BEFORE THE HEARING PANEL

IN THE MATTER   of the Resource Management Act 1991

AND

IN THE MATTER   of Proposed Plan Change 26 to the Operative Waipā
                             District Plan

STATEMENT OF EVIDENCE OF LAWRENCE RYAN MCILRATH
(FINANCIAL CONTRIBUTIONS)
Dated 4 August 2023

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1. INTRODUCTION

1.1   My full name is Lawrence Ryan McIlrath. I am a Director of Market Economics Ltd (M.E), an independent research consultancy.

1.2   I have a BA et Sc (Planning), majoring in Economics from the Potchefstroom University of Christian Higher Education (South Africa), as well as a Master of Business Administration from North-West University (South Africa).

1.3   I have 20 years consulting experience working in both the private and public sectors. I have worked on numerous projects assessing and evaluating the financial and market aspects of projects, policies, and investment programmes. Most of these assessments reflected the interactions between, and spatial distribution of, market segments.

1.4   I specialise in market assessments, demand and supply analysis, sectoral analysis, and urban economic analysis. My work includes assessing sectoral structures and interactions, over time and across locations, scenario assessment and growth modelling, as well as evaluating the implications of different growth pathways on market segments. I have applied these skills across many sectors and locations around New Zealand.

1.5   I have been analysing growth initiatives and policies around New Zealand, including the wider economic flow-on effects, for over fifteen years. I have led several studies into aspects of Local Government funding relating to rates, and contributions, including:

(a)   the funding implications of different rating mechanism (e.g. land value vs capital value approaches);

(b)   the sectoral and spatial distribution of rating funding loads;

(c)   developing Financial Contributions (FCs) models; and

(d)   assessing the growth outlook, distribution of growth, and the effects on demand for community services.

1.6   My project experience relating to funding approaches gives me insight into the challenges and issues associated with allocating funding loads fairly and equitably.

1.7   I am assisting the Waipā District Council (the Council) with Plan Change 26 (PC26), focusing specifically on FCs.

2.   CODE OF CONDUCT

2.1   I have read the Environment Court Code of Conduct for expert witnesses contained in the Environment Court Practice Note 2023 and agree to comply with it. I confirm that the opinions expressed in this statement are within my area of expertise except where I state that I have relied on the evidence of other persons. I have not omitted to consider materials or facts known to me that might alter or detract from the opinions I have expressed.

3.   SCOPE OF EVIDENCE

3.1   My evidence covers three elements relating to the Financial Contributions (FCs) proposed by PC26, including:

(a)   The key findings of my review of the proposed amendments to Section 18 – Financial Contributions of PC26, relating specifically to the Te Ture Whaimana and residential amenity contributions;

(b)   An outline of the principles that should underpin the FC methodology, and a high-level methodology to allocate the funding load; and

(c)   An indication of the estimated scale of FCs based on example projects.

3.2   My evidence does not cover the FCs already in the District Plan, or the calculations associated with those FCs.

4.   EXECUTIVE SUMMARY

4.1   The proposed PC26 seeks to expand the aspects covered by FCs to include a proposed residential amenity and Te Ture Whaimana FC. I have reviewed the initial proposed FCs and related information and I have proposed a more refined approach to the FCs.

4.2   As part of my assistance to the Council for PC26, I raised several issues in the initially proposed FC approach. There is considerable statutory guidance and direction about how to estimate, calculate and apply Development Contributions (DCs). However, this is not the case for FCs.

4.3   I used the principles outlined in the Local Government Act 2002 (LGA) relating to Council's obligations with regard to DCs to help guide my FCs review and to set up the FC calculations. These principles include:

(a)   "fair, equitable and proportionate" contributions; and

(b)   "proportional to, the persons who will benefit from the assets to be provided (including the community as a whole), as well as those who create the need for those assets".

4.4   I have developed a model that calculates the FCs in a way that addresses the issues identified in the initial proposed FC calculations and that is consistent with the guiding principles.

