury reservoir. The experience of Huntsbury only informs us that building large reservoirs is inherently unwise using the current body of engineering knowledge.

The size of the reservoir has profound and direct impact on the probability of "failure" of it's structure in a significant seismic event. This is not a linear curve – the probability of "failure" increases exponentially with size of both the structure and seismic event.

The ability to peer review the design of the reservoir is also significantly impeded by the scarcity of engineers with this specialized knowledge and would need to be procured from an international source such as Japanese seismic engineering consultants.

Weakening of the seismic resilience of the "hosting" ridge and surrounds

The very volume of this proposed excavation with respect to the overall size of the ridge it is excavated from, will lead to a weakening of the earthquake resiliency of the ridge structure itself, including its surrounding slopes, which will only be worsened when the reservoir is completed and filled, **as the reservoir acts as an internal "battering ram" in a significant seismic event**.

Climate Change Impacts and the loss of storm water absorption

Niwa has long predicted that climate change impact on Wellington will be higher average rainfall and wind with an increase in frequency of severe events occurring.

This has a serious consequence on land stability and flooding around the proposed site even in the absence of the proposed water reservoir.

Water saturated land slopes with limited further capacity to absorb, have a significantly higher probability of land slippage.

The water reservoir effectively removes nearly 40,000 cubic metres of water absorbing ground – placing a higher burden on the rest of the surrounding terrain and residential storm water drainage systems and increasing water table height and water ingress into surrounding residential properties.

Reservoir size is being driven by cost

It has been admitted by WELLINGTON WATER that the size of the proposed reservoir has been driven largely by costs – it is much lower cost per litre of water stored to build one very large reservoir than many smaller reservoirs for the same capacity outcome. However, the tradeoff of this lower cost (per litre of water) comes with a higher probability of structural failure in a significant seismic event, significant environmental and community impacts, increased risk to life and property, increased flooding risk due to diminished storm water absorption, and ultimately increases failure risk that diminishes the very resiliency that this reservoir is meant to address.

It is the very size of the proposed reservoir that is driving the WELLINGTON WATER proposal to retain the excavations on site in the form of raised field levels, although the reason has been cited as being driven by traffic impacts for trucks taking the excavations away on Rolleston Street residents. Certainly, the impact of trucking away the excavations is greatly reduced if the reservoir size were to be greatly reduced.

A better approach to water resiliency.

The best resiliency outcome is to localize storage of water as close to its usage as possible. For residents, this would be the installation of at least 200 litre capacity storage tanks, single or multiple on the property per residence. For residences where large tanks are not feasible, multiple portable 20 L containers distribute around the residence, will serve the same purpose. For priority buildings, these already have, or should have, water storage on or nearby to the building for continuity of supply. Encouraging property owners through incentives and/or legislation to have on-site water resiliency is cost effective for ratepayers. Individuals should be held responsible and accountable for their emergency water and food supply – it is not too much to ask of the community.

The next best resiliency would be a higher number of strategically placed reservoirs of 4-10 ML capacity around the water pipe network that due to their smaller size have better survivability prospects in a large earthquake and due to their better geographical diversity offer faster restoration of water to affected areas.

Reducing the proposed reservoir to 10 ML maximum from the proposed 35 ML, will significantly lessen the impacts and risks to the surrounding community and environment and increase the resiliency. It may also allow WCC to proceed within available funding instead of having to first secure the $12M funding shortfall. It would also make it feasible to truck the excess excavations away from the site rather than an ungainly and impactful raising of the field levels.

DOCUMENT ENDS.

From: Katie Underwood [mailto:kt@danzat.co.nz]
Sent: Sunday, 16 July 2017 10:53 a.m.
To: BUS: Reservoir
Subject: Prince of Wales / Omāroro reservoir proposal

Greetings

Please accept this as my submission on the proposed Prince of Wales/ Omaroro reserve proposal. I understand that resilience is necessary given the location of Wellington and New Zealand along various fault lines. And there is the 'greater good' aspect to the proposal.

However, there are specific actions that need to be acknowledged with regard to the impact on local residents during the construction phase. Given the rush for businesses to make as much money as possible and get the job done, I foresee noise, traffic, dust issues and conflict arising during the construction phase. In the interests of residents and the end game, there needs to be specific rules and regulations around hours of operation with the interests of the residents taking precedence over contractors. I say this as I have been through a construction programme similar to this. When the contractor was operating out of hours, all they had to do was say they weren't and that was it. They said they weren't so they weren't. Despite evidence to the contrary. There was continued blatant disregard for the rules and the contractor got away with it. Spot checks to ensure rules are being adhered to need to be completed.

The proposal indicates hours of operation to be between 7am and 6pm. With a quiet set up period from 6.30am Monday to Saturday.
There is no such thing as quiet set up. Trucks arrive, their brakes make a loud noise, trucks beep when they reverse, the engines are left idling for hours for no reason, equipment is dropped, workers shout to each other and there are flashing lights from vehicles. I would not support the quiet set up time. The trucks driving up the street quietly is just not possible. I am not a resident in the street and they should have the only say in operational hours. But it is worth considering 7am-7pm Monday to Friday and 8-1pm Saturday. It is unfair to impose months and months of 6 day a week all day operations on residents. Those that are at home during the day will be severely impacted.
In terms of quiet set up, what sort of lighting will be needed – assuming that this will go over winter? Impact on residents? There needs to be impeccable communication with residents and a respect on how they live their lives without the massive impact such a project as this will cause.

In terms of pedestrian access through current routes, will adequate signposting, lighting and alternatives be provided? There needs to be as little disruption as possible to the daily lives of residents.

Mitigation of debris falling from trucks will be a major issue. I've yet to see a truck that doesn't have some detritus fall and leave evidence on the roads. This will need to be managed to residents don't traipse this stuff through their houses as they go about their daily business.

There are two important streams in the area of construction, the Papawai Stream and the Waitangi Stream Tributary. Is there a guarantee they will be protected from silt and dust? There has been a huge effort by locals to restore these streams. There are endemic fish living in these streams. Rules surrounding no silt to be discharged into them need to be strong to protect the stream. No silt, no sediment. How will the stockpiles of fill being dug out be stored in such a way as not to damage the stream. Should the fill be stored elsewhere?
It is all very well to 'manage' the sediment, but there doesn't seem to be a desire to enforce these rules. Happy to be proven wrong.

Thank you for the opportunity to have a say on this important project.

Catharine Underwood
22 Taft Street
Brooklyn
Wellington 6021
04 894 3717
027 248 2061

Submission: To Wellington City Council

Proposed Reservoir Prince of Wales Park Town Belt Act Easement Application.

Submitter: Frank Cook Date: 17 July 2017

Appearance: I wish to appear before the committee and speak in support of my submission.

Summary

The application by Wellington Water Ltd (WWL) on behalf of Wellington City Council for a Town Belt easement to construct a 35MLK reservoir in Prince of Wales Park should be rejected.

The major reasons for this are

1. The initial decision in June 2011 by Wellington City Council to construct a 35ML reservoir in Prince of Wales Park was based on a flawed and non-peer reviewed MWH report and was taken without consultation.
2. The need for a 35ML reservoir has not been adequately demonstrated.
3. The disruption to Town Belt users and to residents is unreasonable.
4. Mitigation to protect the surrounds and the streams has not been adequately addressed in the application and in any event is very likely not possible.
5. Inlet/Outlet Pipes are not included in the application papers

1. June 2011 decision of WCC

1.1 *Council Decision for Reservoir on POW*.

The minutes of the Strategy and Policy Committee meeting of Thursday 23 June 2011 contained the following resolution:

> **RESOLVED:**
> *THAT the Strategy and Policy Committee:*
> *1. Receive the information.*
> *2. Agree to the location of the proposed reservoir at Prince of Wales Park at 92m above sea level contour, subject to Council's conditions* ***around the reinstatement and protection of landscape and recreational values of the Town Belt,*** *and resource consent being granted.*
> *3. Note:*
> *(a) A paper will be presented on 18 August 2011 to Strategy and Policy Committee regarding the funding for the reservoir.*
>
> *(b)* ***The expected timeframe for the construction of the reservoir, subject to resource consent, is planning and design 2011-12, and construction from 2012-15.***

It was this resolution that set in process the work on Prince of Wales Park presented in the current WWL application.

The basis of the Council decision to proceed with a reservoir at Prince of Wales Park was a report dated March 2011 by MWH (See Appendix-M-Site-Selection-Summary-2017-Part-1 Appendix C) and titled '*Wellington City Council Proposed CBD Reservoir Options Assessment. Prepared for Capacity Infrastructure Services Ltd 24 MARCH 2011'.*

That the current application by WWL for an easement has not referred to this resolution or to the associated Council papers is regretted and distorts the underlying basis on which reservoir work subsequent to June 2011 has been undertaken.

1.2 *Beca 2017 Selection Report*

The 2017 CH2M Beca report – Appendix-M-Site-Selection-Summary-2017-Part-1 and titled '*Central Wellington Bulk Water Supply – Prince of Wales Park Site Selection Summary*' is the report which allegedly develops the argument for a new reservoir and for it to at a level of 92 m. This development of the case for a reservoir is discussed later in this submission. However once the case determines the reservoir has to be at 92m it then totally relies, falls back, on the MWH selection of Prince of Wales as the preferred 92m level option.

I maintain the MWH report has serious flaws and note it was neither peer-reviewed nor has it been re-examined in any subsequent analyses presented in WWL's current application.

1.3 *MWH Report Examined*

The MWH options were narrowed to one of four Town Belt sites and the final choice was based on a multi-criteria analysis (MCA) undertaken by MWH staff with the criteria developed in consultation with Capacity Ltd, the predecessor to WWL.

The page below taken from the MWH report details the evaluation criteria, the scoring, and the subsequent results.

6 Multi-Criteria Comparison of Sites

Evaluation criteria for the site selection were developed in discussions between MWH and Capacity staff. The criteria were developed to ensure that the four well beings of Economic, Environmental, Social and Cultural were considered when selecting the proposed sites. The location of the reservoir was also included as a separate category as the strategic network considerations were considered to be significant.

Figure 6-1 shows the evaluation criteria and the scores from the MWH evaluation. The results of the MWH evaluation scoring are shown in Figure 6-2.

Key Issues	Attributes	Weighting	POW	TORQ	CARM	GOVT
Location	• Proximity to hospital	5%	3	3	3	4
	• Proximity to CBD	5%	4	3	2	3
	• Proximity to Thorndon-Macalister main	5%	4	5	2	2
	• Network / operational flexibity	5%	5	3	2	2
Economic	• Geotechnical suitability of site;	5%	3	3	3	3
	• Cost of Inlet & Outlet mains;	10%	4	5	2	1
	• Capital Cost of reservoir construction.	10%	4	3	2	2
Social	• Proximity to residential areas;	10%	3	3	3	4
	• Landscaping and visual impacts.	10%	3	3	2	2
Environmental Issues	• Changes due to modified habitat.	20%	3	2	3	4
	• Other consenting difficulties	5%	4	4	3	2
Cultural	• Cultural impacts	10%	3	3	3	2

Figure 6-1 : Summary of site scoring

MWH

Wellington City Council
Proposed CBD Reservoir
Site Option Assessment
Project: Z1306852

		Evaluation Criteria						
		Location	Economic	Social	Environmental Issues	Cultural Issues		
	Site	20%	25%	20%	25%	10%	Score	Rank
Short list sites	Prince of Wales park	4.00	3.80	3.00	3.20	3.00	**3.45**	**1**
	Torquay	3.50	3.80	3.00	2.40	3.00	**3.15**	**2**
	Carmichael	2.25	2.20	2.50	3.00	3.00	**2.55**	**4**
	Government House	2.75	1.80	3.00	3.60	2.00	**2.70**	**3**

Figure 6-2 : Results of evaluation scoring

There are a number of issues which need to be highlighted and which show the conclusions to be flawed.

1.3.1 Environment.

A 25% weighting was given to the environment, comprising 20% for 'Changes due to modified habitat' and 5% 'Other consenting difficulties'. Regarding the 20% category the following comments were made in the associated commentary for first, Prince of Wales Park and second, Torquay.

> Prince of Wales
>
> ***5.1.4.1 Changes to local environment***
> The site is currently covered with scrub and regenerating native vegetation, with some macarocarpa and eucalyptus trees. There is a regenerating bush gully to the west of the site. Appropriate landscaping is expected to result in a long term improvement to the site.
> No detailed assessment of the site has been prepared to date however there are no obvious environmental issues with this site. A more detailed assessment should be undertaken prior to construction.
>
> Torquay
>
> ***5.2.4.1 Changes to local environment***
> The site is currently covered by regenerating native vegetation accessed from a large grassed area between Hanson Street and Macalister Park. There is regenerating bush gully to the south of the site. Appropriate landscaping is expected to result in minimal long term impact to the site.
> No detailed assessment of the site has been prepared to date however there are no obvious environmental issues with this site. A more detailed assessment should be undertaken prior to construction.

There is no reference above or anywhere in this MWH report to any streams in the Prince of Wales Park. At that time, and up to this year, Capacity and WWL referred to the streams as drains and they were clearly not a consideration by MWH. As a result of their (MWH) assessment Torquay scored 2 and Prince of Wales 3, which means Torquay was considered more valuable. While POW has open streams there are none in the Torquay area – the last few metres section of open stream in Hanson St, some distance from the Torquay site, has recently been piped.

With the streams and the need to protect them figuring in WWL's application one has to conclude that the 20% environmental assessment Torquay/Prince of Wales should see the positions reversed. The CH2M Beca report simply reiterated that MWH identified no environmental issues regarding Prince of Wales. Evidently they did not wish to raise any stream issues and cloud the MWH findings.

An environment scoring change of one point - Prince of Wales score 2 and Torquay score 3 - the final result would change and Torquay would come out as the preferred option. The outcome would then be

Torquay: **3.35**
Prince of Wales: **3.25**

1.3.2 Pipework.

The evaluation criteria did not include any geotechnical analysis for the inlet and outlet pipes. With those piping routes crossing valleys it is highly likely they cross fault lines and will fail in a large earthquake. In fact this has been accepted as a possibility by WWL, and at one of the public hearings in response to a question the public was informed that they had a supply for pipes in case of an earthquake failure in Japan and other places. That is hardly a position of resilience. More resilient would be a reservoir where the connecting pipes run North-South, and along the same ridge. For example the MWH Government House option would score higher than POW and Torquay on that

basis. And of course with the Torquay option near to the existing Macalister Reservoir, inlet and outlet pipe costs will be significantly less, as well as associated disruption to residents.

1.3.3 Geotechnical stability of site

All options scored 3 here but it was noted POW and Government House both had a fault line in the vicinity. With respect to POW the report stated: "The inactive Lambton Fault may cross the site." and regarding Government House: "An inactive fault may exist within the proposed site." The Huntsbury reservoir emptying in the Christchurch earthquake and the Wellington-Kaikoura November 2016 earthquake, where a record 21 faults moved, should be a warning against building reservoirs over fault lines. POW should have scored less than Torquay because of the Lambton fault.

1.3.4 Proximity to residential areas.

Again Torquay and POW scored equally on this criteria, and no mention was made of vehicular movements and disruption in Hargreaves St, Wright St, and Salisbury Terrace. Only Rolleston St was mentioned. There was no plan to involve the lower field in the MWH report. That change – to using the lower field and incorporating it into the construction area - places many more houses in close vicinity to the proposed works.
The distance to the nearest house was the measure, regardless of whether the nearest house was away from all works and of the number of houses that would be affected. A very strong case could be made that for this criteria POW's score should have been less than that of Torquay.

1.3.5 "No Change" Position of Wellington Water.

In the primary application document (Application for Town Belt Easement) section 6.7 Wellington Water writes regarding the MWH report:

> WWL has reviewed the conclusions of this 2011 [MWH] assessment, and although 6 years old, these are considered to still remain valid, notwithstanding that the TLoS delivery goals associated with the proposed Prince of Wales/Omāroro reservoir (described in section 1.3 of this request) have changed since 2011.

The change in TLoS (Target level of service) is primarily due to the DHB not agreeing to make any budget allocation towards the project. Hence the original TLoS -*to supply Wellington CBD and provide emergency storage for the Wellington Regional Hospita*l –was no longer applicable. These changes in TLoS and consequent delay in proceeding as per the resolution of June 2011 were notified to Wellington City Councillors on 10 September 2013 by WCC Assets Manager, Anthony Wilson (Appendix 1 to this submission). So for WWL to maintain the 2011 report remains valid is not credible on this count alone.
It does appear that once the original rationale for the reservoir was no longer supportable new TLoS delivery goals were sought to justify an already taken decision to build a reservoir on POW Park.
At the point of the Assets Manager's September 2013 email the whole project should have been re-examined. And that the papers in WWL's application make no mention of these changes is an obfuscation of the facts.

