
REPORT 6
(1215/52/IM)

REVIEW OF THE COUNCIL'S "CODE OF PRACTICE FOR LAND DEVELOPMENT"

1. Purpose of Report

To inform Council of updates and changes made to the Code of Practice for Land Development (referred to as the "Code") and the proposed process prior to implementation.

2. Executive Summary

The Code has been amended to allow the use of environmentally sustainable design (especially in the stormwater section), strengthened sediment and erosion control (in alignment with Greater Wellington Regional Council guidelines and this Council's District Plan requirements), and now includes a new Open Spaces chapter.

The former Rural section clauses have been absorbed into the relevant chapters.

Updates have also been made to the standards and legislative documents referred to in the Code.

The Code supports Council's goal to achieve a city that is more liveable, safer, better connected and more sustainable.

The implementation of the revised Code may require a District Plan change.

3. Recommendations

It is recommended that the Committee:

- 1. Receive the information.*
- 2. Agree to the objectives of the Code of Practice (as presented in section 5.1 of this report)*
- 3. Agree that initially the Draft Code be used for internally instigated works and be a basis for assessment for land developments.*
- 4. Agree that comments be invited on this Draft Code from practitioners.*
- 5. Agree that more work be carried out to determine the most effective methodology for implementation.*

4. Background

The Current Code has legal status in that the document is referred to in the Council's District Plan. The majority of the physical work that the Code covers is carried out by developers and is vested to the Council when approved by Council.

The version that currently applies is the 1994 version, including updates up to 1998.

Nothing that is in the 1994 version has been removed with this revision. It has been strengthened with clauses drawn from NZS 4404:2004 Land Development and Subdivision Engineering and the Water Reticulation Code of Australia.

The Code is a guide to officers as well as developers on the standards required for the design and construction of new assets. After being vested, responsibility for ongoing maintenance and renewals of the constructed infrastructure resides with Council. Therefore it is important these assets are constructed to Council's standards

5. Discussion

The standards set out in this Code are regarded as a means of compliance and are based to a large extent on established practice. There is an increasing awareness of the need for environmentally friendly solutions to the effects of urbanisation. The current Code was considered to be too restrictive and as a consequence this review has been undertaken. However, it is not the intention of Council to stifle innovation and sustainability of design. Flexibility in applying these standards is appropriate where the outcome will be a more sustainable, better quality living environment without reducing the basic performance of the infrastructure and still meeting the stated objectives, criteria and standards. All "alternatives solutions" must meet these Council objectives, criteria and standards.

The use of alternative subdivision design and environmental technologies is a relatively new concept compared to the "traditional" approaches. This is apparent on a national basis and is not just a local issue. Knowledge regarding the long term operation, maintenance and success of some designs may be limited or not available. This has meant that the Code, at least initially, must reflect on the side of caution and the Council take a trial and error approach in allowing alternative designs. It is anticipated that innovative solutions will be proposed for evaluation. As the infrastructure being constructed in accordance with this Code has life expectancy of decades or centuries, Council must ensure that the solutions are robust. Therefore they will be monitored and this Code amended if required.

Council is not being requested to approve the technical details in the Code, but the general parameters that it is prepared under. When developing land, the

Code defines the minimum standards for infrastructure design such as earthworks, roading, water and drainage. The content of the Code is technical, including design parameters that Council requires to achieve the implementation of strategies and policies and to ensure that the future maintenance and renewal liabilities of Council are optimised.

The majority of the changes have been made to the Stormwater and Roading sections. In both cases it would be fair to say that the changes have not been ‘leading edge’ but still allow alternative solutions and innovation.

Council is obliged to distribute good quality water and to protect public health by safely and efficiently collecting and disposing of wastewater. The Code ensures both reticulation systems are designed and constructed to best practice standards. Council provisions for water supply and quality are based on the provisions in statutory documents. The provision of adequate potable water supplies and treatment and disposal of wastewater must be compliant with minimum standards as the risks to public health can not be compromised. Therefore the water supply and wastewater disposal solutions in the Code are not open to alternative solutions.

5.1 Changes made

The most important addition to the document is the explanation and linkage between the required engineering design, alternative solutions and standards, and existing Council objectives, policies and other local and national documents. This becomes the basis for the evaluation of any proposed solution.

Each chapter begins by outlining how its clauses and requirements add to Council outcomes and direction in terms of ‘objectives’ for each chapter. The objectives for each chapter are as follows:

- | | |
|----------------|--|
| Earthworks | <ul style="list-style-type: none">• to ensure the stability of land and geotechnical soundness and to control sediment generated by the works, the amount of sediment entering receiving environments and management of surface water flows. |
| Roading | <ul style="list-style-type: none">• to achieve the efficient and safe mobility of road users, including cyclists, pedestrians and goods. |
| Sanitary sewer | <ul style="list-style-type: none">• to have a safe affordable reliable environmentally friendly wastewater system. |
| Stormwater | <ul style="list-style-type: none">• to ensure the stormwater system protects property, public health and the environment by the safe |

disposal of rainwater and associated runoff.