Model structure and FCs

4.5   Conceptually, there are two parts to the FC calculation process. Firstly, the total project costs are expressed on a 'per dwelling' basis. And secondly, this FC is then applied to different developments to calculate the 'per development FC' that is recovered.

4.6   The FC calculation process (the first part) starts with the relevant projects and their costs. The Council provided a list of projects to consider for the residential amenity and the Te Ture Whaimana FCs. An important issue in estimating the FCs is the interplay with other Council funding sources,

especially DCs and rates. I have assumed that project budgets are not already recovered through DCs or rates.

4.7   Next, the distribution of costs and benefits are considered. If, for example, existing households will benefit from a project, then those households should also contribute towards the project budget. This is normally achieved through rates. However, if a project is paid for via rates, then the growth households will also pay that portion. The FC load per dwelling (growth unit) is estimated using a goal seek approach that accounts for any costs recovered via rates from existing households and growth households. The total cost recovered is reconciled against assumed project cost to ensure that there is not any over/under recovery.

4.8   The main elements used to calculate the FCs are:

(a)   The projected household growth based on the 2021 NPS-UD Housing Development Capacity Assessment[1] and implied spatial patterns.

(b)   Project details:

(i)   Project budget (capital costs) and financing costs.

(ii)   The distribution of benefits and costs, across locations (e.g. Cambridge, Kihikihi and Te Awamutu), and growth parts (infill, greenfield, existing). The distribution is entered using the relative shares that are then used to distribute the costs to different households based on the (assumed) share of benefits received. The costs falling to different housing segments are influenced by these shares.

(iii)   Timeframes (a 10 year period is used to reflect the growth/change).

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[1] M.E Ltd, 2021. *NPS-UD Housing Development Capacity Assessment: Future Proof Partners,* Final, 30 July 2021.

4.9   In this case, FCs are used in an intensification context with several unknowns that limit the ability to identify and pre-plan specific projects to deal with growth pressures and specific requirements or responses. Consequently, it is difficult to define specific project catchments, budgets and scopes in anticipation of those pressures.

4.10   I understand that the anticipated average annual budgets (over 10 years, and relevant portion for FCs) across the relevant Council projects are:

(a)   Te Ture Whaimana – in the order of $450,000/annum; and

(b)   Residential amenity – in the order of $350,000/annum.

4.11   Based on the estimated project budgets, assumptions about the distribution of benefits and the understanding that the relationship with other funding sources are captured, I estimated the FCs as:

(a)   Te Ture Whaimana $1,500[2]; and

(b)   Residential amenity $1,300[3].

4.12   These FC rates reflect the dollar-value to collect from each new dwelling and the second part of the FC process relates to applying FCs to the growth units. There is flexibility in the application of these rates to adjust the total amounts payable to reflect development specific attributes, which addresses the effects associated with the Te Ture Whaimana and/or the residential amenity consideration.

4.13   With reference to the Residential Amenity FC, an additional $500/dwelling relating to tree planting will be included in the FC charge. Council park staff have advised me that this value is based on the cost to plant a tree in Waipā.[4]

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[2] Rounded.
[3] Rounded.
[4] The cost includes after-planting care to ensure that the plant establishes.

Conclusion

4.14   The FCs are calculated using a set of projects[5] and assumptions about the distribution of benefits.   The calculation is based on a formula that provides some visibility about the intended approach.

4.15   Looking forward, the projects and assumptions underpinning the FC calculations will need to be continuously reviewed and refined to better reflect the intended outcomes, and to capture the link between the avoided, mitigated or remedied effects, and the project budgets.

5.   **KEY POINTS RELATING TO INITIAL FC**

5.1   Proposed PC26 seeks to expand the aspects covered by FCs, and my evidence focuses on the proposed residential amenity and Te Ture Whaimana FCs. I understand that the initial FCs drew on work completed by Hamilton City Council (HCC). As part of my assessment, I reviewed the information associated with the relevant HCC FC estimates as well as the Waipā District Council estimates.

5.2   I identified several issues in how the initial FCs were estimated and applied. These issues relate to fairness and equity considerations and were communicated and discussed with both HCC and the Council.