Furthermore findings from the Christchurch earthquake of February 2011 and the Kaikoura-Wellington earthquake of 2016 have most certainly changed both the understanding of likely fault movements and of the methods of supply of basic needs immediately following such earthquakes. One large reservoir built over a fault line and with pipes crossing fault lines and likely ruptured in a major earthquake is not a resilient solution. In the main easement application paper the only resilience referred to is seismic resilience for the actual reservoir. A standing reservoir is little use if the water within is not accessible.

And since the June decision of WCC, when only the top POW playing field was going to be out of action, we now have both fields out of action, longstanding commuter paths closed, environmental and other impacts not fully considered at the time. Both fields out dramatically changes the impact on the immediate Mt Cook community.
Additionally is the point made in the September 20913 email to Councillors:
… the Regional Council have included provision in the current year's Annual Plan to study the option of a cross harbour pipeline to increase the resilience of the Eastern Suburbs. Such a pipeline would provide better resilience than a 'one shot' storage solution.
This throws the 'no-change since 2011' position of WWL in this application further into question.

2. WWL Case for a 35ML Reservoir

2.1 The WWL case for a 35ML reservoir is formally made in the CH2M Beca Ltd report dated 24 April and entitled:

Central Wellington Bulk Water Supply - Prince of Wales Park Site Selection Summary

It is important to note that the basic design for the reservoir was done over the period 2012/2013 and before the email of 10 September of 2013 from the WCC Assets Manager advising of a temporary halt to the reservoir project.
It is apparent that work did resume at some later date. However WCC and WWL were left without an adequate rationale for proceeding. The CH2M Beca Ltd 24 April 'Site Selection Summary' report is apparently an attempt to justify the continuation of the project. This report is one of the last to be prepared, but without which there would be no basis for the reservoir at POW to proceed. This is further evidence of an apparent determination to proceed with a reservoir at POW at all costs.

The proper course following the Asset Managers email to Councillors would have been to review the case for a reservoir at that time. Work done to that date particular to the POW site should not have affected any subsequent selection process.

2.2 The CH2M Beca Ltd report is clearly hurried and inadequate as a justification for proceeding with the POW reservoir.

That the front page does not even note who the report is for and other typographical errors evidence the hurried nature of its preparation.

A further inadequacy is that various reports on which the findings are based are cited in the text and in footnotes but are not available in the WWL easement application.
And while it is noted that water use per person trending down – a situation that has developed over the past decade and was clear from the former Greater Wellington annual water reports – the Beca

report says an overall increase is forecast but no details are supplied. Even the cited Cardno report is not available or properly referenced.
On page 3 of the Beca report is written " *Studies highlight a need to build a major new water reservoir close to the Wellington CBD*" The footnote referencing the '*studies'* is to '*Wellington Water Strategic Case 2016, Wellington Low Level Zone technical reports (various 2007 to 2016)*' Those reports are not available. What we have is Wellington Water providing Beca with reports saying we need a 35ML reservoir at POW and Beca repeating that back to Wellington Water as justification! Withholding those reports from the easement application is a serious failure of the applicant.

2.3 The TLoS delivery goals lack clarity and in part that is due to publicity coming out of WWL. For we read example in the article
http://www.massey.ac.nz/~wwjourn/proposed-reservoir-worries-mt-cook-residents-tutor-approved/
"Salayev said the reservoir was urgently needed. Wellington's water supply is vulnerable to seismic activity and there are only 19 hours of water available if was to break."

The implication being that the extra one day supply from the proposed reservoir will come on stream immediately. However WWL make it clear that we are on our own for the first 7 days.

2.4 While expenditure to date on the reservoir project is significant, it would be irresponsible of WCC to allocate a further $20,000,000 on the basis of the evidence presented in this report.
It also needs to be noted that the underlying basis for the selection of the POW site remains the MWH report. As I have already noted the basis for that report has changed and there were serious flaws with the application of the multi-criteria analysis on which the final selection was made.
The Wellington Water Ltd statement 'No other practical alternative method exists for meeting this in-zone water storage service and resilience requirement" is not supported by the evidence provided in the application.

2.5 Page 15 of the application notes:

> WWL has developed a TLoS for the strategic/disaster resilience of its water storage network, following a significant disaster event. This has been developed and agreed around the network being sufficiently prepared to support a Survival & Stability State (from Days 8 to 30 after a large earthquake affecting the Wellington region) at a basic minimum level of service that consists of:
>
> > Provision of 20 litres per person per day to residents via distribution points
> > Providing major hospitals and CD centres with a basic water supply from Day 8
> > Providing Aged Care and Medical Services with a basic water supply from Day 14
> > Providing Education facilities with a basic water supply from Day 21.

In terms of the above TLoS the critical issue will be getting water to the distribution points. In this respect it is not the reservoir location that is critical – if it is the reservoir that will be supplying the distribution points – but the ability to get water to the distribution points. Also the provision to the hospital would be enhanced were the reservoir located in closer proximity to the hospital and where it is less likely connecting pipes will be fractured, ie the Government House option gives much greater confidence in that regard.

2.6 The critical issue of firefighting is mentioned in the report but lacks any details on this. How the reservoir will be in a position to contribute to firefighting following an emergency is absent. It may

well be that some lower level options would be in the best position to contribute in the early days following a large earthquake. Having all water at higher levels may not be the best solution.

3. Disruption to Town Belt Users and Residents

The disruption to Town Belt users and residents will be at an unacceptable level if the proposal proceeds. Changes since the MWH proposal have brought the lower field into the project area. That has significantly increased the level of disruption over the construction period.
The high level of disruption for residents in Hargreaves St, Rolleston St, Wright St, Papawai Terrace, Salisbury Terrace, Salisbury Avenue extends over a number of years. Furthermore Wallace St has one of the higher traffic counts in the city. The PAOS report indicated very high recreational and educational use in POW Park, much of which will be disrupted during the construction phase. While that loss will impinge most on local users it will also have a much wider impact. As the report notes that was the area selected for Imagine My City, which brought people from as far as the Kapiti Coast. Some of those people have returned with their children to revisit the natural features highlighted in the programme. And loss of such an important recreational area will mean more commuter travel for locals, who in the past have relied on the walkability of the area.

A number of long standing pedestrian commuter routes will be closed for at least two years. Reports on these commuter routes and which will be closed is unclear.
For example PAOS Ltd report comments with regard to one of the routes "
People wishing to walk between Dorking Road and Rolleston Street will be redirected to the existing paved path between Dorking Road and Rolleston Street, via the Bell Road reservoir and the steps at the top of Rolleston Street' while the later Beca Ltd Traffic report notes this as desirably left open, as indicated in the snip below taken from their report.

According to PAOS the route will be open, while Beca in their later report notes it as desirable to leave it open.

Both reports indicate the road to Scottish Harriers from Salisbury Terrace will remain open, but that is also an access way for construction activities and is included in the designated construction area. That means access will be by grace and favour only.

Residents experience with WWL has shown their published plans and assurances are not matched by the execution of those plans.

4. Mitigation to Protect Surrounds and Streams

Appendices E, F and J cover respectively Landscape and Visual Assessment, Ecological Impact Assessment and Construction Erosion and Sediment Plan.

4.1 The Ecological Assessment report maintains: *Both Papawai Stream and the Waitangi Tributary are avoided by physical works, and riparian planting is replaced where lost*." While the intention may be to avoid the streams, the nature of the terrain and the proximity to the streams bring into question the credibility of this assertion. The Ecological Assessment report relies on an effective Sediment Plan to protect the stream, but does not actually address that plan. The Ecological Assessment report also maintains effects measured against RPS policy 23 are not significance. However RPS 23(a) reads:

Policy 23: Identifying indigenous ecosystems and habitats with significant indigenous biodiversity values – district and regional plans

District and regional plans shall identify and evaluate indigenous ecosystems and habitats with significant indigenous biodiversity values; these ecosystems and habitats will be considered significant if they meet one or more of the following criteria:

a) Representativeness: the ecosystems or habitats that are typical and characteristic examples of the full range of the original or current natural diversity of ecosystem and habitat types in a district or in the region, and:

(i) are no longer commonplace (less than about 30% remaining); or

(ii) are poorly represented in existing protected areas (less than about 20% legally protected).

Clearly the Papawai Stream is a remnant of a much larger system and in that regard appears significant in terms of Policy 23 of the RPS. However the report measures its significance against Schedule F1 of the Proposed Natural Resources Plan. – A plan which is not yet finalised and is currently going through a Greater Wellington Regional Council consultation process.

4.2 I also maintain that the mitigation as shown in the Construction Erosion and Sediment Plan is inadequate. That plan is a draft which makes comment difficult. While a complete plan will be needed for the Resource Consent process it should have been provided at this stage. Currently this plan does not comply with the Erosion and Sediment Control Guidelines for the Wellington Region. For example the SRP in the upper field is outside the allowable dimensions. And regarding the comment " DETAIL AT EXISTING CULVERT CROSSING TO BE PROVIDED PRIOR TO CONSTRUCTION". It is that crossing which will need to stop cross contamination at periods of high flow. With the stream having over-flowed the culvert in the past it is difficult to see how this will be managed.
As an indication the photo below, taken before the bund was constructed, shows flow from Reach 5 after heavy rain.

4.3 The draft Sediment Plan also contains the following

The ecological assessment notes that both the Papawai Stream and unnamed tributary provide relatively poor habitat (low Physical Habitat Assessment scores). The Papawai Stream contains only one species of fish – banded kopoku. No fish species were recorded in the unnamed tributary, however, koura were present.
Notwithstanding the low habitat availability and lack of fish species identified, the ecological assessment notes that the Papawai Stream and unnamed tributary of the Waitangi Stream represent two of only a very few fragments of the Waitangi Stream that remain un-piped and therefore have high and medium ecological values respectively as remnants to the once much larger system.

So this Plan does note the high and medium ecological value of the streams. It does however miss reference to the sighting of elvers in the stream

4.4 The Construction Erosion and Sediment Plan also notes the possible need to strengthen the road connecting the two fields. The bank below that road is uncompacted fill and has begun eroding at the stream level. See Photo below, taken in July 2017.

Should there be a catastrophic collapse associated with this bank it could cause a flow through the former production village – 26 Wright St. - and interfere with the buried PCBs. The likelihood of this occurring will be dramatically increased with the use of the road above for heavy vehicles. The recent spate of slips in Wellington (https://www.stuff.co.nz/dominion-post/news/wellington/94723591/wellington-in-cleanup-mode-after-storm-savages-capital) highlights the precarious nature of some of our slopes.

A slip of the bank below the connecting road could also happen if a problem develops with the top field SRP. This bank, below the top field and above the stream, has a number of seepage points into the stream indicating former water paths eliminated from view in the original cut and chuck approach when the fields were developed. Very early photos showing the original cleared hills give an idea of the extent of the changes of the 1930s. The more northerly seepage point along that section of the stream is one where in the past I have previously smelled eels, suggesting they have been in the stream in recent times.

4.5 Monitoring

The Construction Erosion and Sediment Plan does not allow for any monitoring pre construction. That should be included.

4.6 Finally the Ecological Assessments report notes the bird life present in the area. Because of the times the bird counts and observations were made it has missed the fact that the morepork/ruru has been present in the area for a very considerable period. Consequentially it has not been established where these birds spend the day but it may well be in the trees scheduled for removal. And the presence of the stream is a significant aspect of the high numbers of birds in the area. A visit to the stream almost invariably shows birds drinking and playing there. There is little doubt the proposed works jeopardise the stream and its quality and consequentially the bird life.

5. Inlet/Outlet Pipes

There are no plans in this Easement Application showing or detailing where the inlet pipes will be located, or the disruption their installation will cause. It is understood that the original plans on the MWH report – inlet up Hargreaves St and outlet through Papawai Terrace – have changed. The recreation report notes they will both be in Hargreaves St, whereas the formal 'Application for Town Belt Easement notes 'Servicing pipework will extend underground across the upper Prince of Wales Park playing field to Hargreaves and Rolleston Streets to connect with water mains supply and outlet, and storm water.' And in section 11.5 notes

a) Final detailed design plans for the reservoir and any supporting services, including power supply and inlet and outlet water supply pipelines, and overflow and scour flow pipelines, must be submitted to the Parks Manager prior to the commencement of reservoir and pipeline construction.

It is not at satisfactory that a decision to proceed or not is to be made without that information. The original plan in the MWH report took the outlet through a steep and well vegetated bank in the Town Belt across the stream and into Papawai Terrace. That the placement of these pipes in relation to the Town Belt is not available is a further reason to reject the application.

The Beca costing (see Appendix G Cost Estimate Summary Table) does not include inlet/outlet connecting pipes. In the MWH report those costs were set at $4,800,000, which amounts to an increase of 30% on the Beca cost estimates.

6. Other Matters

6.1 *Availability of documentation.*

The documentation associated with this application was not made available for viewing at the Council's service centre until Tuesday 8 July, and that was only done following a public request. Tuesday 8 July was in the fifth week of the five week submission period. The assumption by WCC appears to be that everyone will read the documents online. I think the Council has a responsibility to make a viewing copy available from the time submissions open.

The Council's resolution of June 2017 enabling WWL to proceed with its application makes reference to the 2017 Town Belt Management Plan. That plan is not yet published on its website. While changes to the 2013 Management Plan may have been minor it remains wrong for the Plan to form part of the Council resolution and not be readily available for public access.

6.2 Resilience and TLoS

The question of resilience and TLoS needs much greater debate and has not been well done in the WWL Easement application. As has been noted earlier under emergency conditions the POW location is not the most favourable option to servicing the hospital and also may not be optimal for servicing distribution points. There is no mention of discussions with WREMO in reaching these 'agreed' TLoSs and there has not been an opportunity for public input into these important

questions. Once this application is rightfully rejected then immediate plans need to be made for public debate around the WWL TLoS delivery goals.

Finally, I have kept this submission brief with my major focus the failure of WCC and WWL to revisit the June 2011 decision following the change to its rationale. Many other matters, such as the problematic proposed raising of the fields are left to others to comment on.

Conclusion

The Council would be wrong to approve this application a number of grounds, including the five below.

1. The initial decision in June 2011 by Wellington City Council to construct a 35ML reservoir in Prince of Wales Park was based on a flawed and non-peer reviewed MWH report and was taken without consultation.
2. The need for a 35ML reservoir has not been adequately demonstrated.
3. The disruption to Town Belt users and to residents is unreasonable.
4. Mitigation to protect the surrounds and the streams has not been adequately addressed in the application and in any event is very likely not possible.
5. Inlet/Outlet Pipes are not included in the application papers

Essentially, the required re-evaluation following the change in position of the DHB, notified to Council in 2013, has yet to occur.

Frank Cook

Wellington 17 July 2017

Appendix 1

From: Anthony Wilson
Sent: Tuesday, 10 September 2013 12:28 p.m.
To: GRP: Councillors
Cc: GRP: Executive Leadership Team (ELT); Haydn Read
Subject: Hospital Prince of Wales reservoir

Good afternoon Councillors,

I have asked Capacity to place a temporary halt on progressing this project for the reasons set out below:

My apologies, but the project website has been updated advising a delay in the formal consultation, prior to my being able to advise you all.

The reasons for my request are five fold:

1. The first is that the DBH have not agreed to pay their share, and I have had a meeting with the Crown Monitor who advises me that they have no budget allocation and are unlikely to make such a provision. My understanding of the Council's resolution is that construction is not to proceed without an agreement to recover the hospital's share, or alternatively until some form of targeted rate is in place. Such a rate proposal has the potential for political fallout with the government, given the political sensitivity of the health budget.

2. The second is that I understand (but am still checking) that the DBH does not have any financial provision to fund the dedicated pipeline that will go from the new reservoir to the hospital. There is little value in building this reservoir with one of its prime purposes to serve the hospital, if this line is not built.

3. The third is that the consultants are seeking an increase in their fees which Capacity judges as unreasonable.

4. The fourth is that the Regional Council have included provision in the current year's Annual Plan to study the option of a cross harbour pipeline to increase the resilience of the Eastern Suburbs. Such a pipeline would provide better resilience than a 'one shot' storage solution.

If anyone would like further information I am happy to discuss

Regards,

Anthony Wilson

MT COOK! MOBILISED

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17 July 2017

To Wellington City Council and Wellington Water

Consent under the Town Belt Act for the proposed Prince of Wales / Omāroro Reservoir

Thank you for the opportunity to comment on the proposed Prince of Wales/Omāroro Reservoir (POWO). Through Mt Cook Mobilised (MCM), Mt Cook residents have discussed at length the proposed Prince of Wales / Omāroro Reservoir. MCM was formed in 2007 to represent residents of the suburb and meets every six weeks or so in open forum. We publish e-bulletins frequently and print a newsletter twice a year which is delivered to every household in Mt Cook.

