Concept Paper: Water and wastewater capacity assessments at Waikato District Council for developments enabled by the Medium Density Residential Standards

Introduction

The Medium Density Residential Standards (MDRS) enables development at densities different to what the Waikato District Council (council) water and wastewater network were designed to cater for. The council will need to undertake capacity assessments differently to determine whether or not infrastructure upgrades are required to enable the development.

This concept paper speaks briefly on the background and issues before overviewing the current process and proposing an amended process (at the conceptual level). Significant work would be required by council and Watercare to establish the amended process.

This paper focuses on 2-3 dwellings on a lot enabled by the MDRS because larger developments (more than 3 dwellings) will require a more fulsome effects assessment through the resource consent process.

The MDRS will enable residential intensification on existing residential lots. The water and wastewater infrastructure in the urban areas of the Waikato District have not been designed for the density enabled by the MDRS. Existing processes are designed to target the intensification enabled by legacy district plans as well as greenfield development. There is a gap in the existing processes with regard to water and wastewater network capacity when assessing development proposals that seek to intensify residential land uses in existing urban areas under a MDRS regime.

The uptake of the MDRS is not expected to be significant due to the enabled land supply far exceeding dwelling demand. As it is enabled anywhere, but will not happen everywhere (demand does not exist), it is proposed that a case-by-case assessment process will suffice. If uptake is much more significant than expected, items like GIS tools and education will be much more important and the process may need to be amended further.

Background

The water and wastewater networks in council's main urban areas are designed to cater for development resulting from council's legacy planning frameworks which enabled lot sizes of between 450-600m^2 and one dwelling per lot. The planning frameworks also enabled the development of a minor dwelling on some sites (generally sites greater than 600m^2) although the uptake has not been significant.

Subdivision consent applications are currently subject to a water and wastewater network capacity assessment. These assessments are undertaken by council's Land Development Engineers and are complemented with input from Watercare Waikato (council's three waters asset management contractor) for significant developments, including those where the density sought is higher than anticipated (eg 300m^2 lots). Where network capacity is not available, the customer is required to construct and vest, or fund, new infrastructure or infrastructure upgrades to enable the development.

The delivery of the new infrastructure or infrastructure upgrades required for a development is managed through the subdivision consent process. Council has not seen brownfield redevelopment

of significant scale and therefore most privately-led infrastructure delivery is completed in greenfield areas and is delivered at the sole cost of the customer.

The majority of 'trunk' infrastructure (large scale) is delivered by council and funded via a mix of rates and development contributions. Trunk infrastructure is designed to cater for planned growth at anticipated densities. Water and wastewater treatment plants are designed for projected population growth and are seldom a constraint for 1-3 new dwellings per lot. The growth component of council's treatment plant upgrades is recovered via development contributions. All new development creating additional demand on the council's water and wastewater infrastructure are liable to pay development contributions and these can be charged at the time of resource consent, building consent or service connection[1].

The general presumption to date in the Waikato district has been that when a new lot is created, local water and wastewater network capacity to enable the development of *one dwelling per lot* was assessed at the time of subdivision. This means that when the time comes for a building consent application, it can safely be assumed (by the customer and by council) that capacity is available for one dwelling per lot. With a small number of exceptions, this means building consents for one dwelling on a lot do not require a detailed assessment of council's water and wastewater network capacity. As the number of minor secondary dwellings is not high (and they are generally for 1-2 people and are on larger sites) any associated network capacity impacts are deemed low and, as such, are also not subject to a detailed capacity assessment at the time of building consent.

Should council staff assess a development proposal and determine that water and/or wastewater network capacity is problematic (for example where there is a restricted network[2]), council has the ability to refuse a connection under the relevant bylaws for water and wastewater. This is not frequently used at present. A refused connection would mean a customer would need to identify and show in their building consent application an alternative means of compliance with the relevant aspects of the building code. In practical terms, the capacity assessment outcomes are currently managed by the staff member undertaking the building consent assessment (the two assessments are coordinated internally). In an urban area, on a small site, it would be difficult to identify alternatives, especially for wastewater disposal, because adequate space is needed on site to allow for a wastewater disposal field.

The current process:

1. Customer applies for a subdivision consent and an assessment of water and wastewater network capacity is completed (based on an assumed 1 dwelling per lot) by a council Land Development Engineer. If specialist input is required due to the complexity or scale of the development, the application is referred to Watercare.
2. If network capacity is adequate, and all other components satisfactory, subdivision is granted.
3. The customer builds the subdivision, including the required infrastructure upgrades. The customer installs one water and one wastewater connection per lot.
4. The subdivision is completed and building consent applications can be received for building on a new lot.