5.3   **Appendix 1** summarises the issues identified in my review, which can be grouped into four broad themes:

(a)   The interplays between different funding mechanisms, like DCs and rates, and the risk that growth could be charged multiple times;

(b)   Technical considerations around how the FCs are calculated;

(c)   The description relating to how the FCs will be used (i.e. to deliver 'improvements', 'betterments' and so forth.) The wording suggests the FC will be used to address the effects of historic

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[5] Council supplied.

activities and that growth (FCs) will be asked to pay for, and fund, projects remedying effects that are unrelated to growth; and

(d)   Potential inconsistencies between the envisaged purpose of the FCs and potential.

5.4   Addressing these issues is relatively straightforward and they can be dealt with through careful distribution of funding loads, and by considering the allocation in conjunction with other Council funding streams (like DCs and rates). The relationship with DCs is critical. I understand that an FC will not be charged on a service (project or investment) if the funding load associated with that project is fully recovered via DCs. Regardless, the FCs calculation needs to explicitly reflect and consider the potential overlaps with other funding streams to avoid over-recovery of costs.

5.5   The model structure outlined in the next section addresses the identified issues.

6.   PRINCIPLES AND GENERAL MODEL STRUCTURE

6.1   Statutory guidance relating to methodological approaches to estimate and structure FCs are not as detailed as those associated with DCs. Further, case-law in this area is mostly related to DCs.

6.2   Despite the limited guidance regarding FCs, the LGA outlines Council's obligations and the aspects to consider in estimating DCs. This guidance forms an important building block for establishing the principles for estimating FCs. The principles align with the key elements of the LGA in terms of DCs, specifically that allocation has to be:

(a)   "fair, equitable and proportionate"; and

(b)   "proportional to, the persons who will benefit from the assets[6] to be provided (including the community as a whole), as well as those who create the need for those assets".

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[6] It is acknowledged that the FCs can apply to non-asset projects.

6.3 To be consistent with the principles, the FC allocation process has to recognise and reflect several aspects, including:

(a) Temporal – both current and future community interests are considered. The specific timeframes associated with the benefits and costs should also be considered.

(b) Functional – the community(ies) that the activity relates to are considered and both the costs and benefits are considered.

(c) Distributional – the specific (spatial) parts of the community benefitting and/or contributing to the need for an activity should be considered, as well as where the funding load falls.

6.4 Using these principles and aspects as a guide, I developed a model to estimate the FCs in PC26. The structure is consistent with FC models used elsewhere in New Zealand (as developed by M.E).

6.5 The model is set-up in a way that estimates FCs that are fair, equitable and proportionate. Populating the model and establishing the specific setting to use (e.g., relative shares) is subject to further work to refine the inputs and assumptions. This includes finalising the projects to include in the calculation, and setting the relative shares to apply. Importantly, this information continually changes and will require constant updating to ensure that the appropriate portion of costs are recovered from the relevant community segments. Further, the interplays with rates, DCs and FCs will need to be monitored and accounted for in the calculations.

6.6 The Council identified a series of example projects[7] for the residential amenity and Te Ture Whaimana FCs proposed in PC26. I understand that the projects were identified by the Council based on existing work as well as information from the Waikato River Authority.[8] These projects are used to illustrate the anticipated scale of FCs. The allocation process considers different parts of the community.[9]

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[7] See Appendix 2.
[8] For the Te Ture Whaimana components.
[9] For example, existing households and growth households.

6.7   Consequently, the model has the functionality to distribute the funding load across existing households (dwelling or ratepayers) and growth (intensification or greenfields), based on assumed benefit-cost distributions. The FC load per dwelling (or growth unit) is estimated using a goal seek approach that accounts for any rates funding paid by existing and growth households (if this is relevant). The total cost recovered is reconciled against assumed project cost to ensure that there is not any over/under recovery.