Mt Cook Mobilised supports in principle the need for more reservoirs in Wellington. However we are uncomfortable with the scale of the proposed 35 million litre reservoir, and we doubt the ability of the Prince of Wales Park area to sustain the long and short term impacts.

We would like to comment on the proposal as follows:

1. Wellington's need for more stored water
2. External peer review of designs
3. Scale of the project and implications for our neighbourhood
4. Protection of surrounding bush eco-system, streams, and native fish
5. Suitability of the Prince of Wales fields
6. Car parking
7. Ongoing communication with the community
8. Educational opportunities
9. Weighing up the impacts

1. Wellington's need for more stored water

During the Wellington Water Open Days we learnt that Wellington's low zone water supply reservoirs supply 70,000 people and hold one day's supply of water. The low zone reservoirs are replenished overnight via pipes that run under the Hutt Road. Mt Cook Mobilised agrees that Wellington needs more reservoirs, but we are not convinced that a single reservoir of the size proposed is the best solution.

Since the 1970s Wellington City has been discussing where to site a new reservoir. A report prepared in 2011 suggested a shortlist of four sites that meet the criteria of being 92m above sea level and which could be added to the gravity-based low zone network.

The size of the proposed reservoir, 35 million litres (ML), has been dictated by economics. We suggest that using a 'resilience' lens, rather than an economic one, would see the city plan to build multiple smaller reservoirs in different locations, rather than trying to construct the largest one we can build, on a site that will struggle to cope with the effects.

MCM COMMENT:

- *We think that the option of multiple reservoirs spread more widely through the low zone network area should be considered as a basis for better resilience and less impact on the Town Belt, rather than reliance on this single POWO reservoir.*
- *For instance, $2 a week (=$100 a year) for 2,000 dwellings in the area, i.e. $200,000 a year, would pay the interest on $4m at 5%, as a contribution to prioritising better resilience ahead of a straight 'value for money' argument.*
- *Wellington City Council and WREMO have been installing large tanks in neighbourhoods, and encouraging people to install 200 litre home water tanks, where practical. Given the situation, we would like to see more focus on this, including further discounting of the home tanks to encourage householders to store enough water for at least 7 days.*

2. External peer review of designs and supporting technical reports and assumptions

Wellington is a city established on fault lines. Our geotechnical engineers understand a lot about the action of earthquakes but it is not possible to know everything. In the 2011 Christchurch earthquake the Huntsbury Reservoir cracked, and lost its entire contents of 35 million litres of water. This was later discovered to have been caused by the movement of two rock faces in a previously unknown fault splinter beneath the reservoir.

MCM COMMENT:

- *We ask that all of the reservoir designs and supporting information are externally peer reviewed by expert reviewers to ensure that the designs are as robust as they can be. This may mean peer reviewers from overseas.*

3. Scale of the project and implications for our neighbourhood

The proposal for the POWO reservoir is based on getting two days' storage for operational resilience, and meeting a disaster resilience target of a minimal supply of 20 litres per person per day between days seven and thirty after a natural catastrophe, as per Wellington Water's Service Levels that have been agreed with Wellington City Council.

In a disaster scenario it is forecast that there could be 8,000 breaks in the local distribution pipes network (Application for Easement para. 1.3.4, page 7). How will the 20 litres per person per day be moved from a single reservoir to multiple distribution points around the city between days 7 and 30 if the infrastructure is broken like this? Wouldn't a spread of smaller supply sources be better than a large single reservoir to achieve this emergency distribution, and potentially also have less overall impact on the Town Belt?

This consultation is about the use of the Town Belt for a reservoir. It is also about the use of the two Prince of Wales parks, which are in the Town Belt bordering residential properties. The consultation gives consideration to whether any permanent change can be made to one or both of the fields to incorporate fill excavated from the reservoir site.

In 2013, when an earlier reservoir project almost got off the ground, the thinking was that all the excavated fill required to backfill the reservoir would be stored on the upper Prince of Wales Park (to a height of 8.5m). The current discussion is about whether the fill can be stored on both fields, to a height of 4m on the upper Prince of Wales field and 5.5m on the lower Prince of Wales field. Some

of the fill would be used to backfill the reservoir, and further fill could potentially be used to raise one, or both, of the fields by 1 – 1.5m after the reservoir had been backfilled.

The Prince of Wales Park area is not a quarry. A stockpile of fill that is 4 or 5.5m high is sizeable, say 1.5 – 2 times the height of a modern living room, and the extra weight of the fill could put pressure on the ground water below the fields. We are unsure of the composition of the fields and whether they could support the extra weight of the proposed stockpiles or a substantial height increase.

We have an issue with the scale of the project which seems increasingly too large for this site. Even the spur that is the proposed location for the reservoir is not a very big site. If, for instance, the scale was reduced to a 20ML reservoir rather than a 35ML reservoir, presumably the stockpile heights would be scaled back to 60% of the proposed stockpile heights, i.e. 2.4m and 3.3m, respectively, which would be more manageable on suburban parks in the Town Belt.

Not unsurprisingly the prospect of substantially raised fields, either temporarily or permanently, is not attractive to residents living close to the two Prince of Wales parks. There is deep concern about loss of privacy and views, increased risk of run-off and flooding, and possibly increased shading. If the fields are not raised, or raised less with a smaller reservoir, there will need to be changes in the number of truck movements. Without more information about the number of truck movements it has not been possible to fully debate whether raising the fields is an acceptable long term option for our community. That said, we have come to a consensus that we think the scale of the proposal at 35ML is too ambitious for this Prince of Wales site.

MCM COMMENTS:

- *Over the last several years, this area has experienced a number of intense rain events. It seems likely that this type of deluge would wash away a reasonable amount of the fill stockpile, if the downpour occurred before the stockpile had been stabilised by grass hydroseeding. We wish to know what provision the project team will make for this situation?*
- *Two trucking 'seasons' are proposed to maximise the drier times of the year, but we have seen intense rainfall at unexpected times of the year, as the climate patterns begin to change.*
- *Has there been any investigation of alternative ways to take fill off-site, e.g. conveyor belts or aerial cable ways, techniques used in mining, for instance?*
- *The project team's suggestion that truck movements will be limited to 9am to 3pm during the Monday – Friday office/school week is a welcome one. (We note that trucks will also run on Saturdays but not Sundays). The impact of trucks on Rolleston Street is not part of the Town Belt consultation, but is part of the RMA process. The number of truck movements to expect is not able to be confirmed yet, but this is a topic that is of concern to the affected residents.*
- *We would like an assurance that all impacted roading and pipe infrastructure that has been affected by the construction work is returned to at least its original standard and quality at the end of the project.*

Lower Prince of Wales Park - Wetland Area

At a recent Mt Cook Mobilised meeting we talked about the possibility of the lower Prince of Wales Park being turned into a wetland, to mitigate effects on Papawai Stream. Water and sediment coming down from the Brooklyn slopes would be detained in the wetland area, which would slow it down before it reached Papawai Stream. Wetlands promote biodiversity. We talked about including ball play, and dog-walking areas. A wetland would be a great educational resource. If a wetland is developed, lower Prince of Wales Park would no longer be available as a sports field.

MCM COMMENT:

- *In principle Mt Cook Mobilised supports the idea of a wetland as part of a redeveloped lower Prince of Wales Park. A wetland would add further value to this area.*

4. Protection of surrounding bush eco-system and native fish

The preeminent requirement for our community is that the surrounding bush eco-system is protected, and particularly that the Papawai Restoration Area, the native banded kokopu and koura which live in Papawai Stream and in the Waitangi Stream tributary, are protected.

The Papawai Restoration Group holds monthly working bees, which are well attended. Since 2010 the restoration work of the group has been celebrated at Mt Cook's annual Spring Fling, a community picnic attended by around 200 people, including a large contingent of primary school-aged children.

Papawai Restoration Group working bees are held on a Sunday, which would not be a work day for any proposed construction activity in the area. We are strongly opposed to any construction activity on the day of a working bee.

Looking at the requested service area in the easement application, Papawai Restoration Area is outside the construction zone. Continued access to the Papawai Restoration Area is non-negotiable for our community.

The Papawai Restoration Group has a Memorandum of Understanding (MOU) with Wellington City Council whereby the group plants and looks after an area of the Town Belt below the two Prince of Wales parks. The area covered by the MOU includes the Papawai Stream and extends to the bund around the lower Prince of Wales Park. The understanding between WCC and the Papawai Restoration Group is that no chemicals will be used in this area. Our understanding is that the Greater Wellington Regional Council does not spray near streams.

We note from Boffa Miskell's Ecological Impact Assessment that the habitat of the banded kokopu and koura has been assessed as "not significant" against the GWRC criteria because overall in New Zealand they are not a threatened species. Since the fish and koura were discovered living in Papawai stream, the Papawai group has worked with Greater Wellington Regional Council to have a fish passage installed, planted the riparian edge to give the fish cover during daylight, taken part in fish stocktakes, cleared the stream's scruffy dome of debris following flooding, notified GWRC when sewerage entered the stream, and kept Wellington Water appraised of the state of the erosion in the stream. The Papawai planted area and stream have become an intrinsic part of Mt Cook's community.

MCM COMMENTS:

- *Continued access to the Papawai Restoration Area is a priority, including on the Sundays of our monthly working bees.*
- *For Mt Cook Mobilised, the banded kokopu, koura and the streams are very important, together with the plantings in the part of the Town Belt around the Prince of Wales parks.*
- *It is critical that the construction of a reservoir does not add to the Papawai Stream flows and erosion.*
- *The Ecological Impact Assessment does not mention the stand of tī kōuka (cabbage trees) in the Bell Road Restoration Area, which is in the gully immediately to the west of the spur (proposed reservoir site), and cared for by the Bell Road Restoration Group. This stand of tī*

kōuka is unusual for its size. We would like to see the protection of these trees explicitly stated in the Ecological Impact Assessment.

Walkways, seating, and natural play area

The narrow pathway immediately north of the upper Prince of Wales Park, between Hargreaves Street and Rolleston Street, will become an important walking track between Mt Cook and Brooklyn, and into the city when the upper field is closed.

We appreciate the work done by PAOS in the Assessment of Effects on Recreation to assess impacts on walking commuters and other recreational uses of these grounds.

When the landscaping is designed to cover the reservoir, we would like to see a natural play area for children incorporated into the design.

MCM COMMENTS:

- *We want assurance that public access via the walking track between Rolleston and Hargreaves Streets is retained during construction.*
- *We would like to see the commemorative bench to Dudley the dog returned to the area on the spur of the hill at the conclusion of the project.*

5. Suitability of the Prince of Wales fields

Composition of the fields

Within the Mt Cook community there is concern about how well the two fields will withstand the weight of extra fill. We are not totally clear from the reports just how much geotechnical work has been done on the playing fields, nor whether it has been done after recent seismic events. We understand that this work has not yet been done on the lower field, nor perhaps on the steep 10 to 20 metre high banks to the east of both the upper field and the access way between the two fields. The lower field has historically been a source of flooding for nearby residents, and the banks are largely loose fill from the original construction of the fields.

Over several months we witnessed the Papawai Stream bank being eroded under flood conditions, beside the concrete car pad of the Mt Cook Pavilion (changing sheds). Similarly, further downstream, the streambed is eroding more deeply and starting to significantly cut into the high bank below the access track between the two fields and the south-east corner of the upper playing field. The sediment going downstream from all the erosion is raising the level of the streambed in the last 50 metres before it enters the pipe system through to the harbour, which must be adding to the risk of future flooding of the adjacent houses. All this has added further to our concerns about the impact of additional fill on the adjacent playing fields, and the risks to Papawai Stream from the reservoir development.

MCM COMMENT:

- *We consider that all necessary geotechnical work should be completed before the Town Belt easement is determined, because of the potentially serious effects from the proposed development on the stream and the Town Belt, and hence on the surrounding residents.*

Contamination of playing field soil

The proposal for raising the fields involves stripping off the topsoil, stockpiling it separately from the fill, then reapplying it to the fields. This practice is used so that the fields can be prepared for vehicle use and for stockpiling fill. If the topsoil is not removed and is left 'in situ', earthwork and vehicle movement activity is likely to destroy its structural integrity and micro biological condition, rendering it incapable for reuse.

In 2012 BECA prepared a Preliminary Contamination Investigation of the upper Prince of Wales Park. Both the upper and lower Prince of Wales playing fields have been identified as potentially contaminated HAIL (Hazardous Activities and Industries List) sites, based on their current and historic use as sport turfs. Sport turfs tend to make any 'potentially contaminated site list' on the basis that they may have been subject to the use of persistent pesticides, e.g. DDT, which was routinely used on sports fields until the late 1970s. The Investigation of the upper field also found some heavy metals (cadmium, lead and nickel) and in the soil, DDT, and low levels of PAHs (polycyclic aromatic hydrocarbon) in surface samples.

BECA has advised that the disturbance of all HAIL sites is required to comply with the provisions of the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health, and its regulations (the NES). Any disturbance of a HAIL site that may result in the release or discharge of contaminants to land, water or air is also subject to the requirements of any rules in the Greater Wellington Regional Council's existing and proposed new regional plans. A resource consent will be required.

Thanks to Beca for supplying this explanatory information.

MCM COMMENTS:

- *We are concerned that the proposal to strip off the topsoil, stockpile it and reuse it will provide opportunities to release contaminants into the environment. The reports required by the NES regulations will provide more information when the RMA resource consent is applied for.*
- *Raising the fields could put extra pressure on the fields and could cause the contaminants to be released into the ground water. This is still a concern.*

Chemical flocculants

As per the preliminary Construction Erosion and Sediment Control Plan prepared by Beca, sediment retention ponds will be established to collect silt run-off from the fill stockpiles. The ponds are dosed with chemical flocculants to help the silt particles bind together, to allow the silt to be removed rather than enter the stormwater or Papawai Stream. The commonly used flocculant PAC (polyaluminium chloride) is aluminium based and adds to the acidity of the stream. As part of the control measures, dissolved aluminium levels in Papawai Stream would need to be tested regularly, not only after specified trigger events i.e. significant rain. Mitigation measures would be in place if the level is too high.

In addition the outflow from the upper field sediment retention pond is to flow directly into the Papawai Stream. As well as the risk of contaminants and silt entering the stream, MCM wants assurance that to avoid further erosion the flows into the stream from the ponds will not increase beyond present flows in significant rain events, or if the sediment ponds need to be emptied.

MCM COMMENT:

- *Dissolved aluminium is not desirable in Papawai Stream. It will not kill the fish, but it is likely to impact on the stream.*

6. Car parking

Workers Cars

When the Wellington Hospital was being redeveloped, the hospital made an arrangement with Te Whaea in Hutchison Road to use the car park for hospital workers to park their cars. This large car park is used for the Te Whaea dance and drama complex, and for people using the artificial turf above. During weekdays football is only played in the evenings and the car park appears to be quiet during the day. This is a very large car park (70+ parks) which is a short walk from lower Prince of Wales Park (up Westland Road, which is off Hutchison Road).

MCM COMMENT:

- *If the 40 workers' cars could be relocated to the Te Whaea car park there would be extra space on the lower Prince of Wales Park for storing fill, which could reduce the height of the stockpile there.*
- *Another possibility for car parking that is worth investigating is the training facility at the BNU Gym, 2 Bell Road, which is operated by the Brooklyn Northern United Football Club. This is a short, but steep, walk from the upper Prince of Wales Park, via the steps from Bell Road.*

Access to Wellington Scottish Athletics Clubrooms and via the lane to/from the city

The "Scottish Harriers" club rooms are used by a variety of local and other people for a variety of purposes both during the day and in the evenings, seven days a week. As we read the easement application, and from assurances provided at the Open Days, access along the lane to the club rooms will not be impeded during the construction period.

It is important that the value of the clubrooms to the local and wider community not be lost. Also, many Brooklyn residents come down the walkway and along the lane to go to work and to schools. This access should also continue to be available. We do not believe that people driving in and parking at the clubrooms, or passing through this area on foot, will cause any inconvenience to the workers parking on the construction site car park, if workers' car parking cannot be accommodated at, say, the Te Whaea car park.

Car parking on Rolleston Street

This is out of scope for the TBA application, but the impacts will be discussed with Rolleston Street residents as part of the RMA timeline.

7. Ongoing communication with the community

We have been impressed by Wellington Water's project team, and their level of engagement with the community through Open Days, community meetings, and direct contact. A project of this scale takes time for the community to come to grips with, as neighbours to the project, and as neighbours of the Town Belt.