[1] The Waikato District development contribution policy and its implementation adequately enables the collection of development contributions under an MDRS framework eg at the time of building consent.
[2] Waikato District currently has a small number of restricted schemes such as the wastewater infrastructure in Te Kowhai and Matangi. There are no restricted networks currently identified in the urban areas where the MDRS apply.

5. If a customer is seeking application to build one new dwelling per lot, and possibly also a minor secondary dwelling, they do not require a capacity assessment at the building consent stage (unless it is a restricted network).
6. If a customer is seeking application to build more than one dwelling and one minor secondary dwelling[3] per lot, they require a resource consent where a capacity assessment can be undertaken, and upgrades can be triggered, or resource consent can be refused.

Proposed amendments to process (conceptual only, subject to council approval processes including financial, political and legal review and approval);

Steps 1 to 6 remain as above, with step 7 being replaced by:

7. If a customer is seeking application to build more than one dwelling and one minor secondary dwelling[3] per lot they would follow this process:

A. The customer seeks information on network constraints from council via its website or from customer support services.
B. The customer applies for new (additional) water and wastewater connection/s from Watercare *prior to* applying for building consent.
C. Connections application/s will be received and assessed by Watercare. If there is no available capacity, the connection application will be refused by Watercare. If capacity is available, a connections approval will be issued.
D. Council requires a connections approval from Watercare to be included with the building consent application. If none is provided, council will request further information regarding connection details. Noting that the customer should have explored network capacity prior to pursuing a building consent.
E. If no capacity is available, and the connection application/s refused, the customer could;
    a. Investigate and show alternative compliance with the building code (which may be very difficult to do on a small site),
    b. Work with Watercare to understand local network upgrades and associated cost, and decide whether it is feasible to progress the development,
    c. Withdraw their building consent application, or
    d. Take no further action. The building consent application would get refused by council after 30 working days from the last request for further information.

The above amended process will enable council to manage intensification effectively in its recently-established medium density residential zone (MRZ). It is suggested that the capacity assessment process for both the MRZ and the MDRS areas should be consistent.

It is anticipated that the above process amendments would take at least six months to fully establish. If there were additional modelling and GIS tools needed to proactively identify network constraints, those could take longer to develop but would not hold up process implementation.

Information would be published via existing council communication avenues and via the building consent application process. The information would alert customers to the presence of infrastructure constraint issues as a consequence of the MDRS and would include potential costs and risks associated with new, more intensive development and the need for network connection

[3] Noting that some customers start the process here. For example, they own a lot which has one dwelling and they want to build a second dwelling on it.

permissions prior to advancing other development assessments. This is to avoid unnecessary expenditure by the customer on development proposals that are not feasible due to infrastructure constraints or the customer's funding capacity.

The matters council and Watercare will need to consider when amending its processes include:

Guidance

- Public education, including websites updates and guidance.
- The ability to proactively identify and communicate to the public any areas with limited capacity.
- Guidance on what information an applicant is expected to provide to support a connection application, including investigation of available infrastructure.
- Guidance to applicants regarding configuration of servicing including where a wastewater main line traverses a property and multiple dwellings are proposed on the one lot, and assessment of suitability/condition of existing connection if use is proposed for additional dwellings.
- Guidance for customers and staff on what to do if there is no capacity.

Process

- Whether existing application forms and processes are efficient and scalable.
- Consideration of how any public infrastructure and private connections are captured outside of a subdivision; as-builts/valuation.
- Consideration of items such as build-overs, building encroachments, asset relocations in this process.
- Establishment of the method and form of final signoff to support building code compliance certificate.
- How the process complements or requires changes to other existing processes, such as capacity assessments for subdivision consents.

Policy framework

- Whether amendments are required to waters and wastewater bylaws to enable effective and efficient implementation, including consideration of lapse periods on approvals to enable reallocation.
- Whether amendments are required to the service level agreement between council and Watercare.

Resource/funding

- Capacity and capability of staff resourcing to undertake an increased number of 2-3 dwelling capacity assessments, with resourcing to meet customer timeframes within the service level agreement between council and Watercare.
- Review of existing application fee structure to ensure it accommodates and funds the process amendments. There may be budget implications associated with additional assessments, however these costs should be recoverable from applicants if the fees and charges regime is amended.
- Consider if and how council might identify, fund and undertake upgrades to relieve capacity constraints.

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