6.8   Estimating the FCs requires several inputs. I describe the general structure of the model and how it treats the different inputs below. The following elements are used in estimating the FCs are as follows:

(a)   The projected household growth (across the urban areas) forms the starting position. These are based on the 2021 NPS-UD Housing Development Capacity Assessment[10]. The growth estimates are out to 2050, enabling an estimate of annual (year-on-year) change. Although, it is noted that the FC model is currently based on a 10-year period.

(b)   The high-level spatial patterns/distribution of growth is extracted from the above-mentioned work. This differentiates between greenfield growth, intensification growth, and existing ratepayers(noting that only households are used; business and rural ratepayers are excluded).

(c)   It is assumed that 30% of growth will be via intensification, increasing to 40% over the long term. The balance is assumed to be accommodated via greenfield developments. These percentage shares will need to be monitored and confirmed

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[10] M.E Ltd, 2021. *NPS-UD Housing Development Capacity Assessment: Future Proof Partners,* Final, 30 July 2021.

because they influence the quantum of dwellings (units) over which costs are distributed.

    (d)   The following project details are considered:

        (i)   Project budget (capital costs);

        (ii)   Project financing. It is assumed that projects will be debt funded, using a table loan (not bond funded), and while the loan term can be adjusted, a default 10-year term is used. The interest rate used in the assessment can be changed by entering an assumed rate. Currently, local government interest rates are in the order of 3.3% and the interest charge is estimated using this rate. The interest rate is not static and liable to change in line with economic factors.

        (iii)   The distribution of benefits and costs, across different locations (e.g., Cambridge, Kihikihi, Te Awamutu), and growth parts (infill, greenfield, existing). The distribution is entered using relative shares (percentages) that are used to distribute the costs to different households based on the (assumed) share of benefits received.

    (e)   The total funding load (capex and interest rate) associated with the project is estimated. No operating costs are recovered by FCs and are consequently excluded from the FC calculation.

    (f)   The timing (when a project starts) is considered and provides an ability to update the base population to reflect realised growth to ensure that the (future) cost distribution is based on the appropriate number of dwellings (units). The current assessment uses a 10-year period and uses 2023 as a base year.

6.9   The allocation process considers existing households. If existing households will benefit from a project, then a portion of the funding load

is sheeted to these households. The load is distributed over the life of the project, or the same period used to recover FC from growth.[11]

6.10 Finally, Excel's goal seek function is used to estimate the per household FCs and rates by minimising the difference (set to zero) between the required project funding and recovered fees (rates and/or FCs). The goal-seek function accounts for the interplays between rates (for the intensification growth) and FCs, to ensure that neither intensification nor existing households are overcharged.

7. INDICATIVE FINANCIAL CONTRIBUTIONS

7.1 The are two parts to the FC process. The first relates to translating the identified projects into a per dwelling cost (the FC), and the second part uses the FC-rate and applies it to growth to estimate the FC-charge associated with a development.

7.2 A challenge with estimating the applicable FC in response to intensification and growth is the uncertainty associated with the following:

(a) Timing of growth;

(b) Scale of growth;

(c) Location of growth; and

(d) Type of growth.

7.3 Unlike greenfield development or planned intensification, this uncertainty reduces the ability to put a specific quantum around infrastructure, amenity or community facility planning, or the associated timing. In turn, this complicates pre-planning to identify specific projects to address specific requirements or responses as they arise. Consequently, it is difficult to define specific project catchments, budgets, and scopes to use when estimating the FCs.

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[11] If existing households do not benefit from the project, then the percentage shares (para 6.8.d.iii) are set to zero. Consequently no costs are then recovered from existing households.

7.4   As discussed above in paragraph 6.6, the Council provided a range of anticipated projects that were identified and sourced based on internal discussions and liaison with the Waikato River Authority. These projects reflect the *type* and *nature* of anticipated projects. **Appendix 2** lists the example projects and the estimated budgets (covering multiple years).

7.5   Based on the example project, the expected average annual budgets across the relevant projects are:

(a)   Te Ture Whaimana – in the order of $450,000/annum; and

(b)   Residential amenity – in the order of $350,000/annum.

7.6   Using these assumed annual budgets over a time year period suggests the anticipated project budgets to be in order of:

(a)   Te Ture Whaimana projects $4.5 million; and

(b)   Residential amenity projects $3.5 million.