Further consultation meetings are planned with Hargreaves Street residents (Hargreaves Street is the proposed route for the reservoir inlet and outlet pipes), and with Rolleston Street residents (to discuss issues around truck movements). These are RMA concerns rather than Town Belt easement issues.

A meeting was held with Salisbury Avenue / Westland Road residents and others who border the lower Prince of Wales Park.

We also want to ensure that during construction there is a process for advice to MCM on any changes that are found necessary as the work proceeds. Our experience from the minor works associated with Papawai stream and associated drainage issues is that contractors are not always supervised closely and change the details of the work as they proceed (for example the recent re-routing of pipework through the Papawai reserve).

MCM COMMENTS:

- *Whilst the Town Belt Act easement application is necessarily the first step before Wellington Water goes further with this proposal, from the perspective of our community the wider view needs to be taken into consideration, including the proposed pipework on Hargreaves Street, and the traffic volumes, noise, diesel fumes and car parking implications for Rolleston Street. From our perspective we foresee further discussions between Wellington Water and the community before final decisions can be made.*
- *We ask that a high level of communication with residents is maintained throughout the project, particularly during construction and while the options are being assessed.*
- *During construction we ask that a nominated person is available as a contact point with a 24 x 7 contact number for residents, and that the nominated person supply weekly updates to the community.*
- *We ask that Wellington Water engage with Housing New Zealand to ensure that the Housing New Zealand residents in the Rolleston Street apartments are aware of the project, as the Open Days were not well attended by residents of the apartments.*
- *We appreciate Wellington Water making project documentation publically available and ask that this continue as the high level decisions are refined.*

8. Educational opportunities

A project of this scale does not come along very often. When Pukeahu National War Memorial Park was developed, the approach was taken to involve Mt Cook School. The result was phenomenal. The children were invited to visit the site at various times throughout construction, they named the cranes, drew art about the park development, talked about it in class, and became inspired to become engineers. Brooklyn School and St Bernard's Primary School are a short walk from the proposed Prince of Wales / Omāroro site. Mt Cook School, St Mark's School, Newtown School, Wellington High, Wellington College and Wellington East Girls' College are all within walking distance, and Ridgeway School is not much further.

MCM COMMENTS:

- *We would like educational opportunities to be designed into the project to make the most of a valuable real life learning situation for children and young adults.*

9. Weighing up the impacts

As a community we strive to understand the project's effects on each other, and to attempt to spread the load so that no one part of Mt Cook bears an undue brunt of the development.

The proposed reservoir construction site is very close to housing.

No final decision should be made until Rolleston Street residents have been separately consulted about traffic implications.

Our key concern is that we do not think that the case for a 35 ML reservoir above Prince of Wales Park has been soundly made. If the project is to go ahead as planned or in modified form, we need better assurance that no residual damage will be caused incidentally by the project, e.g. that residents' properties will not become prone to flooding, that the grounds can withstand the additional weight of stockpiles of fill, that the habitat is protected, and the area is left with recreational and ecological improvements after the work has been completed.

Thank you for the opportunity to comment on this proposal.

Mt Cook Mobilised would like to speak when this project is discussed by Councillors.

Carol Comber and David Smyth on behalf of Mt Cook Mobilised.

From: Stephen Day [mailto:stephenday19@gmail.com]
Sent: Tuesday, 18 July 2017 1:24 p.m.
To: BUS: Reservoir
Subject: Prince of Wales / Omāroro Reservoir consultation

Dear Wellington City Council.

Apologies that this submission, below, is late. Our Wellington Scottish Athletics Club Management Committee approved it last night.

We would like to remain involved in this consultation and project as it progresses.

Kind regards,

Stephen

Submission on behalf of the Wellington Scottish Athletics Club

Wellington Scottish is an athletics, running and walking club. Our clubrooms are located at Prince of Wales Park. We have 226 club members ranging in age from 4 to 91.

Predominantly, we use our clubrooms on Saturday afternoons during our winter season (from March to October) for about 2.5 hours between 1.30pm and 4 pm. During summer we are based at Newtown Park track. This winter season we have 17 club runs based at our clubrooms – this number would be typical for us during a standard season. Most Saturdays we would have between 50 and 120 people attending a club run, including 5- 15 fifteen children in our 'J Team'

We support a new reservoir. Its construction will not affect us significantly as runners and walkers (we can always run or walk in another direction where the construction is not taking place).

However, we have three concerns that we wish to raise with the City Council.

1. Driveway access

For us to access our clubrooms we will need to be able to use the driveway from Salisbury Ave and the footpath from Westland Rd. Our members arrive at club runs by a mix of transport including cars, bikes and as pedestrians. All will need to have access to the clubrooms.

2. Children

We have a team of kids that come along to our Saturday afternoon runs. Normally they play games and do some running on the adjacent Prince of Wales Park sports fields if no one else is using them. They also often explore in the surrounding bush. We want them to continue to have a nearby, safe location for their activities that they can walk to safely.

During the construction period, we want the areas where there are potential health and safety risks for children to be clearly marked and efforts taken to make sure children are safe.

3. Karate Club

The Karate Club is the tenant in our clubrooms and uses the building far more than we do – it has activities in the building for significant periods of the day almost every day. We want it to continue to enjoy safe, easy access to the building.

We share facilities with the Karate Club so if its access to the building were impacted to an extent that it would need to find new or temporary premises, that this would put significant financial strain on our club.

Once the reservoir is finished

We are eager that, when the reservoir is finished, it returns to being a space where people can run, walk and explore. Ideally, we would like the space to include an off-road trail circuit that people could train and race on. This could include a track around the outside of the two sports fields that runners and walkers could use for tempos, speed training and races.

We would also like the Salisbury Ave driveway and surrounding walkways, which are currently in a state of disrepair, to be improved.

--
Stephen Day
021 2900 734
stephenday19@gmail.com
Hangouts/Messenger/Skype: stephenday19

From: W.C. & E.E. Nagel [mailto:nagel@xtra.co.nz]
Sent: Monday, 17 July 2017 2:20 p.m.
To: BUS: Reservoir
Cc: Werner Nagel; Elizabeth Nagel
Subject: Comments on the proposed Prince of Wales/Omaroro Reservoir

17 July 2017

To Wellington City Council and Wellington Water

Consent under the Town Belt Act for the proposed Prince of Wales/Omaroro Reservoir

We live in Rolleston Street, Mt Cook and have done so for over 40 years. We appreciate the opportunity to give our comments in relation to the application for consent under the Town Belt Act for the proposed Prince of Wales/Omaroro Reservoir.

We support the submission made by Mt Cook Mobilised and identify with all of the concerns raised in that submission.

Our over-riding concern is that the scale of this project is inappropriate for the site chosen. We understand the economic reasons for this but believe it is false economy to choose an option that does not meet Wellington's need for increased resilience. We believe any granting of consent under the Town Belt Act must consider whether the scale of this proposal really does provide greater resilience for Wellington. Spreading the locations of multiple smaller reservoirs throughout Wellington and therefore spreading the potential risk factors is a better guarantee of future resilience for Wellington. We are supportive of having a reservoir on the proposed Prince of Wales site but not one of the huge size proposed.

We have particular concerns regarding the impact on Rolleston Street residents. These concerns are not within the framework of this forum but we will make them known in the appropriate forum. However it is relevant that a smaller reservoir would reduce some of these concerns.

We are grateful for the information made available to us online and at meetings with residents. We trust that this openness and easy communication will continue throughout the process of addressing Wellington's need to improve water availability as part of building a more resilient capital city.

Elizabeth and Werner Nagel

72 Rolleston Street

Mt Cook, Wellington 6021

Ph 3845470

Friends of the Wellington Town Belt

17 July 2017

Chief Executive
Wellington City Council
P O Box 2199
Wellington

Attention Bec Ramsay

Proposed Prince of Wales / Omaroro Reservoir

These comments on the application publicly notified by the Wellington City Council (WCC / the Council) are submitted on behalf of the Friends of the Wellington Town Belt.

The notification and proposal for a new reservoir have been made under the Wellington Town Belt Act 2016 (the Act). The Act which came into force on 9 May 2016 in section: -

(a) Provides a transparent statutory basis for the Council's trusteeship and management of the Wellington Town Belt on behalf of the inhabitants of the city of Wellington, and
(b) Imposes on the Council responsibilities, and provides the Council with powers to protect, and enhance the Wellington Town Belt.

In performing its role as trustee of the Wellington Town Belt section 4 of the Act states the Council must recognise and provide for the protection and enhancement of the Wellington Town Belt for future generations. Section 4 of the Act also spells out principles the Council must have regard to in the management of the Wellington Town Belt including ensuring community participation is encourages and supported.

The proposed site for the intended new reservoir, as covered in the application submitted by Wellington Water Limited (WWL) is described in the Wellington Town Belt Management Plan (as amended by the Council 20 20 April 2017) in Sector 4 Brooklyn Hills. Specifically it is stated in Landscape and ecological management policy 8.4.3.4, the Council will "ensure the proposed reservoir (intended to be sited on the spur above Prince of Wales Park) is buried and remedial planting done to mitigate its impact on the Town Belt. It is further stated "the reservoir will be buried to limit modification to the landscape. It will sit on the ridge above the sports-field adjacent to Rolleston Street in Mt Cook".

The Friends of the Wellington Town Belt have been aware of the prospect a new reservoir may be sited in this locality since the Town Belt Management Plan was publicly notified in 2013. Having submitted on and observed the construction of new reservoirs on Town Belt sites off Weld Street in Wadestown and on two sites at Mt Albert, the Friends noted those constructions were approved on the basis that they would be completely underground and that restoration landscaping would occur associated with the projects.

In reality both Mt Albert reservoirs are not totally underground and restoration landscaping has not completely been undertaken in all cases. This is most disappointing and appears to reflect a lack of total commitment from the Council to ensuring major projects such as these are not left incomplete despite understandings given before the projects proceeded. This disappointing past track record does not give confidence that what is proposed to be done at Prince of Wales Park will indeed turn out to be the case.

Without a doubt the new reservoir proposal is a major undertaking and as currently intended will have significant impact on the Wellington Town Belt and the community in the immediate environs of the project. Community concerns have been documented by the group Mt Cook Mobilised and those concerns must be given full consideration.

There have been a substantial number of reports and associated suggestions prepared on issues that may impact on the project. There remains an urgent need to review/analysis and fully understand that material including potential impact on the Town Belt and the community. Therefore the Friends recommend that before the Council acts further on the modified application and specifically before any Resource Management Act initiatives are taken a working group be established as follows: -

1. Representation on the working group to include the Council (Councillors and Officers), the applicant company and most certainly the community (as is provided for in the Wellington Town Belt Act)

2. The working group to be charged with undertaking a systematic review of all elements contained in the application lodged by Wellington Water Limited

3. The working group to identify issues that could have any effect on the proposed project that should be the focus of additional consideration before the Council proceeds with the notified application and subsequent Resource Management Act action.

John Bishop
Chairman
P O Box 28 056
Wellington

e-mail: bishop.lamb@paradise.net.nz

Submission Wellington City Council

Prince of Wales Reservoir

Based on what information has been presented to date, I am opposed to the construction of a reservoir being considered for the Prince of Wales site on many counts

One of my major concerns is that of the placement of excavated soil being built up on the two playing fields, and I have strongly indicated this to both councillors Iona Pannett of the Wellington City Council and Mr Ulvi Salayev of Wellington Water on the basis that large areas are reclaimed sub soil structures, especially the top field's eastern bank

My concerns have been treated with scant regard

Please view photographs of the top field and the cut and chuck method of construction

Wellington Water and Becas want to scrape the top field of the top soil and mound for resurfacing once the field has been raised one and a half (1.5) metres on the half way line tapering to one (1) metre at both east and west ends of the park

They also want to place a 450 tonne temporary sludge pond on the most fragile east end of the top field

Conclusion

If the bank partially slips, the stream below will be blocked causing flooding again into Papawai Terrace and beyond

If there is a larger surface slip of the bank, it will possibly damage properties at the end of Papawai Terrace and the apartments constructed along the back boundary of number 26 Wright Street metres away from the Waitangi Stream

If there is total collapse occurring in the slip zone between the original hillside and the reclaimed soil and that scallops downwards, it could take out the buildings and disrupt and gouge the ground below them

In all cases the constant is that the stream will continue to flow, and if any of these scenarios occur the access is a narrow track which will make it very difficult to remediate considering it will be a muddy exercise

Please read my affidavit re the contaminated soil buried below 26 Wright Street structures and the nature of the dangerous substance contained in the bladder

If there is a total collapse and stream floods into the property and the bladder is punctured (it contains contaminated wood and sharp materials) the controls that the Wellington City Council has currently in place would not be able to contain the spread of such a toxic material

I will use an analogy: bodies float out of the ground when graveyards flood, especially when the water table is affected

The chemical I refer to are PCB's, and, even though we asked to have it removed, Wellington City Council wilted and allowed it to be buried, a problem for future generation to deal with

I was concerned then and I am concerned now

I will be approaching the Ministry of the Environment for guidance on mitigating the spread of this colourless, odourless substance embedded in the soil and other buried objects, and I will also contact the Ministry of Health as to what category under the Stockholm Convention this criteria falls

I want this whole project peer reviewed by a body of independent commissioners competent in listening to our issues

Colin Taylor

Colin C Taylor. 15th July 2017

I WISH TO SPEAK AT THE HEARING

THESE CAN BE ELECTRONICAL ENLARGED

IN THE HIGH COURT OF NEW ZEALAND
WELLINGTON REGISTRY

CIV-2007-485-1880

Under	the Judicature Amendment Act 1972
In the matter of	an application for review of a decision under the Resource Management Act 1991 not to publicly notify or serve notice of a resource consent application
Between	**FRIENDS OF WRIGHT STREET INCORPORATED** a duly incorporated society under the Incorporated Societies Act 1908, having its registered office at Wellington **Applicant**
And	**WELLINGTON CITY COUNCIL** a duly constituted territorial authority having its main office at Wellington **First Respondent**
And	**STRATUM MANAGEMENT LIMITED** a duly incorporated company having its registered office at Wellington and carrying on business as a developer **Second Respondent**

AFFIDAVIT OF COLIN CAMPBELL TAYLOR

Sworn the 29th **day of** October **2007**

BUDDLEFINDLAY
Barristers and Solicitors
Wellington

Solicitor Acting: PT Beverley/ BR Balderstone
Tel 64-4-499 4242 Fax 64-4-499 4141 PO Box 2694 DX SP20201 Wellington

mh

I, **Colin Campbell Taylor**, Sales and Marketing Representative, of Wellington, do swear:

1. I live at 12 Wright Street, Mt Cook, Wellington. I have lived there for over 25 years. I am a member of the Friends of Wright Street Incorporated, and have been involved with the members in pursuing a range of issues of concern to us in the street.

2. I believe that the proposed development at 26 Wright Street should have been notified. I have concerns with a number of issues that the proposal raises.

3. For example, I am concerned that proposed development will add significantly to the parking pressure on Wright Street. There is already significant parking demand on Wright Street, and I do not believe that the Council addressed this issue properly in concluding that any effects on parking in the area would be no more than minor. I am also concerned about the effects on Waitangi Stream, and the effects of this 21 multi-unit development on the historic character of Wright Street.

4. In summary, I believe that public notification would have allowed the residents of Wright Street and the surrounding area the opportunity to voice these concerns in front of the Council's hearings committee. The non-notification of this application has denied us this opportunity to not only raise our concerns but also provide valuable information to the Council.

5. I am particularly concerned over potential contamination of the site. I will deal with this in more detail below.

Communication with the Council

6. I informed the Council of my concerns with the development, in particular in relation to contamination by registering myself through the "Concerned Neighbour Questionnaire" on 23 May 2005. Attached and marked "A" is a true copy of the questionnaire, which records me as a "very concerned neighbour". After that, I received very little further information from the Council, despite asking to be kept informed of this proposed development.

7. I received a letter on 31 March 2006 from the Council to inform me that it had received a resource consent application for 26 Wright Street. Attached and marked "B" is a true copy of that letter.

8. Due to the overall lack of communication and a feeling that my concerns were being ignored, I contacted Councillor McKinnon by email on 5 September 2006. In this email, I asked Councillor McKinnon to look into the issue of contamination on site as it was important to me to know that the Council were taking the issue seriously. There are children that live in the street and potential PCB contamination is a serious concern.

9. Councillor McKinnon organised a meeting with Ernst Zollner & Halley Wiseman (from the Council) and myself. Councillor McKinnon was there for the first part and I voiced my concerns very strongly about contamination. Councillor McKinnon did listen carefully to my concerns, and he passed a copy of my email on to the Council Officer processing the application.