- Open Spaces
- to emphasise sustainable integrated management of the natural environment.

With the increase in environmental emphasis, a new Open Spaces chapter has been included and the earthworks section has been strengthened in alignment with the GWRC Guidelines.

The major changes made are:

Earthworks

- Sediment and erosion control has been strengthened in alignment with GWRC guidelines. The Code now requires minimal disturbance and/or earthworks, including sediment control before any development starts and throughout the project.

Roading

- The vehicle network category table now makes allowances for the widths required for cycle and bus lanes. Therefore minimum width has increased in some instances.
- The number of houses served by a private way has been reduced and standards increased. This is to ensure all roads in the City, whether private or publicly owned, are designed and built to a best practice standard.
- Cycle friendly sump grates are being required where appropriate.

Stormwater

- Now allows for the principles of sustainable low impact design and development and the use of innovative technologies that increase the efficiency of resource use.

Wastewater

- Average wastewater flows for the Central Area and Suburban Centres has been increased to accommodate the increasing trend of city living and follow on effects that this will have on the network capacity.

Water

- The requirements for water have been strengthened through using water supply standards drawn from NZS 4404:2004 Land Development and Subdivision Engineering and the Water Reticulation Code of Australia.
- Fire fighting requirements have been made more specific minimising the risk to Council.

Open Spaces

- This section emphasises sustainable integrated management of the natural environment and promotion of the interrelationship between land and water - working with, rather than against, nature.
- Focus is given to habitat protection- maintaining valued ecosystems, habitats and natural features. This includes watercourses and native vegetation. It also outlines requirements for planting; including turf, re-vegetation and ornamental species.
- Promoting access to open spaces, natural areas, streams and the provision of tracks and playgrounds close to and well connected with neighborhood centers.

The former Rural section clauses have been absorbed into the relevant chapters and the “as-built” information requirements have been amalgamated.

Changes have also been made to the formatting and general presentation of the document without significant modification.

The table in Appendix 1 highlights the main changes made to the Code.

5.2 Implementation

In the final preparation of this report, officers were advised that the adoption of this revised Code may require a District Plan change. In the past, the Code remained outside the District Plan so that changes could be made to it without triggering a requirement for a Plan change. However the 2005 RMA amendment has caused some uncertainty and legal advice is being sought regarding the options open to Council. Options span including some of the Code content directly into the District Plan, referring to the document differently in the District Plan to allow it to be a stand alone document etc.

It was not considered desirable to delay initiating the implementation of the revised Code until the outcome of the legal deliberations as the proposed changes have been eagerly awaited. As an interim solution it is proposed that the revised or “Draft Code” be adopted (where appropriate) for works instigated by Council and also be used as a guide for the current assessments that are undertaken.

Work will continue to determine the best and most practical option to ensure that the contents of the Draft Code are utilised without causing risks to the Resource Management process or Council.

5.3 Consultation

As the Code is basically a technical document of standards, it is not considered appropriate to follow Councils normal “engagement” policy nor is consultation under the LGA required.

However, that said, there has already been considerable discussion with stakeholders both internally and external to Council to improve the document in terms of sustainability and to minimise Council and the communities risks (with respect to Water supply). It is proposed that further discussion continues with land developers and surveyors through regular liaison meetings. As the utilisation of this Draft Code will instigate feedback and comment it will also be placed on the Council’s website with provision for feedback, comment and suggestions from users. These suggestions will then be considered prior to the document being finalised.

This hiatus will also allow further work to be carried out as outlined in the section below.

5.4 Continual reviews

To remain current, the Code must be continually updated to reflect changes in Council Strategy, policy, standards, guidelines, technology improvements and innovations.

Changes to the Code are based on Council agreed policy changes only. Any current works and investigations have not been included in this review (e.g. the implementation of the proposed walking or cycling plan). When policies are adopted the relevant Code clauses will be correspondingly updated.

It is proposed that the Code be regularly updated. However it will depend on the legal opinion being sought as to what the most appropriate methodology will be.

The following information has already been identified as requiring further investigation with a view to possible inclusion/amendment:

Roading

- Incorporate objectives from the walking, cycling and bus plans.
- Look at reducing intensive earthworks and contour modification (which increases the occurrence of sediment erosion and is inconsistent with the intentions to maintain landform and landscape features) whilst still allowing for provision of public transport.
- Consider alternatives to turning circles.
- Consider allowing recycled glass and/or concrete for roading base course.
- Investigate connectivity in terms of maximum distance between intersections.