7.7   The FCs are estimated using these assumed costs and the following process:

(a)   Identification of the relevant budget/costs: The interplay between rates, DCs and FCs is an area requiring careful consideration to avoid costs over-recovery. Only costs not recovered via rates or DCs should be included in the FC calculation. I have assumed that the above budgets are independent of any DCs.

(b)   Identify the relative shares: The projects are reviewed to identify the distribution of effects (benefits) across community segments. If existing households will benefit from a project, then a portion of costs should be recovered from that segment and is normally achieved through rates. However, if rates are levied, then growth households will also pay rates[12] and this component needs to be considered before the FCs are calculated.

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[12] For simplicity, the estimate is based on a uniform annual charge and applied to existing households (i.e., the same $-value per dwelling).

(c)   The dollar-value recovered from growth households, via rates, is estimated.[13] The dollar-value collected from growth via rates is then subtracted from the total cost to be collected from growth via FCs.

(d)   The balance (FC less the rates collected) is then expressed in terms of the anticipated growth units. Using a goal seek approach, the FC is calculated so that the collected FCs equals the share of costs to be recovered from growth.

7.8   The process can be summarised using the following general formula:

$$FC_{Rate} = \frac{Costs + Interest\ (Time\ value\ of\ money)}{Growth\ units} \times \mathcal{F}$$

Where:
FC$_{Rate}$ =   Financial Contribution per growth unit.
Costs   =   Relevant project costs after accounting for a portion of cost falling on existing households, costs recovered through DCs, or other mechanisms, and any rates recovered from growth households.
Interest   =   Interest costs over the relevant timeframe.
Growth units =   Count of units (growth) from which the projects costs are recovered.
F   =   Discount Factor to adjust the estimated FC down to reflect, for example, the maximum FC that will be charged (Set as a maximum of 1).

(a)   The 'costs' item reflects the total cost to recover after adjusting for the share of costs to be recovered from existing household (subtracted) and other funding mechanisms (e.g., development contributions or rates).

(b)   The growth units reflect the relevant growth units that will incur a FC (e.g., exclude growth that will occur in the rural areas).

7.9   Based on the estimated project budgets, the calculated FCs are:

(a)   Te Ture Whaimana $1,500[14]; and

(b)   Residential amenity projects $1,300[15][16]

7.10   The following range of assumptions apply to the current estimates:

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[13] That is: Sum of costs recovered from growth via rates over the assessment period = (number of units in year 1 x rates) + (number of units in year 2 x rate) +(number of units in year 3 x rate) ….+ (number of units in year n x rate).
[14] Rounded.
[15] Rounded.
[16] This excludes the FC for tree planting ($500/tree per dwelling).

(a)   The FC estimates are based on a 10-year project life cycle;

(b)   The project budgets reflect the share of costs associated specifically with the 'growth households', i.e. any funding that needs to be recovered from existing households have already been excluded from these budgets (e.g., growth pays 100% of the FC, but if a rate is charged, then the rates recovered from growth households needs to be excluded; and

(c)   The spatial distribution is based on the anticipated growth patterns, across Cambridge, Te Awamutu and Kihikihi. It is assumed that the project costs will be recovered proportionally across growth (by location i.e., each growth unit/household equivalent will pay the same FC regardless of location across the district).

7.11   The FC calculation is based on the costs associated with the identified projects, and assumptions about the distribution of costs and benefits. These assumptions will need to be refined over time to reflect better information and understanding of the projects.

7.12   The second part of the FC process is to estimate the per development FC-charge. The FC-rate is then applied to individual residential developments using the following approach (which is the same approach for the residential amenity projects and Te Ture Whaimana FCs):

$$FC_{Charge} = (FC_{rate} * n) * (1 - F)$$

Where:
FC$_{rate}$ =   *Financial Contribution per growth unit[17].*
n   =   *Number of new dwellings in the development*
F   =   *Discount factor to account for development specific attributes or the value of other contributions for the same purpose.*

7.13   With reference to the Residential Amenity FC, an additional $500/dwelling relating to tree planting will be included in the FC charge.