Contamination

10. I am particularly concerned about the issue of contamination on the proposed development site. I believe that the site was used for the manufacture of electrical capacitors, a key component of the manufacture of these is the use of polychlorinated biphenyls, or PCBs. I believe that PCBs are very toxic to the environment, and pose a risk to humans if they occur in high levels. There are families including young children that live in the street, and Waitangi Stream runs directly behind the west boundary of 26 Wright Street. This stream ends up running through the Waitangi Park on Wellington's waterfront. In my view, the potential for PCB contamination is a very serious concern, and this needed to be approached with the utmost care by the Council.

11. During my working life, I have worked at a chemical production plant, and in the electrical industry. At both workplaces, I witnessed a lack of safety and environmental standards. My concern is that if PCBs were used in the manufacture of capacitors on the proposed development site, and the safety and health standards were of a similar nature to those that I experienced, then the site could pose a significant risk to the health of residents in the Wright Street area, and

the wider public and ecology of Waitangi Stream and Wellington harbour.

12. I am not seeking to give expert evidence on contamination. However, I am concerned about what I consider to be a superficial approach by the Council in concluding in making its notification decision that the effects of this potential contamination would be no more than minor.

13. I have searched the internet to find out who manufactured capacitors using PCBs in New Zealand. In the "Identification of PCB-Containing Capacitors" booklet, capacitors containing PCB's are listed in alphabetical order. At pages 33 and 34, Ducon New Zealand and Ducanol condensers are listed. Ducon is a previous occupier of the proposed development site. Attached and marked "C" are the relevant pages of this booklet.

Council Correspondence on Contamination

14. Between 20 April and 22 December 2006 the developer's consultant, Wellington Regional Council and Wellington City Council corresponded regarding contamination on the site. Attached and marked "D" is a true copy of that correspondence from the Councils' files.

15. For example, in the 28 April 2006 email from Bruce Croucher (Wellington Regional Council's Contamination and Land Scientist) to the Council, Mr Croucher stated:

> *"...I would be interested to know that electrical components were produced. Some nasty chemical[s] have [been] and are use[d] in the production of electrical components e.g PCBs"*

16. In 1 May 2006 and 3 May 2006 emails from the developer's consultant (Mr Grant) to the Council, Mr Grant confirmed that prior to 1958, electrical condensers were manufactured on the site for some years by Ducon NZ Ltd.

17. In response to the 1 May 2006 email from Mr Grant, Mr Croucher stated:

> *"This is exactly what I was hoping they didn't make. Older condensers frequently contained polychlorinated biphenyls*

(PCBs). PCBs should they be present on the site, may have significant implications for any redevelopment of the site. The issues are that PCBs are toxic and extremely eco-toxic and it is recommended that they are not disposed of to landfill."

18. The Council was clearly on notice by this stage of the seriousness of the potential contamination. I also note that on 3 May 2006 (i.e. exactly one year before the notification decision), the potentially contaminated nature of the site was recorded on the Selected Land Use Register (SLUR) maintained by Wellington Regional Council.

19. The developer then commissioned an expert report from Pattle Delamore Partners. Attached and marked "E" is a true copy of the report. I have real concerns about the adequacy of this report and whether the Council could have been properly satisfied on the basis of the report that the effects would be no more than minor. My concerns include:

(a) there was no testing of the site undertaken;

(b) the report expressly acknowledges that it is only a "desktop" investigation;

(c) there is less than half a page of actual analysis on whether the site may be contaminated. The rest of the report is made up of a site description, site history, background to PCBs and recommendations;

(d) there is an assumption that the yard areas were sealed, but no justification for this assumption;

(e) there is no analysis of the potential risks to neighbours or the adjacent water body;

(f) there is no analysis of the risk of demolition and trucking out of material that could be contaminated.

20. In my view, it is very questionable whether this desktop investigation and a three page report was sufficient to satisfy the Council of the effects the potential contamination at 26 Wright Street. The report concludes that overall the potential for site contamination is considered to be low. I do not see how that conclusion could be

reached given the site history, and on the basis of a desktop investigation.

21. The Pattle report was sent to the Council Resource Consents team with an attached letter from Mr Grant that stated "*The site does not appear on the Selected Land Use Register (SLUR) maintained by Greater Wellington.*" This letter was dated 19 May 2006. Attached and marked "F" is a copy of that letter. As stated earlier, the site appears on the SLUR from 3 May 2006. The SLUR noted that the site had a verified history of hazardous activity or industry and also stated that in the 1950s the site manufactured electrical components including condensers, which at the time typically contained PCBs.

22. The 19 May 2006 letter from Mr Grant to the Council also stated that as the report stated that the risk of contamination was low, no resource consent was required for a contaminated site. I do not understand how the Council could have accepted this view without requiring some form of testing.

23. On 23 May 2006 Mr Croucher sent an email to the Council. Mr Croucher recommended that an investigation encompass the entire Wright Street site, rather than just the areas recommended in the Pattle report, and also noted that the Pattle report made the assumption that the Wright Street site was sealed at the time of electrical manufacturing, but that this may not have been the case. I am concerned that the conclusions in the Pattle report are based on this assumption, and this may well be incorrect.

24. I am also concerned about the risks of the demolition of a potentially contaminated site. In a 1 June 2006 email from Mr Croucher (copied to the Council), he stated:

"I see the major risks from any potential contamination on the site is not that posed to the occupants of the site – although this cannot be discounted – but ensuring that construction worker[s] are suitably protected, the correct disposal of any contaminated materials and ensuring that there are no detrimental effects on the environment."

25. In my view, this again reinforced to the Council the seriousness of the potential contamination effects. If construction workers need

protection, then I would assume the same would apply to neighbours living directly next to this site, including young children.

26. This risk was also recognised in a letter from Mr Grant for the developer to the Council dated 7 August 2006, where the following condition was volunteered (emphasis added):

"That to ensure the demolition of the existing buildings on 26 Wright Street and construction of the town house development can occur ***without unnecessary risk of damage or contamination to adjacent properties (in particular 34A Wright Street, 7 Papawai Terrace and the adjacent waterbody within the Town Belt)*** *a Demolition Management Plan (incorporating a demolition methodology) must be supplied and approved by the Compliance Monitoring Officer ..."*

27. Again, the Council was well aware of the risk to neighbours from demolition and potential contamination, and it is difficult to see how these effects could have been disregarded by the Council. A public process would have at least allowed the neighbours and community the opportunity to input into the adequacy of such a management plan. I note that the Council has not included the above proposed condition in the final consent.

28. I note that the Council's Notification report (page 11) was based on the view that there would be some sampling, but that this would be after the buildings are demolished and the existing seal is removed. This is inconsistent with the requests of Mr Croucher and the assurances of the developer, but in my view this demonstrates that the Council did not appreciate the risks at stake from this contamination. In particular, this approach suggests that potentially exposed soil (adjacent to the Waitangi Stream) could remain exposed to the elements while a lengthy resource consent process was worked through.

29. Also, the Council's notification and decision reports state that the site is not registered on the Wellington Regional Council's SLUR register, which is incorrect as the site was on that register for exactly a year from 3 May 2006.

Conclusion

30. I am concerned that the contamination issue has not been treated seriously enough by the Council, and that the Pattle report was far too superficial for the issues at stake. I believe that the Council should have requested further information so as to properly understand the contamination issues on the site. If this application was notified then the Council and neighbours could have submitted, and the Council could have been properly informed about the contamination issues.

31. Finally, I am also concerned about parking issues, effects on Waitangi Stream and the effects on the historic character of Wright Street. The neighbours had gone to significant effort to raise a wide range of real issues with the Council, including a 120 signature petition. It was clear to the Council that there was wide interest and concern, and these potential effects are not minor in my view. I would have made submissions on these issues if this application had been notified.

SWORN at Wellington
this 29th day of October 2007
before me:

Colin C. Taylor
COLIN CAMPBELL TAYLOR

A Solicitor of the High Court of New Zealand

Mercia Reddy
Solicitor
Wellington

"A" FILE: RC 8776.
SR# 18776.

CONCERNED NEIGHBOUR QUESTIONNAIRE

Date: 23/5/05

Source: ☐ Front Counter
☐ Phone

Request via Jeremy Blake, District Plan Team

Possible Development Site Details

Address of possible/proposed development: 26 Wright Street, Mt Cook

Concerned Neighbour Details

Name of Concerned neighbour: Colin Taylor

Postal Address: 12 Wright Street, Mt Cook

Phone:

Email:

Concern:

Heard through grapevine that same developer as 3-5 Papanui Tce has purchased 26 Wright Street - therefore wants to be added as a VERY CONCERNED NEIGHBOUR.

Officer:

Docs# 558830

This is the exhibit marked "A" referred to in the within Affidavit of COLIN CAMPBELL TAYLOR and sworn at Wellington this 29th day of October 2007 before me:

A Solicitor of the High Court of New Zealand

"B"

FILE COPY

Absolutely POSITIVELY Wellington
Me Heke Ki Pōneke Wellington City Council

31 March, 2006

Colin Campbell Taylor
12 Wright Street
Mount Cook
Wellington

Service Request No:143194
Property ID: 1129785

Dear Colin

NOTICE OF RECEIPT OF RESOURCE CONSENT APPLICATION 143194 AT 26 WRIGHT STREET

Further to our letter of 16 August 2004 (Service Request No. 118776), I would like to advise you that a resource consent has been received for this property for construction of a multi-unit residential development.

If you would like to view the application and/or discuss it, please call Halley Wiseman on 801 3285.

Yours faithfully

Fiona McKee
Resource Consents Administrator
Strategy and Planning
Wellington City Council
Telephone 801 3679

This is the exhibit marked "B" referred to in the within Affidavit of COLIN CAMPBELL TAYLOR and sworn at Wellington this 29th day of October 2007 before me:

.....
A Solicitor of the High Court of New Zealand

Wellington City Council
PO Box 2199, 101 Wakefield Street, Wellington, New Zealand
Ph 64-4-499 4444, Internet www.Wellington.govt.nz

"C"

IDENTIFICATION OF PCB-CONTAINING CAPACITORS

SCHEDULED WASTES MANAGEMENT

AN INFORMATION BOOKLET
FOR ELECTRICIANS AND
ELECTRICAL CONTRACTORS

1997 ANZECC

This is the exhibit marked "C" referred to in the within Affidavit of COLIN CAMPBELL TAYLOR and sworn at Wellington this 29th day of October 2007 before me:

A Solicitor of the High Court of New Zealand

Make	Type	Capacitance (µF)	Dimensions (cm)	Power (V)	Remarks
DUCON	GPM 2200 WDCR	20 +/-10%		250 VAC	
DUCON	ET3C	25	4.0 x 1.3	250	Electrolytic
DUCON	LPM 407	25			
DUCON	GPM 235 HCR	35			
DUCON	GPM 4350 L	35 +/-10%	12.0 x 11.5 x 7.5	440	PFCU Paper Capacitor
DUCON	PFK 642/1	39.8 +10	23.0 x 13.0 x 8.8	400	PFCU Paper Capacitor
DUCON	EMC 283	40			
DUCON	2QN081	45	16.0 x 11.5 x 7.5	230	PFCU
DUCON	R5228	49.5	17.0 x 26.5 x 12.0	400	PFCU
DUCON	EMU 6512	65			
DUCON	5 P 700 D	70			
DUCON	GPM 4800	80 +/-10%	23.0 x 13.0 x 9.8	400	PFCU Paper Capacitor
DUCON	EMB 826	150			
DUCON	EMB 823	180			
DUCON (NZ) LTD	8785		16.0 x 11.5 x 7.5	400	PFCU
DUCON (NZ) LTD	4P35B	2.5 MU-F	11.0 x 5.0 x 3.56	400	Fluo. Lamp. Capacitor
DUCON (NZ) LTD	4P35C	3.5 MU-F	5.4 x 6.2 x 5.0	400	Fluo. Lamp. Capacitor
DUCON (NZ) LTD	2P45	4.5	11.0 x 5.0 x 3.6	240	Fluo. Lamp. Capacitor
DUCON Condensor Ltd.	PO605/1, 50	1	1.3 x 4.1 x 8.1	200	
DUCON Condensor Ltd.	QA, RS502/285, 3/48	1.0	6.5 x 4.4 x 1.6	200	

Make	Type	Capacitance (µF)	Dimensions (cm)	Power (V)	Remarks
DUCON Condensor Ltd.	PO 606A	2	8.1 x 4.1 x 2.5	200	
DUCONOL	4P35	3.5	5.5 x 6.0 x 5.0	440	Fluo. Lamp. Capacitor
DUCONOL	Part No. 5458 114, 787	4.5	11.1 x 4.9 x4.0	240	'A' CAPACITOR
DUCONOL	APF 260 CR	6	12.0 x 4.8 x 3.0	250	Paper Capacitor
DUCONOL 'A'	4RN054	10	9.5 x 11.5 x 7.5	400	PFCU
DUCONOLA	PST 569	0.5			
ELNA	93 E 605V	250	4.9 x 1.8	50	
ELNA	CE-W	2500		63	
ENDURANCE	PPU 148				
ENDURANCE	AA10	2.3		250	
ENDURANCE	APR 1968	6 +/-10%		250	
FAC		2.5			
FIRBOURG	31740-18	1.4 +/-10%	5.0 x 4.5 x 3.5	310	Fluo. Lamp. Capacitor
FRAKO	M 280/20 RKB 18	20	16.5 x 5.0	280	PFCU
FUJI KEN	FS-4055	5.5 +/-5%			Capacitor
FUJI KEN	FS-2557	5.7 +/-5%	7.5 x 5.5 x 3.4	250	Fluo. Lamp. Capacitor
FUJI KEN	FS-2580	8.0 +/-10%	8.0 x 5.4 x 3.3	250	Fluo. Lamp. Capacitor
FUJI KEN	FS-2585	8.5 +/-5%	9.5 x 5.4 x 3.4	250	Fluo. Lamp. Capacitor
G.E.	45 F				
G.E.	72F6056	0.1		600	60 Hz

"D"

Bruce Croucher

From: Halley Wiseman [Halley.Wiseman@wcc.govt.nz]
Sent: Thursday, 20 April 2006 10:59 a.m.
To: David Grant
Cc: Bruce Croucher
Subject: Dangerous Goods Store - 26 Wright St

David

Further to our telephone conversation, further information is required in relation to the use of 26 Wright Street as a dangerous goods store. I have spoken to Bruce Croucher who, while Greater Wgtn have no record of this being a contaminated site, would like details in relation to the following:

- What type of dangerous goods were stored on the site & what were they used for;
- The quantities of goods stored;
- The location of the dangerous goods on site

Thanks

Halley Wiseman
Resource Consent Planner
Wellington City Council
Telephone (04) 801 3285
Fax (04) 801 3165

This is the exhibit marked "D" referred to in the within Affidavit of COLIN CAMPBELL TAYLOR and sworn at Wellington this 29th day of October 2007 before me:

A Solicitor of the High Court of New Zealand

SW/05/596/02
#338846

urban
PERSPECTIVES LTD

Level 5
82 Willis Street
PO Box 9042
Wellington
New Zealand

24 April 2006

Resource Consents Team
Strategy and Planning
Wellington City Council
P O Box 2199
Wellington

Attention: Halley Wiseman

Dear Halley

Further Information Request – SR 143194
Multi-Unit Development - 26 Wright Street, Mount Cook

In response to your email of 20 April requesting information about a Dangerous Goods Shed on the site I have now researched the land use history of this site at the Wellington City Council Archives.

The archive files show:

- No records held prior to 1923
- 1923 – mid 1950's furniture manufacturing factory operated for SS Williams
- Mid – late 1950s the site used for the manufacture of electrical components
- 1959 – 1968 used as warehouse and administration offices for Goodyear tyres
- 1968 – 84 used a wholesale grocery warehouse and distribution centre for Moore Wilson's prior to their move to the Tory Street
- 1984 - present used as a film production studio

Building permit (B31326) was issued in May 1951 for a "Dangerous Goods Store". Attached to this letter is a copy of the plans and specifications for this shed dated stamped 5 March 1951. It details that the purpose of the small concrete shed was for storage of inflammable products associated with furniture manufacture. The shed was constructed in a central position on the site, which is now the location of a carparking area. The shed appears to have only been on site during the 1950's as the building permit for alterations for the Goodyear use of the site in February 1959 do not show the shed remaining at that time.

Please advise if I can assist you further with this matter.