Stormwater

- Update information, including stormwater design data, with reference to climate change investigations as information becomes available.
- Consider benefits and costs of requiring that once developed, the runoff from a site must not exceed the flows currently experienced from the site. This may be achieved through detention or retention.

Water

- This chapter still requires more detail for pump station and reservoir design.

6. Conclusion

The requirements set out in this Draft Code are based on statutory documents and standards and are based to a large extent on established practice. The means of compliance from the previous version have been modified by allowing flexibility in applying these standards to create better quality living environments.

The Draft Code contains greater emphasis on principles of sustainable low impact design and development. It supports Councils strategies, policies, objectives and community outcomes.

This document will be used for works instigated by Council staff and utilised in the assessment process for developments.

The options available to Council for the implementation of this Draft Code will be determined with the assistance of legal input and, if necessary, will be presented to Council for decision.

Contact Officers: *Nicci Wood, Planning and Asset Engineer, Infrastructure Planning and Maria Archer - Manager, Infrastructure Planning*

Supporting Information

1) Strategic Fit / Strategic Outcome

The changes to the Code relate to the Transport, Urban Development and Environmental Strategies and specifically the long term outcomes - More liveable, Stronger sense of place, More compact, Better connected, More sustainable, Safer and More healthy:

2) LTCCP/Annual Plan reference and long term financial impact

The majority of the work carried out under this code is funded by Developers. The impact on infrastructure work funded by Council is already included in Annual plan projects. Changes will have minimal long term financial impact.

3) Treaty of Waitangi considerations

There are no Treaty of Waitangi implications however all District Plan work is required to take into account the principles of the Treaty of Waitangi (refer to section 8 of the Resource Management Act 1991).

4) Decision-Making

The proposed changes to the Code of Practice for land development are not significant in that they support existing Council decisions.

5) Consultation

a) General Consultation

Consultation to date has been mostly within the Council. Consultation with the developers and others is proposed as the next stage in the process and ongoing.

b) Consultation with Maori

Consultation is not required with Maori.

6) Legal Implications

The legal implications regarding the District Plan are being determined.

7) Consistency with existing policy

This report is consistent with existing Wellington City Council policy.

Appendix 1

Overarching and summary comments	
There are some areas of significant improvement, particularly around permeability and stream protection in the roading, earthworks, stormwater and open space chapters.	
Standards have been updated and renewed.	
Objectives have been added to the start of each chapter outlining what Council want to achieve through the clauses in the chapter.	
Rural area's clauses have been incorporated into the relevant chapters.	
As built requirements have been amalgamated.	
Section	
A.1	Explains links to legislation and Council outcomes, strategies and plans. Introduces guidance documents.
A.2	Explains alternative solutions which are referred to in the text.
A.6.1	Requirement for an erosion and sediment control plan identifying sediment erosion hazards, restricting vegetation clearance, and protecting streams.
A.6.2	Brought the as built requirements for all assets together in one place.
B.2	Added more proactive provisions for sediment management including plans during design, before and during work on site.
B3 -B5	Tighter controls for silt, sediment, erosion, stormwater and dust.
C.	Permeable surfaces and other 'soft' stormwater solutions to reduce stormwater runoff and/or enhance water quality where appropriate.
C.1	Improved Table of Roading vehicle hierarchy taking into account the District Plan's, Infrastructures, NZ standards and Urban Design's individual categories including widths, gradient and bus lanes notwithstanding a need for traffic flow and pedestrian and cycle safety.
Table C/1	Private Way criteria strengthened to mitigate future maintenance issues.
Table C/1	Length of cul de sacs limited to 200m to promote shorter blocks and greater connectivity.
C.1.16	Road Safety Audit (design/construction) section added.
C.2.9	Pavers section developed to allow for clay and brick pavers which are used around the city.
C.3.9	Hand railing updated to reflect the Building Code.
C.4	Road amenity section added to improve street environments, provide for vegetation, street furniture and road elements, and encourage a visually attractive, safe and comfortable street environment.
D3.1	Stormwater section opened up to include water quality, stream protection (and fish passage) and promote the use of 'soft' acceptable solutions that incorporate environmentally sensitive design (ESD) principles; including swales, retention ponds, etc. All alternatives must meet Council standards.
D.7.1	Requirement for run off from new sites to be neutral i.e. not exceed the current flows experienced from the site. This may be achieved through detention or retention.
D.7.1	Design calculation data updated to take into consideration climate change.
D7.6	Secondary flow paths on private property shall be protected with an easement in favour of the Council.
F	Open spaces Whole new chapter promoting the interrelationship between land and water. Working with, rather than against, nature. Focus is given to habitat protection, maintaining valued landscapes, ecosystems and natural features.