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[17] Estimated using the approach outlined in para 7.8.

I understand that this value is based on the cost to plant and maintain a tree.

7.14   **Appendix 3** presents a worked example.

7.15   An advantage of using the formula-approach is that it provides a degree of predictability. I acknowledge that there are several assumptions underpinning the calculation that will need to be refined and finalised over time to better reflect the projects associated with the FCs. However, these details are not currently available, and the formula approach provides a way to capture such details while maintaining a consistent approach. In addition, combining the formula approach with a set maximum FC, signals the upper limit that could be charged thereby giving certainty around the $-value to include when undertaking project due diligence and feasibility assessments.

7.16   To summarise, my assessment estimated the FC (approach at para 7.8) as well as a proposed rule around how to apply the FCs to a development (para 7.12).

8.   CONCLUSIONS

8.1   The Council already has FCs in the District Plan and is expanding the purposes to include FCs for Te Ture Whaimana and residential amenity.

8.2   A key challenge in estimating FCs for the new purposes relates to the specific projects to include. The unplanned nature of intensification means that it is difficult to prepare a full list of projects (with detailed costings) associated with specific effects.

8.3   The FCs are calculated using a set of projects[18] combined with several assumptions covering the distribution of benefits. The funding load is

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[18] Council supplied.

distributed across existing households and growth households using a mix of proportions.

8.4 The proposed approach with the formula provides some visibility about the intended approach.   Looking forward, the specific projects and assumptions underpinning the FC calculations will need to be refined to better reflect the intended outcomes and to capture the link between the avoided, mitigated, or remedied effects, and the project budgets.

Lawrence McIlrath
Dated 4 August 2023

Appendix 1: Identified issues with notified Section 18 - Summary

General issues

A2. The introduction (of the initial FC section) states the FCs can be used to supplement DC where the DCs are insufficient to avoid, mitigate or compensate for the adverse effects of the activity. This will give WDC an opportunity to supplement DC-related income. However, DCs have specific guidance around how to calculate the total charge. Ideally, the DC calculation is set up to recover the full DC charge. The reason(s) for any DC shortfall needs to be considered and the DC policy should be adjusted to remove this issue. While the FCs are clear that it will only relate to a shortfall, there is a risk (perception) the FC will be used to double-charge for some projects.

A3. The Objectives, as well as the Rules and Performance Standards provide the structure for FCs and the terminology refers to improvement, betterment and so forth. Care is needed to ensure that an appropriate portion of the project's costs is allocated in a way that reflects the distribution of benefits as well as causation. Similarly, the term 'betterment' is used as part of the Te Ture Whaimana (TTW) part of FCs. Other terms like restoration, protection and relationship between different parties are also used. The mentioned terms, especially betterment and restoration, suggest an improvement in the underlying value(s) or qualities associated with the TTW. Equity and fairness are principles that underpin both FC and DCs. The fairness and equity principles also have a temporal dimension meaning that it would not be appropriate to charge growth households (via FCs or DCs) to pay for projects that remedy or restore the effects associated with activities in an earlier period.

A4. For example, if a project delivers outcomes that benefits existing households, then it would be inappropriate to expect growth households to fund the entire (100%) project. Since existing households also derive benefit from a project, they should also contribute to the funding.

A5. The proposed Objectives and Policies (18.4.1(b)) highlight the interactions across positive and adverse effects. Measuring the net position across multiple effects can be complex. It is assumed that intensification will deliver adverse effects, but the positive effects should also be acknowledged. These include effects like improved urban efficiencies (a lift in vibrancy), environmental sustainability, reduced transport needs, passive surveillance, and so forth. These positive effects are often ignored when considering the adverse effects of intensification. However, establishing the net position (all positive effects vs all adverse effects) is complex and difficult.