Kind regards

D G Grant

David Grant
Resource Management Consultant
Urban Perspectives Ltd

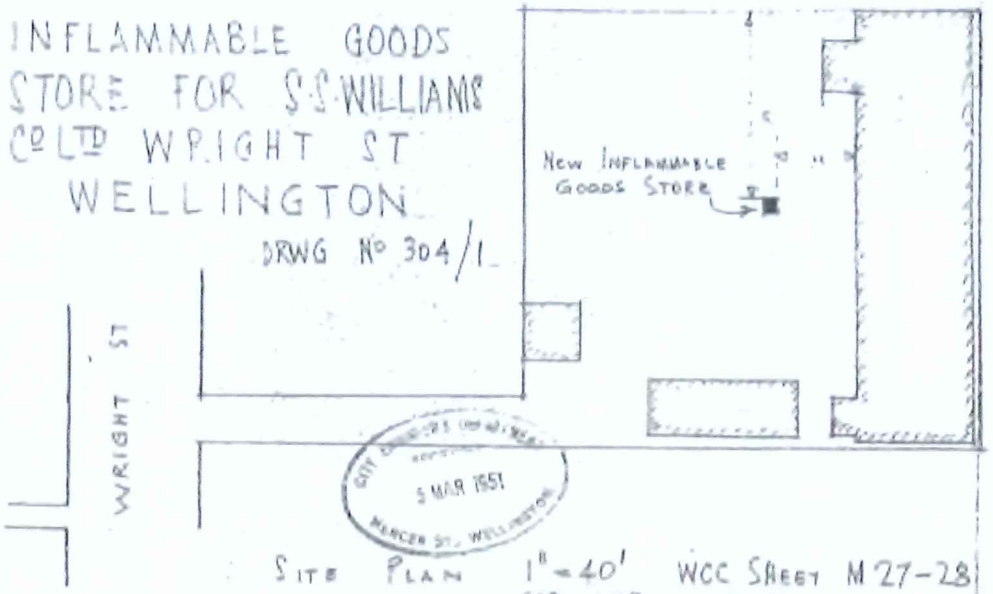
tel: 64 4 499 9725
fax: 64 4 499 9726
urban@urbanp.co.nz

CC: Bruce Croucher – Greater Wellington Regional Council

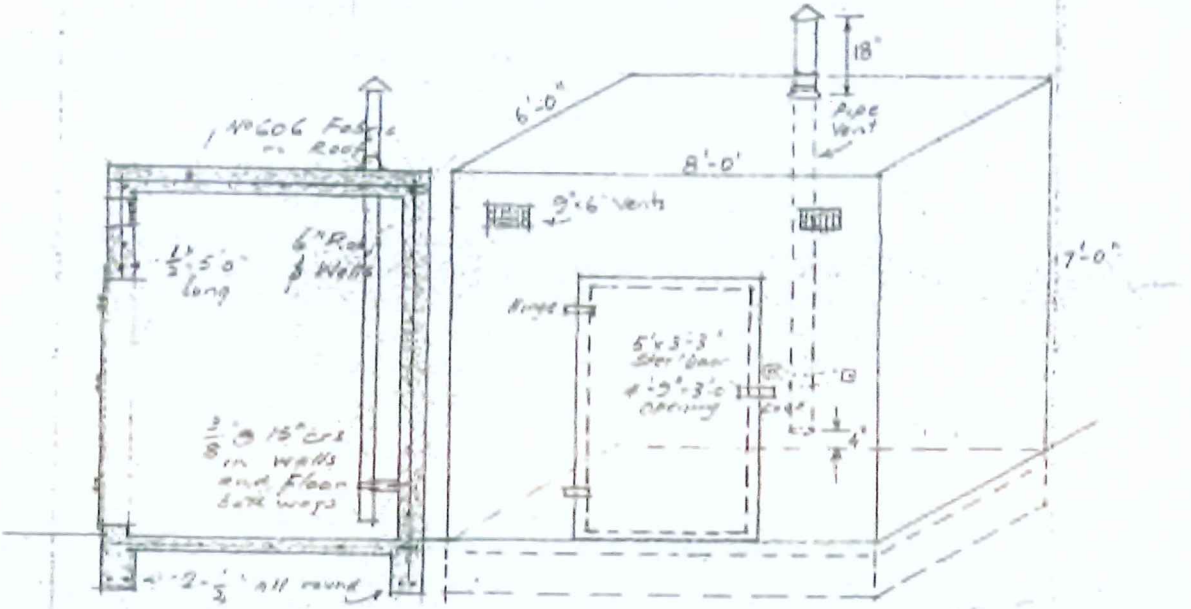
mh

INFLAMMABLE GOODS STORE FOR S.S. WILLIAMS Co LTD WRIGHT ST WELLINGTON

DRWG No 304/1



SITE PLAN 1" = 40' WCC SHEET M 27-28



½" CROSS SECTION SKETCH OF STORE

SPECIFICATION

DANGEROUS GOODS STORE FOR MESSRS. S. S. WILLIAMS AT VICTORY PREMISES, WRIGHT STREET, WELLINGTON. S.E.C. SHEET NO. M 27.

Excavator: Cut away bank and trench for footings as shown. Fill under floor slab to even surface.

Concreter. Build in concrete to the dimensions sheet and reinforce in accordance with details. All is 1 part Portland cement, 5 parts of Miller's aggregate thoroughly mixed in the normal way. Build in 2 - 9" x 5" earthenware vents where shown.

Steel Worker. Fix 5' x 3'-3" mild steel plate, ¼" thick door on pin hinges set in concrete and weld thereto hasp for engagement in staple embedded in concrete. Apply one coat of priming immediately after fabrication.

Plumber: Form 4" 22 gauge galvanised iron pipe with bowl into vent carried from 4" from floor up through roof slab rising 2 feet above roof.

Painter: Prime vent stack and apply two coats of linseed oil paint to this and to the steel door outside and in.

Bruce Croucher

From: Halley Wiseman [Halley.Wiseman@wcc.govt.nz]
Sent: Friday, 28 April 2006 03:53 p.m.
To: Bruce Croucher
Subject: RE: 24 Wright St, Mt Cook Wellington City

thanks Bruce - will feed this back to David. Have a good weekend too!!

From: Bruce Croucher [mailto:Bruce.Croucher@gw.govt.nz]
Sent: Friday, 28 April 2006 15:52
To: Halley Wiseman
Subject: 24 Wright St, Mt Cook Wellington City

Hi Halley

have reviewed the site history from Urban Perspectives Ltd

The dangerous goods store looks as though it probably stored glues varnishes and oils for the furniture manufacturing company. This is probably not a big concern although I would be interested to know what electrical components were produced. Some nasty chemical have and are use in the production of electrical components e.g. PCBs.

This is why it is important that an environmental consultant or someone with experience undertakes these site histories/preliminary site investigations. They would have identified this issue and undertaken some further investigation to answer the questions posed.

If you have nay question please contact me

Have a great weekend - I am away home

cheers

Bruce Croucher
ontamination and Land Scientist
Greater Wellington Regional Council
P O Box 11-646
Wellington
P 04 801 1026
F 04 385 6960

Bruce Croucher

From: David Grant [david@urbanp.co.nz]
Sent: Monday, 1 May 2006 03:41 p.m.
To: Halley Wiseman
Cc: Bruce Croucher
Subject: Re: 24 Wright St, Mt Cook Wellington City

Attachments: image003.jpg

Hi Halley and Bruce
Thanks for the update on my previous information supplied.
All I can tell you about the manufacture of electrical components on the site is that "condensers" were produced.
There is very limited information on the Archive's property file about this particular use of the site - the reason why I couldn't be specific on dates for this activity.
If this raises a further red flag the only way to provide further information would be to get a specialist environmental consultant involved as Bruce suggests.
Please advise.
regards
David Grant


image003.jpg (3 KB)

Resource Management Consult nt

ph: 04 499 9725
fax: 04 499 9726
Level 5, 82 Willis St
PO Box 9042, Wellington
New Zealand

----- Original Message -----
From: Halley Wiseman
To: David Grant
Sent: Monday, May 01, 2006 2:15 PM
Subject: FW: 24 Wright St, Mt Cook Wellington City

FYI

From: Bruce Croucher [mailto:Bruce.Croucher@gw.govt.nz]
Sent: Friday, 28 April 2006 15:52
To: Halley Wiseman
Subject: 24 Wright St, Mt Cook Wellington City

Hi Halley

I have reviewed the site history from Urban Perspectives Ltd

The dangerous goods store looks as though it probably stored glues varnishes and oils for the furniture manufacturing company. This is probably not a big concern although I would be interested to know what electrical components were produced. Some nasty chemical have and are use in the production of electrical components e.g. PCBs.

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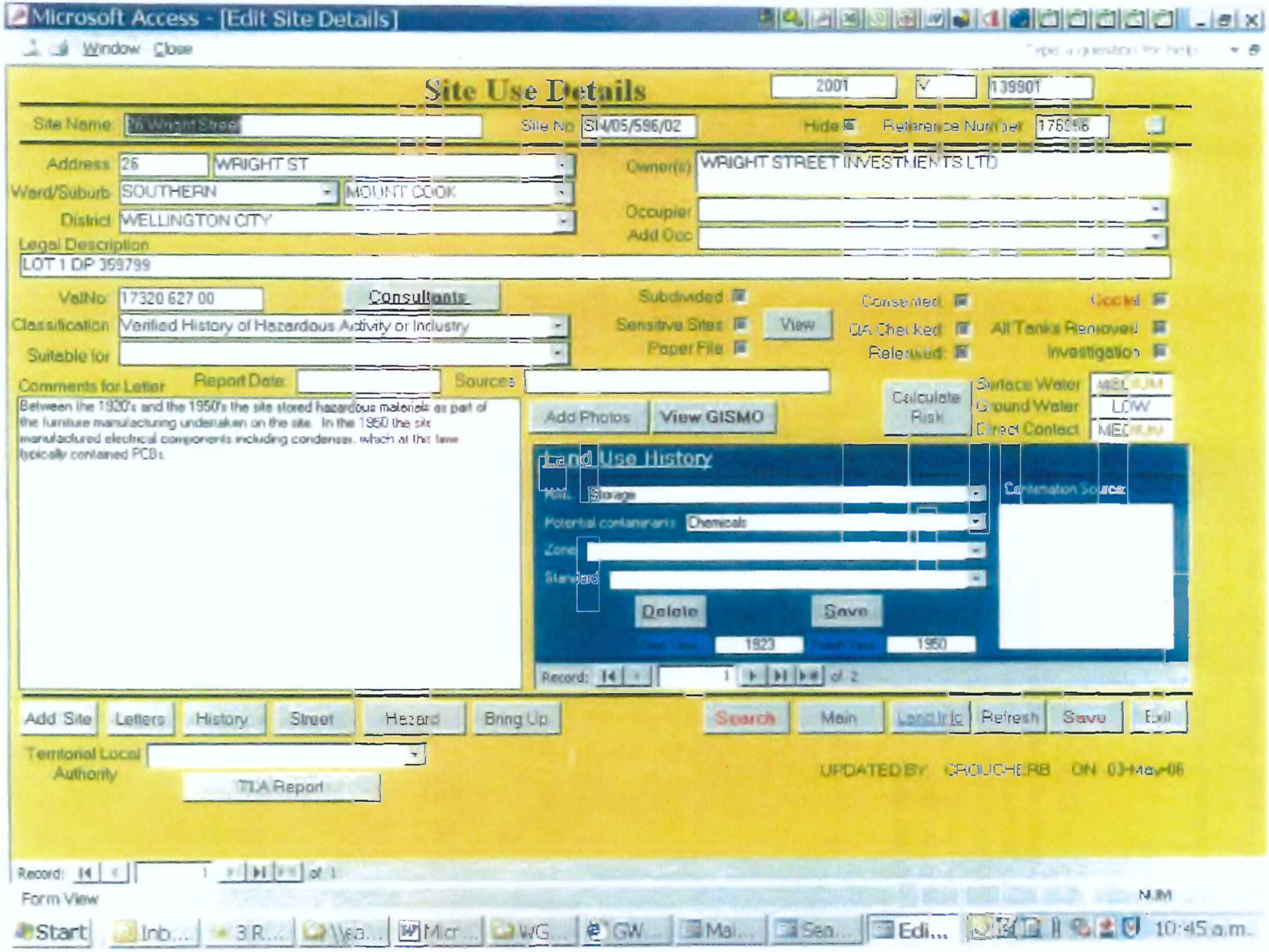
Have a great weekend - I am away home

cheers

Bruce Croucher
Contamination and Land Scientist
Greater Wellington Regional Council
P O Box 11-646
Wellington
P 04 801 1026
F 04 385 6960

nb

Extract from Selected Land Use Register (SLUR)



Halley Wiseman

From: David Grant [david@urbanp.co.nz]
Sent: Wednesday, 3 May 2006 11:58 a.m.
To: Bruce Croucher; Halley Wiseman
Subject: Re: 24 Wright St, Mt Cook Wellington City

Hi Bruce and Halley

Have just returned from Council Archives to see what additional information was held and can confirm that prior to 1958 electrical condensers were manufactured on this site "for some years" by Ducon (NZ) Ltd.

I will update my client on this and arrange for specialist input on this matter in order to allow the consent application to proceed. This will likely be a proposed methodology for investigation of the site, and procedures to be followed if contamination is found to be present.

Halley will you please advise if the consent application will require amendment to now also seek consent under Rule 5.4.4 for use of a contaminated site.

regards

David Grant
Resource Management Consultant
urban PERSPECTIVES LTD

ph: 04 499 9725
fax: 04 499 9726
Level 5, 82 Willis St
PO Box 9042, Wellington
New Zealand

----- Original Message -----
From: Bruce Croucher
To: David Grant ; Halley Wiseman
Sent: Tuesday, May 02, 2006 11:35 AM
Subject: RE: 24 Wright St, Mt Cook Wellington City

Hi Halley & David

This is exactly what I was hoping they didn't make. Older condensers frequently contained Poly Chlorinated Biphenyls (PCBs).

PCBs should they be present on the site, may have significant implications for any redevelopment of the site.

The issues are that PCBs are toxic and extremely ecotoxic and it is recommended that they are not disposed of to landfill.

any questions please call me

Bruce Croucher
Contamination and Land Scientist
Greater Wellington Regional Council
P O Box 11-646
Wellington
P 04 801 1026

nk

F 04 385 6960

From: David Grant [mailto:david@urbanp.co.nz]
Sent: Monday, 1 May 2006 03:41 p.m.
To: Halley Wiseman
Cc: Bruce Croucher
Subject: Re: 24 Wright St, Mt Cook Wellington City

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There is very limited information on the Archive's property file about this particular use of the site - the reason why I couldn't be specific on dates for this activity.
If this raises a further red flag the only way to provide further information would be to get a specialist environmental consultant involved as Bruce suggests.
Please advise.
regards

David Grant
Resource Management Consultant

urban
PERSPECTIVES LTD

ph: 04 499 9725
fax: 04 499 9726
Level 5, 82 Willis St
PO Box 9042, Wellington
New Zealand

----- Original Message -----
From: Halley Wiseman
To: David Grant
Sent: Monday, May 01, 2006 2:15 PM
Subject: FW: 24 Wright St, Mt Cook Wellington City

FYI

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To: Halley Wiseman
Subject: 24 Wright St, Mt Cook Wellington City

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I have reviewed the site history from Urban Perspectives Ltd

The dangerous goods store looks as though it probably stored glues varnishes and oils for the furniture manufacturing company. This is probably not a big concern although I would be interested to know what electrical components were produced. Some nasty chemical have and are use in the production of electrical components e.g. PCBs.

This is why it is important that an environmental consultant or someone with experience undertakes these site histories/preliminary site investigations. They would have identified this issue and undertaken some further investigation to answer the questions posed.

nf

Halley Wiseman

Decided Bruce r PDP meet. Bruce happy to meet on site.

HW.

From: Bruce Croucher [Bruce.Croucher@gw.govt.nz]
Sent: Tuesday, 23 May 2006 11:27 a.m.
To: Halley Wiseman
Subject: RE: 26 Wright St

Hi Halley

Given that the site is to be redeveloped for residential use, I would recommend that the site is investigated in accordance with the MfE Contaminated land Management Guidelines. The results of the investigation can then be used to determine the suitability of the site for proposed use and what conditions would be appropriate to prevent any adverse effects from the redevelopment of the site. The consultants make the assumption that the site was sealed at the time the electrical manufacturing took place, it may not have been. I would strongly recommend that any investigation encompasses the entire site, not just the areas identified in the letter report.

I would also recommend that a construction management plan is produced before any redevelopment take place on the site. The CMP could utilise the findings of the site investigations to determine appropriate monitoring conditions/mitigation measures to quantify/prevent any discharges of contaminants/nuisance from the site.

If you have nay questions please contact me.

Regards

Bruce Croucher
Contamination and Land Scientist
Greater Wellington Regional Council
P O Box 11-646
Wellington
P 04 801 1026
F 04 385 6960

From: Halley Wiseman [mailto:Halley.Wiseman@wcc.govt.nz]
Sent: Friday, 19 May 2006 10:56 a.m.
To: Bruce Croucher
Subject: 26 Wright St
Importance: High

Hi Bruce

I'm assuming you've got a hand delivered copy of the contamination report frm PDP re this site. When you've had a chance to have a read, please call me.

Thanks!!

Halley Wiseman
Resource Consent Planner
Wellington City Council
Telephone (04) 801 3285
Fax (04) 801 3165

MR

Behind every great city there's a great website

www.Wellington.govt.nz

Online rates payments now available

29/05/2006

~~Ted Taylor~~ Copy printed from electronic file.

From: Bruce Croucher
Sent: Thursday, 1 June 2006 12:01 p.m.
To: 'Graeme Proffitt'
Cc: craigs@stratum-mgt.co.nz; 'Halley Wiseman'
Subject: RE: 26 Wright Street - Site Visit

Graeme

I think that sums up what we agreed would be appropriate for the site.

I see the major risks from any potential contamination on the site is not that posed to the occupants of the site - although this cannot be discounted - but ensuring that construction worker are suitably protected, the correct disposal of any contaminated materials and ensuring that there are no detrimental effects on the environment.

Regards

Bruce Croucher
Contamination and Land Scientist
Greater Wellington Regional Council
P O Box 11-646
Wellington
P 04 801 1026
F 04 385 6960

-----Original Message-----
From: Graeme Proffitt [mailto:Graeme.Proffitt@pdp.co.nz]
Sent: Thursday, 1 June 2006 11:42 a.m.
To: Bruce Croucher
Cc: craigs@stratum-mgt.co.nz
Subject: 26 Wright Street - Site Visit

Bruce

Thanks for your time on site this morning.

Recording our points of agreement ...

1. The proposed development will have almost complete site coverage and/or soil capping of some areas where the levels will be built up, therefore will pose little risk.

2. However, some sampling is appropriate, with the best time for sampling being after the buildings are demolished and existing seal removed, but before any soil is disturbed. There is no need to sample now.

3. Soil samples should be taken from:

(a) under the main building

(b) at the entrances to the main building and along the frontage of the side building

(c) under the side building (thought to have originally been an open-fronted timber rack and potentially used for storage in the 1950s) if the concrete floor is removed. For your information, since our meeting I have been advised by Stratum Management that the concrete floor could well remain as the levels are such that there is no need to remove it.

(d) around the former inflammable goods store

(e) around the yard area generally as a few composite samples (but not on the higher level ground in the southeast corner which, because of its elevation, has likely never been used for industrial activities).

In passing you noted that the cladding on the front of the side building might be asbestos cement, although if it was installed in the 1985 renovation it will not be.

MR

~~Ted Taylor~~ Copy printed from electronic file.

From: Graeme Proffitt [Graeme.Proffitt@pdp.co.nz]
Sent: Thursday, 1 June 2006 11:42 a.m.
To: Bruce Croucher
Cc: craigs@stratum-mgt.co.nz
Subject: 26 Wright Street - Site Visit

Bruce

Thanks for your time on site this morning.

Recording our points of agreement ...

1. The proposed development will have almost complete site coverage and/or soil capping of some areas where the levels will be built up, therefore will pose little risk.

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(d) around the former inflammable goods store

(e) around the yard area generally as a few composite samples (but not on the higher level ground in the southeast corner which, because of its elevation, has likely never been used for industrial activities).

In passing you noted that the cladding on the front of the side building might be asbestos cement, although if it was installed in the 1985 renovation it will not be. This cladding will need to be dealt with as appropriate during the demolition.

Please confirm this is as you understand it.

Regards

Graeme Proffitt DDI 04 471 4132
Pattle Delamore Partners Limited
PO Box 6136, Wellington, New Zealand
phone +64 4 471 4130
fax +64 4 471 4131
graeme.proffitt@pdp.co.nz

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PERSPECTIVES LTD

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7 August 2006

Resource Consents Team
Planning and Urban Design
Wellington City Council
P O Box 2199
Wellington

Attention: Halley Wiseman

Dear Halley

Further Information / Application Amendments – SR 143194
Multi-Unit Development - 26 Wright Street, Mount Cook

I write in response to your further information request letter of 15 May 2006 on a variety of matters associated with the multi-unit application for 26 Wright St, Mt Cook including:

- Contamination
- Waterbody proximity
- Urban design
- Landscaping
- Vehicle Access
- Sunlight access
- Maximum height
- Demolition methodology

In addition to this further information request you sent an email on 18 May, 2006 requesting that I *"extend the further information request to include confirmation of the extent of any cuts along the boundaries of the site by way of cross sections."*

As will be seen from the attached documentation provided changes have been introduced to the proposal to address some of the concerns raised during initial processing of the application. A key amendment to the scheme has been to relocate the group of Units 12-15 into an east/west orientation rather than north/south as originally shown on the application plans.

Contamination

As identified in the earlier supply of further information (dated 19 May 06) there is the potential for contamination to be present on the site as a result of a historical landuse (manufacture of electrical condensers by "Ducon" during a period in the 1950's). Although the site is not identified on the Greater Wellington Regional Council Selected land Use Register (SLUR), as a result of concern from Greater Wellington about this historical use the Applicant commissioned a report from an environmental consultancy firm (Pattle Delamore Partners Ltd) to assess the risk to the environment arising from the previous use and proposed development. The conclusion of their report

earlier supplied was that they were unable to confirm PCB's had been stored and used on the site and that there was a low risk for ground contamination to be present.

As the site is not an identified contaminated site, nor has an assessed high risk of contamination, the Applicant considers that Rule 5.4.4 "use of a contaminated site" is not triggered by this proposal. However given the lack of absolute certainty the Applicant has offered to implement a 'precautionary approach' on this matter. This would involve testing of specifically of targeted areas to determine the presence of any possible contamination and implementation of a suitable site management methodology should any contamination be identified.

The proposed methodology for assessing the site and reacting to any contamination found to be present was discussed on-site between Bruce Croucher of GW and Graeme Proffitt of PDP in late May. The points of agreement reached at the meeting (as supplied by Graeme Proffitt) were:

1. *The proposed development will have almost complete site coverage and/or soil capping of some areas where the levels will be built up, therefore will pose little risk.*

2. *However, some sampling is appropriate, with the best time for sampling being after the buildings are demolished and existing seal removed, but before any soil is disturbed. There is no need to sample now.*

3. *Soil samples should be taken from:*

   (a) under the main building
   (b) at the entrances to the main building and along the frontage of the side building
   (c) under the side building (thought to have originally been an open-fronted timber rack and potentially used for storage in the 1950s) if the concrete floor is removed. For your information, since our meeting I have been advised by Stratum Management that the concrete floor could well remain as the levels are such that there is no need to remove it.
   (d) around the former inflammable goods store
   (e) around the yard area generally as a few composite samples (but not on the higher level ground in the southeast corner which, because of its elevation, has likely never been used for industrial activities).

Feedback in response to these points (as supplied from Bruce Croucher) was:

I think that sums up what we agreed would be appropriate for the site.

I see the major risks from any potential contamination on the site is not that posed to the occupants of the site - although this cannot be discounted - but ensuring that construction worker are suitably protected, the correct disposal of any contaminated materials and ensuring that there are no detrimental effects on the environment.

It is the Applicants belief that the precautionary approach proposed on this matter is able to be treated as a "relevant other matter" pursuant to s.104(c) of the Act. This would enable suitable precautionary conditions of consent "that the consent authority considers appropriate" to be put in place under s.108 of the Act to manage any avoid, remedy and mitigate any environmental risk associated with the potential for contamination to be present on the site.

It has not yet been confirmed by Council whether it considers Rule 5.4.4. to have been triggered by this development proposal.

Waterbody Proximity

The consent as originally lodged did not acknowledge or seek consent for the close proximity of a waterbody located within the Town Belt. This oversight was due to a lack of awareness about the presence of the stream on the early site visits. Since being alerted to this by the Council, the Town Belt adjacent to the site has received some maintenance, which combined with this year's wet winter has served to better highlight the presence of a stream adjacent to the rear boundary of the site.

A small stream (which appears to have its flow generated by overland stormwater flows from Salisbury Ave / Tce and from within the Town Belt) flows parallel to the western boundary of the site in a shallow stony bed before disappearing into an intake structure immediately adjacent to the rear north-west corner of the property. It is believed to be a tributary of the Waitangi stream which has been re-exposed as a feature within Waitangi Park on the Wellington Waterfront. Measurement of the distance of the stream from the rear footprint of the existing building on the site (presumed to be the approximate boundary line) has shown that the stream banks range from approximately 2.2m - 4m from the boundary. Photographs of the stream are attached as Appendix 6 within the Addendum (No.2) supplied in association with this further information response.

As identified within the revised District Plan Rule Matrix Assessment Tables supplied with this further information, Rule 5.3.3.1 (yards) will also now be triggered by the application due to a combined fence and retaining wall (structures) being located closer than 3m from the waterbody. In addition the earthworks requiring consent from Rule 5.3.9.4 will now also extend to the earthworks (building demolition and site preparation) occurring within 5m of the waterbody. [*Please Note - The Architecture + further information response attached is incorrect in respect of some statements made within point 2 – 'Proximity to water body'*]

A further Addendum (No. 2) to the resource consent application originally lodged has been included with this further information to address these additional rule breaches due to the proximity of this development from a waterbody. It is not considered necessary to further amend the Form 9 as it includes an application for "all necessary consents" including associated (hard) landscaping and site works.

Urban Design

The urban design matters for which additional information was sough are specifically dealt with in the attached letter from Architecture + and supporting information provided with this further information response.

Landscaping

The landscaping details sought by the additional information request have been specifically dealt with in the attached letter from Architecture + and supporting information provided including the landscape planting plan and planting specification.

Vehicle Access

The vehicle access details sought by the additional information request have been specifically dealt with in the attached letter from Architecture + and supporting information provided with this further information response. Three visitor carparks have now been shown on the site plan.

Sunlight Access

The sunlight access details sought by the additional information request have been specifically dealt with in the attached letter from Architecture + and supporting information provided with this further information response. The repositioning of Units 12-15 has resulted in the proposal becoming fully compliant with all necessary sunlight access controls applicable to the site.

Maximum Height

The maximum height details sought by the additional information request have been specifically dealt with in the attached letter from Architecture +. This includes a plan (AP3) demonstrating the 9m height limit introduced by Plan Change 39 as applied across the development. An additional plan (AP3a) that is not referred to in the text of the Architecture + letter has also been included to demonstrate the Operative 10m maximum building height limit applied across the proposed development.

The assessment of the effects for these building heights within the development (none of which exceed the 1m additional allowance above maximum height for pitched roofs as provided by the Operative rules of the District Plan) in the original AEE remains unchanged and valid.

Demolition Methodology

The further information request sought provision of a demolition methodology to ensure that the neighbouring properties were adequately protected from risk during the demolition of the existing main building on the site which is built up to both the southern and northern boundaries.

As the project is in its early approval to concept stage, the appointing of demolition contractors has not been undertaken. Therefore, it is not practical or possible to provide a demolition methodology at this time. It the Applicants opinion the most appropriate way to deal with this matter at this time is to volunteer a consent condition to provide Council (and the neighbouring properties) with certainty on this matter. Such a condition is suggested as follows (which also incorporates controls to protect the adjacent waterway within the Town Belt):

"That to ensure the demolition of the existing buildings on 26 Wright Street and construction of the town house development can occur without unnecessary risk of damage or contamination to adjacent properties (in particular 34A Wright Street, 7 Papawai Terrace and the adjacent waterbody within the Town Belt) a 'Demolition and Construction Management Plan'(incorporating a demolition methodology) must be supplied to and approved by the Compliance Monitoring Officer, Wellington City Council prior to any demolition or construction activities commencing on the site"

Cross Sections
Cross sections to determine the extent of earthwork cuts along the boundaries of the site were sought. These are detailed on the Site Cross Section Plans P2a and P2b attached within the documentation provided with this further information response.

Status of the Revised Application
As is shown in the attached revised District Plan Rule Matrix the landuse activity status of the now amended application has changed. Originally lodged as a Non-Complying Activity, the proposal is now believed by the Applicant to be a **Discretionary (Restricted) Activity**.

[The final activity status remains subject to confirmation from Wellington City Council planners whether Rule 5.4.4 is triggered by this application. If so the overall activity status of the application would then become a Discretionary (Unrestricted) Activity.]

Written Approvals
Written approval to the original proposal lodged in March of this year was provided by the Parks and Gardens Unit of Wellington City Council whom were considered by the Applicant to be the only potentially adversely affected party to the proposal. This was due to a sunlight access breach of up to 4.8m from townhouse Unit 15 positioned right up to the common boundary with the Town Belt, combined with rule breaches in respect of combined wall/fence height and a deck in the side yard.

The amendments to the proposal have now removed all sunlight access breaches along the common boundary with the Town Belt. The potential rule breach attributable to a retaining wall / fence height exceeding a combined height of 2m at a potion of the common boundary will remain. The previous deck in the side yard breach from only Unit 15 in the original scheme has now been increased to breaches present from Units 12, 13, 14, and 15 as a result of their reorientation. The effects associated with overlooking of the Town Belt from these four decks in the site yard is considered by the Applicant to be a positive effect in terms helping ensure public safety via overlooking and monitoring opportunities within this part of the Town Belt rather than any potential adverse effects. It is now determined that there will be a structure (wall/fence) within 3m and earthworks within 5m of a waterbody within the Town Belt. As identified within Addendum No.2 it is considered there will be no adverse effects on the waterbody from the boundary fence or from proposed site earthworks.

Given the amendments to the original application lodged, the revised plans have been supplied to Scott MacColl of the Parks and Gardens Unit in order for reconsideration of the earlier written approval given. The overall potential effect on the Town Belt from the revised proposal is considered to be less than that for which approval was earlier supplied.

For the reasons provided within the Original AEE (dated 29 March 2006); Addendum (dated 11 April 2006); Addendum No.2 (dated 7 August 2006); and further information supplied no other parties are considered to be adversely affected by the proposal.

Concluding Comment
This multi-unit development within a residential area is a Discretionary (Restricted) Activity and is therefore envisaged as appropriate by the operative rules of the District Plan. In addition it is very nearly compliant with the multi-unit design guide changes

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sought by Proposed Plan Change 39 for this Inner Residential character suburb. The AEE originally submitted along with amendments assessed by two addendums and further information supplied have all served to show the effects of the proposal on the environment will be no more than minor and able be avoided, remedied or mitigated by appropriate conditions of consent.

I trust this fulfils the further information required to 'progress forward' this resource consent application. Please contact me if I can provide any further assistance or clarification on any of the attached information.

Kind regards

DA Grant

David Grant
Resource Management Consultant
Urban Perspectives Ltd

Attachments:

- Revised application plans (2 copies at A2 and 2 copies at A3):

- Site Plan	P1	R2	12 July 06
- Site Cross Sections	P2a	R1	21 July 06
- Site Cross Sections	P2b	R1	21 July 06
- Type A Units	P3	R1	12 July 06
- Type A1 Units	P4	R1	12 July 06
- Type B Units	P5	R1	12 July 06
- Type B1 Units	P6	R1	12 July 06
- Type B2 Units	P7	R1	12 July 06
- Type C Units	P8	R1	12 July 06
- Type C1 Units	P9	R1	12 July 06
- Type D Units	P10	R0	12 July 06

- Landscaping Planting Plan for 26 Wright St, Mt Cook (dated May 2006) and associated Planting Specification (2 copies)
- Letter from Architecture + addressing the matters contained in the further information request of 15 May including additional supporting plans and diagrams (2 copies)
- Compact Disk containing a "Sketchup" Model (and viewer) of the development (1 copy)
- Revised District Plan Rule Matrix Assessment for the amended proposal (2 copies)
- Addendum No. 2 amending the original resource consent application lodged in respect of structures and earthworks within close proximity to a waterbody (2 copies)

Copy to:

CC of covering letter and revised plans only: Bruce Croucher – Greater Wellington Regional Council

CC of covering letter; revised plans; rule matrix; addendum (No. 2) and landscaping planting plan: Scott MacColl – WCC Parks and Gardens

CC of covering letter and supporting documentation (excluding the development model on compact disk): Rachel Hornsby – WCC Issues Resolution Officer

~~Ted Taylor~~ Copy printed for electronic file.