A6. The example document (HCC) used to inform the WDC FC policy describes the cost allocation process relating to the TTW (last paragraph, page 6). It states that both capital and operational costs are included, but it is unclear from this document how (or if) the interplays between FCs, DCs and rates are considered. There is a potential risk of double-dipping. If a new development pays the FC (for the TTW projects), and the rates load that is collected over future years also recovers for the same TTW project, then that development pays twice. Further, it appears that the TTW projects are designed to address historic effect and the growth component is included in addressing legacy issues. This raises questions around the relativity in terms of who benefits, causation, and who pays. It is plausible that these aspects are captured in HCC's wider FC-DC-rates calculation. But it means that WDC needs to be cautious in adopting the HCC values because there are many parameters and variables to consider in determining the FC values.

A7. The example calculations illustrate the maximum values (FC), but additional detail needs to be integrated in the calculation to show the relationships with rates and DCs. In addition the temporal spread (over time) should be integrated in the calculation to reflect growth spread

over multiple years (especially if a portion of overall funding load is recovered via rates).

A8. With reference to the 'total cost' alternative for the examples, this needs additional detail to address aspects like a level of service change, how replacement values are estimated and the potential effects (and FC implications) that will arise from providing pumping stations on the network capacity (e.g. additional capacity is provided by removing bottlenecks), etc.

Appendix 2: Example Projects

Residential Amenity Projects	10-y Budget (Capex)	Share to Growth
Cambridge Town Belt Recreational Infrastructure	755,000	21%
Neighbourhood Reserves Development	409,000	80%
Play Provision Outside Structure Plan	2,336,400	80%
Riverside Reserve Development Cambridge	567,079	80%
Mangapiko Stream Esplanade Walkway development Te Awamutu	2,457,510	13%
Premier Parks – Kihikihi Domain	50,000	16%
Premier Parks – Pioneer Rose Garden (Te Awamutu)	150,000	13%
Public convenience new facilities Cambridge town belt	470,000	21%
Lake Te Ko Utu	1,652,000	21%

Te Ture Whaimana – Example Projects

Project #	Project name	Estimated Costs
WRA22-017	Taiea te Taiao Mā Mangapiko, mai i Maungatautari ki Pirongia ahu ake (Cherish the environment following the Mangapiko, from Maungatautari to Pirongia and beyond).	$443,090
WRA22-033	Ngāti Hauā Mahi Trust & Waikato Regional Council Partnership Project - Karapiro and Mangaonua Catchments (High level total estimates Karapiro $11million,)Mangaonua $3.2million	$350,000 - $500,000/year Past 3 years $500,000 per year Next 3 years $350,000/year (In addition a hill country erosion programme $250,000/year)
WRA21-030	Manga-o-tama Ōhaupō Peat Lakes to Waipā River Catchment Restoration Project	$400,000/year ($800,000 total over 2 years)
	Lake Mangakaware	$178,608.24 / year $1,8m over 10 years ($1.5m - 2018 estimate – costs have risen around 20%)
	Lake Ngaa Roto	$676,744.80 / year $6,8m total over 10 years ($5.6m - 2018 estimate costs have risen around 20%)
2217	Erosion Control and Amenity Enhancement	$5.5m (10 years) Capex - $4.3m
2587	Lake Te Ko Utu Water Quality improvements	$400,000

Appendix 3: Short worked example

A worked example follows with the key assumptions:

- 10 unit intensification development;

- Both Te Ture Whaimana and Amenity contributions apply;

- First 2 units are credited;

- The developer is providing (volunteering) their own riparian and street planting to the value of $500 per unit

Item		Te Ture Whaimana	Residential Amenity	
			Residential Amenity	Tree
FC-rate	FC_{rate}	1,500	1,300	500
Units	b	10	10	10
Credits (for units)	c	2	2	2
Relevant Units	n = (b-c)	8	8	8
Unadjusted FC	$e = FC_{rate} * n$	*12,000*	*10,400*	*4,000*
Discount factor[1]	F	0%	0%	100%
FC Charge to recover	$FC_{Charge} = e * (1-F)$	12,000 (x)	10,400 (y)	- (z)
	SUM (x + y + z)	22,400		
1 - Based on development attributes and developer's activities				