From: Halley Wiseman [Halley.Wiseman@wcc.govt.nz]
Sent: Thursday, 21 September 2006 10.57 a.m.
To: Bruce Croucher
Subject: 26 Wright St
Importance: High

Hi Bruce
Excerpt below is from another one of the neighbours. Could you please have a read and give me your thoughts on this in relation to the information that we have received to date.

Sorry to do this to you but comments by tomorrow would really be appreciated
Cheers
Halley

Contamination Ducon not only stored PCB on site but manufactured on site in the current building
Please visit website www.safetyline.wa .gov.au/pagebi page 21
This lists the manufacturers includes Ducon(NZ) Ltd and under its former name Ducon Condenser Ltd which in all cases produced capacitors containing PCB This information can be verified by viewing the publication the ANZECC publication

(IDENTIFICATION OF PCB_CONTAINING CAPACITORS dated 1997 and acknowledges the input of the New Zealand Ministry of Health,Public Health Policy and Regulations Division

My concern is that the answers lodge in the reply are inadequate to contain the spread by either airborne dust or exposure to the elements that could contaminate the surrounding area including the Waitangi Stream that borders the property

I have worked in the chemical industry 20 years later and because of the lack of regulations even then I suffer

Waterbody Proximity
Again Contamination and that the area is prone to flooding is a concern

Halley Wiseman
Resource Consent Planner
Planning and Urban Design
Wellington City Council
Telephone (04) 801 3285
Fax (04) 801 3165

nfr

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Level 5
82 Wills Street
PO Box 9042
Wellington
New Zealand

21 December 2006

Resource Consents Team
Planning and Urban Design
Wellington City Council
P O Box 2199
Wellington

Attention: Halley Wiseman

Dear Halley

SR 143194 – Multi-Unit Development - 26 Wright Street, Mount Cook
Confirmation of Methodology for Potential Contamination Investigation

I write further to my letter of 19 May 2006 providing an assessment of contamination issues for this site by Graeme Proffitt of Pattle Delamore Partners Ltd which found *"the potential for ground contamination is considered to be low"*. Taking a precautionary approach, the report contained recommendations for investigations to occur on the site prior to its redevelopment commencing as follows:

"If the site is redeveloped then it would be prudent for a small number of soil samples to be taken following the demolition of the existing buildings, but prior to any excavation works. The soil samples would be analysed for PCBs and heavy metals. The samples should target

- *Original locations of entranceways opening onto the yard area in front of the main building*
- *Around the original location of the inflammable goods shed*
- *Random locations under the original buildings"*

The further information letter accompanying this report stated the Applicant would adopt the detailed precautionary approach (or variations on this approach as determined necessary by Greater Wellington) and accept relevant conditions of consent in respect of this matter.

tel: 64 4 499 9725
fax: 64 4 499 9726
urban@urbanp.co.nz

You have recently advised that this precautionary approach has been accepted by Bruce Croucher at Greater Wellington subject to inclusion of some additional testing of the main building floor slab to determine that the demolition material from the building will meet the acceptability criteria of the Southern Landfill. I can confirm that as requested by Bruce Croucher sampling and testing of the floor slab within the main building on the site will occur in addition to the sampling detailed above.

You have also asked for clarification on the proposed methodology for the sampling and testing to be undertaken on the site. I am not able to add anything further to the details earlier supplied in the recommended methodology by Graeme Proffitt other than confirming:

- Sampling of ground and floor slab of the building will occur by Prattle Delamore Partners Limited prior to any site works commencing
- Test results will be supplied to both Wellington City Council and Greater Wellington Regional Council for detennination of the contamination status of the site
- Should contamination of the floor slab contamination be present within the main building, testing of the ground below the building will also be undertaken after its demolition

I can confirm on behalf of the Applicant, that if pre-commencement site sampling test results determine heavy metals and/or PCBs to be present in levels that elevate the site to the status of a 'contaminated site' then a resource consent application will at that point be prepared and lodged for consent from District Plan Rule 5.4.4.

Kind regards

DG Grant

David Grant
Resource Management Consultant
Urban Perspectives Ltd

CC: Bruce Croucher – Greater Wellington Regional Council

~~Ted Taylor~~ Copy printed from electronic file

From: David Grant [david@urbanp.co.nz]
Sent: Thursday, 21 December 2006 05:16 p.m.
To: Halley Wiseman
Cc: craigs@stratum-mgt.co.nz; Rachel Hornsby; Bruce Croucher
Subject: 26 Wright St
Attachments: Contamination Methodology Confirmation.doc

Hi Halley
As requested please find attached a letter confirming the approach of the Applicant to be taken in respect of investigating potential site contamination at 26 Wright St.
regards

David Grant
Resource Management Consultant

urban PERSPECTIVES LTD

ph: 04 499 9725
fax: 04 499 9726
Level 5, 82 Wills St
PO Box 9042, Wellington
New Zealand

nr

Halley Wiseman

From: David Grant [david@urbanp.co.nz]
Sent: Friday, 22 December 2006 9:58 a.m.
To: Halley Wiseman
Cc: craigs@stratum-mgt.co.nz; Bruce Croucher
Subject: Re: Wright St

Hi Halley
Totally agree with Bruce and apologies if my wording did not accurately reflect this - it is certainly what the Applicant has committed to do

Therefore:
"Confirm sampling for contamination and supply of results will occur prior to any site works including demolition occurring".

regards

David Grant
Resource Management Consultant

urban PERSPECTIVES LTD

ph: 04 499 9725
fax: 04 499 9726
Level 5, 82 Willis St
PO Box 9042, Wellington
New Zealand

---- Original Message ----
From: Halley Wiseman
To: David Grant
Cc: Bruce Croucher
Sent: Friday, December 22, 2006 9:21 AM
Subject: RE: Wright St

Hi David

Please see Bruce's email below and confirm that what you meant with the following was that prior to the demolition of the building:

- Sampling of ground and floor slab of the building will occur by Prattle Delamore Partners Limited prior to any site works commencing

Kind regards
Halley

From: Bruce Croucher [mailto:Bruce.Croucher@gw.govt.nz]
Sent: Friday, 22 December 2006 09:10
To: Halley Wiseman
Subject: Wright St

Hi Halley

I have read the letter and in principle I find the principles acceptable. I do however have some concerns over ensuring that the testing of the floors is undertaken before they are disposed of. The reasons for this are to ensure : -

- that should any special disposal be required, it can be arrange prior to the floors being broken up.
- And that any contaminated concrete does not get accidentally mixed with clean concrete and inappropriately disposed of to landfill.

If I was you, I would prefer that the floor slabs were tested before demolition. This would prevent any confusion over what went where and any risks posed by the contaminated concrete

The over issue I have is I do no recall requiring anything. I may have made a few suggestion/recommendations.

Have a great Christmas and New Year, enjoy your break.

See you in the New Year

Bruce Croucher
Contamination and Land Scientist
Greater Wellington Regional Council
P O Box 11-646
Wellington
P 04 801 1026
F 04 385 6960

MR

"E"

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Auckland Wellington Christchurch

solutions for your environment

17 MAY 2006

15 May 2006

Craig Stewart
Wright Street Investments Limited
PO Box 11680
WELLINGTON

Dear Craig

26 Wright Street - Assessment of Contamination Issues

Wright Street Investments Limited owns a property at 26 Wright Street, Wellington. This property has been a film production studio for many years, but was formerly a factory. For a few years the factory was used for the manufacture of electrical capacitors. Greater Wellington Regional Council has brought to your attention that this use may have employed polychlorinated biphenyls (PCBs) in the manufacturing process. PCBs are on a list of hazardous substances that may cause site contamination

Wright Street Investments intend to redevelop the property for residential use at some point in the future and have requested Pattle Delamore Partners Limited (PDP) to carry out an assessment of the risk that the past use of the site might pose to that redevelopment.

Site Description

The site (Lot 1, DP359799) is located in a residential area of Mount Cook, Wellington, and consists of a predominantly flat section of about 0.3 hectares (Figure 1). Apart from a grassed area of higher land in the south-east corner, the site is entirely covered in a paved carpark or buildings. The main building runs along the back (west) boundary. There are residential properties to the north, east and south, while to the east is council reserve (part of the Wellington's Town Belt). The land slopes under the building towards the reserve, where there is a small, overgrown stream about 5 m from the back boundary of the site.

The main buildings and a small building on the eastern boundary date from 1923, when they were constructed as a factory and vehicle garage, respectively. These buildings, and a further building on the northern boundary, have been modified and refurbished a number of times, most recently in 1985 for their present use. Examination of 1923 and 1951 drawings submitted with building permit applications shows the main building to be of solid construction. The original factory was of brick construction, having walls varying between 450 mm thick at foundation level to 225 mm thick for the top floor. The ground floor is reinforced concrete supported on the continuous perimeter wall and intermediate piles, while the first floor is of heavy wooden construction. A site inspection showed all the exterior walls, bar a small section of the southern end wall, to be plastered, however the small section not plastered confirmed the wall to be of brick.

The ground under the main building slopes from front to back and from south to north. The carpark in front of the building is at the ground floor level, while the ground at the rear of the building varies between about 1 and 1.5 m

This is the exhibit marked "E" referred to in the within Affidavit of COLIN CAMPBELL TAYLOR and sworn at Wellington this 29th day of October 2007 before me:

.....

A Solicitor of the High Court of New Zealand

below the ground floor level. The only openings observed in the foundation wall were small ventilation openings a small distance below floor level. Window openings are at least 1m above ground floor level. A number of doors open onto the carpark.

The building permit records also detail a small inflammable goods store located in what is now the carpark. This store, permitted in 1951 while the site was still operating as a furniture factory, had reinforced concrete floor, walls and roof, and the door opening had a concrete lip to prevent any spills escaping. It is not known when this store was demolished.

Site History

The site history, as researched by Urban Perspectives Limited and provided to PDP, show the original buildings were erected in 1923 for use as a furniture factory. At some stage from the mid 1950s the building was owned by Ducon (NZ) Limited, who manufactured electrical equipment, including condensers (otherwise known as capacitors), and from around 1959 by the Goodyear Tyre Company, as warehouse and offices for the distribution of tyres and rubber goods. From 1969 the site was as a grocery warehouse and distribution centre by Moore Wilson, food wholesalers and distributors, and then from 1984, as a film production facility and associated uses.

The period of ownership of particular interest is that of Ducon (NZ) Limited. Research by PDP has revealed that Ducon is listed by ANZECC [1] as having manufactured PCB-containing capacitors. It is not known, however, whether PCB-containing capacitors were manufactured in the Wright Street factory.

Background to PCBs

Polychlorinated biphenyls are a family of chlorinated hydrocarbons widely used in industry since the 1930s as dielectrics (insulators) in transformers and large capacitors, as heat exchange and hydraulic fluids, solvent extenders, in plastics and in some paints and printing inks. PCBs fall into a wider group of chemicals known as Persistent Organic Pollutants (POPs) because of their toxic nature, resistance to break down and the way they are stored in body fat and can accumulate through the food chain, thereby posing a risk to human health and the environment.

New Zealand has agreed to eliminate the use of PCBs in ratifying the Stockholm Convention, an international agreement on controlling the use of POPS. PCBs can no longer be manufactured in, or imported into, New Zealand and New Zealand has implemented a nationwide recall of PCBs used in the electrical industry. Most stocks of PCBs have already been shipped overseas and destroyed.

PCBs are mentioned in a Ministry for the Environment list of hazardous activities and industries (the HAIL), under an entry for transformers and the manufacture of heavy electrical equipment. This list is used by regional councils to guide them in deciding whether a particular site has the potential to be contaminated.

Assessment

The site history suggests the potential for PCBs to have been stored and used on the site during its use by Ducon, although there is no confirmation that this has actually occurred. There is also the potential for other hazardous substances to have been employed on the site, both during its use as a furniture factory (e.g. lead and solvents in

[1] ANZECC , 1997 Identification of PCB-Containing Capacitors, An Information Booklet for Electricians and Electrical Contractors, Australian and New Zealand Environment and Conservation Council.

paints and varnishes) and subsequently by Ducon, e.g. heavy metals in electrical components. Site uses following Ducon will have had a low potential for site contamination.

The solid construction of the factory building suggests a low potential for contamination under or around the building from Ducon's period of ownership. Any spills within most of the building would probably have been contained within the building, with the solid concrete floor preventing any ground contamination under the building, and the brick walls preventing any spills escaping sideways to the outside of the building. It is possible that spills or leaks near the main entrances, off the carpark, either during the unloading of raw materials or loading out of finished goods, might have resulted in spillage outside. However, assuming the yard area in front of the buildings was sealed at the time the factory was used for electrical manufacturing, then little if any ground contamination could have occurred. Overall, the potential for ground contamination is considered to be low.

The current site configuration suggests no risk to site occupants, even if there is some ground contamination, as there is no access to bare soil in locations where contamination would be most likely.

Recommendations

1. No action needs to be taken for the existing site use.
2. If the site is redeveloped then it would be prudent for a small number of soil samples to be taken following the demolition of the existing buildings, but prior to any excavation works. The soil samples would be analysed for PCBs and heavy metals. The samples should target
   - Original locations of entranceways opening onto the yard area in front of the main building.
   - Around the original location of the inflammable goods store.
   - Random locations under the original buildings

Limitations

This desktop investigation has been limited to an examination of building consent and site history information prepared by others, and a site inspection. This information has been used to assess the possible ground conditions that might exist, and the implications for proposed residential site redevelopment. No sub-surface investigations have been carried out and the ground conditions cannot be guaranteed. Confirmation of the conditions would require sub-surface investigation.

This assessment has been prepared for Wright Street Investments Limited for the objectives described in this report. Use of the information by any other party, or for any other purpose, is entirely at that party's risk.

Yours sincerely

PATTLE DELAMORE PARTNERS LIMITED

Graeme Proffitt

Figure 1: Current aerial photograph of site.

"F"

urban
PERSPECTIVES LTD

Level 5
82 Willis Street
O Box 9042
ellington
ew Zealand

WELLINGTON CITY COUNCIL
URBAN STRATEGY
19 MAY 2006
RECEIVED

19 May 2006

Resource Consents Team
Strategy and Planning
Wellington City Council
P O Box 2199
Wellington

Attention: Halley Wiseman

Dear Halley

Further Information Request – SR 143194 – Potential Contamination
Multi-Unit Development - 26 Wright Street, Mount Cook

I write in partial response to your s.92 further information request of 15 May 2006 for this multi-unit development. In respect of 'contamination' you have requested:

"Details of the site investigation that has taken place in relation to the site being potentially contaminated in order to determine whether consent is actually required under this Rule." i.e. Rule 5.4.4 – Notwithstanding any rule to the contrary, any activity, use, or construction, alteration of, and addition to buildings or structures, on a contaminated site is a Discretionary Activity (Unrestricted).

'Contaminated Site' is defined by the District Plan as *"means a site at which hazardous substances occur at concentrations above background levels and where assessment indicates it poses or is likely to pose an immediate or long-term hazard to human health or to the environment."*

The site does not appear on the Selected Land Use Register (SLUR) maintained by Greater Wellington. As a result of responding to an earlier further information request from Wellington City Council regarding the history of buildings and uses on this site, a concern was raised by Greater Wellington Regional Council. This was concern about the possibility of Poly Chlorinated Biphenyls (PCBs) being present on the site as a result of its use for the manufacture of electrical condensers by Ducon (NZ) Ltd for several years during the 1950's.

The applicant has in response commissioned Prattle Delamore Partners Ltd (PDP) to investigate the site in light of this concern expressed and assess the risk of contamination. This report is attached and in it the following conclusion is drawn:

"The site history suggests the potential for PCBs to have been stored and used on the site during its use by Ducon, although there is no confirmation that this

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fax: 64 4 499 9726
urban@urbanp.co.nz

This is the exhibit marked "F" referred to in the within Affidavit of COLIN CAMPBELL TAYLOR and sworn at Wellington this 29th day of October 2007 before me:

.....

A Solicitor of the High Court of New Zealand

is has actually occurred ... the potential for ground contamination is considered to be low."

On the basis of the attached report there can be no contamination confirmed as being present on the site, and in the Applicant's opinion does not satisfy the District Plan definition of a contaminated site, or trigger provide the necessary certainty to trigger Rule 5.4.4.

However, the Applicant is prepared to implement, via appropriate conditions of consent, a precautionary approach to this matter as recommended by the PDP report. These could include undertaking sub surface sampling on the site in accordance with their suggested methodology or variations on this approach as determined necessary by Greater Wellington.

Kind regards

D G Grant

David Grant
Resource Management Consultant
Urban Perspectives Ltd

CC: Bruce Croucher – Greater Wellington Regional Council


HYUNDAI
NOTICE
All persons entering this site must comply with the safety regulations of the following act
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C & D LANDFILL
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PHOTO OF SOIL STABILITY
PAPAWAI TERRACE