

## STAFF REPORT

**TO:** Environment & Planning Subcommittee

**FROM:** Mike Mackiggan - Consent Planner Natural Resources

**REFERENCES:** RM080891 - Discharge of Stormwater

SUBJECT: CAMDEN PROPERTIES - REPORT EP09/07/17C - Report prepared

for hearing of July 2009

Camden Properties Ltd. has lodged several resource consent applications relating to a comprehensive residential resort subdivision. This report discusses the resource consent application made to discharge stormwater associated with the proposed completed development.

The site is in the Coastal Environment Area, and it is primarily zoned Recreation, with a small portion of Open Space Zone. The site is in the Land Disturbance Area 1.

## 1. DESCRIPTION OF THE PROPOSED ACTIVITY

The proposal has already been described in the Planner's report on the Subdivision and Land Use consents (RM080097 and RM080880).

# 2. TASMAN RESOURCE MANAGEMENT PLAN (TRMP) ZONING, AREAS AND RULES AFFECTED

The land is zoned Recreation, is within the Coastal Environment Area, and is in the Land Disturbance Area 1.

The relevant Permitted Activity Rule is 36.4.2 but the proposed activity will not meet the Permitted Activity Rule 36.4.2 (e) conditions therefore the activity becomes a Discretionary Activity (Discharges to Fresh Water or Coastal Water) with the relevant rule being 36.4.4.

Whilst the stormwater discharge component in isolation is a Discretionary Activity, the application overall is a **Non-Complying Activity** as a result of the proposed disturbance in the Coastal Area (RM080892).

#### 3. SUBMISSIONS

Submitters raised no issues relating to the proposed stormwater discharge at the site. The submissions received regarding the overall proposal are described in the Planner's report on the Subdivision and Land Use consents (RM080097 and RM080880).

## 4. PRINCIPAL ISSUES

The principal issues associated with stormwater discharge component of the application are as follows:

a) Will the development result in adverse effects on the coastal marine area and adjacent land associated with stormwater run-off?

## 5. STATUTORY PROVISIONS

The application is a Non-Complying Activity. The Council must consider the application pursuant to Section 104 and Section 107 of the Resource Management Act 1991.

The matters for the Council to address in Section 104 are:

- Part 2 matters;
- the actual and potential effects on the environment of allowing the activity (Section 104 (1)(a));
- relevant objectives and policies in the Tasman Regional Policy Statement, and the Tasman Resource Management Plan (Section 104 (1) (b));
- any other matter the Council considers relevant and reasonably necessary to determine the application (Section 104 (1)(c)).

As the activity is a Non-Complying Activity the Council must, if it is of the mind to grant the consent, also be satisfied under Section104D that:

either the adverse effects of the activity on the environment will be minor; or,

the proposed activity will not be contrary to the objectives and policies of a proposed plan and/or plan (these are effectively additional tests that must be checked before a consent is to be granted).

The Council must also consider the application pursuant to Section 107 of the Resource Management Act 1991.

#### 5.1 Resource Management Act Part 2 Matters

In considering an application for resource consent, Council must ensure that if granted, the proposal is consistent with the purpose and principles set out in Part 2 of the Act.

**Section 5** sets out the **purpose** of the Act which is to promote the sustainable management of natural and physical resources. "Sustainable management" means:

"Managing the use, development and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while -

 sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and

- safeguarding the life-supporting capacity of air, water, soil, and ecosystems;
  and
- avoiding, remedying, or mitigating any adverse effects of activities on the environment.

# **Sections 6, 7 and 8** set out the **principles** of the Act:

**Section 6** of the Act refers to matters of national importance that the Council shall recognise and provide for in achieving the purpose of the Act. The matters relevant to this application are:

- 6(a) The preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use and development.
- 6(b)The protection of outstanding natural features and landscapes from inappropriate subdivision, use and development.
- 6(c) The protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna.

**Section 7** of the Act identifies other matters that the Council shall have particular regard to in achieving the purpose of the Act. Relevant matters to this application are:

- 7(b) the efficient use and development of natural and physical resources
- 7(c) the maintenance and enhancement of amenity values
- 7(d) intrinsic values of ecosystems
- 7(f) maintenance and enhancement of the quality of the environment, and
- 7(g) any finite characteristics of natural and physical resources
- 7(i) the effects of climate change

**Section 8** of the Act shall take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi). I understand that the applicant has consulted with iwi regarding the overall development and that iwi are in general support. I do not anticipate that there are any relevant issues for this application in respect of Section 8.

If consent is granted, the proposed activity must be deemed to represent the sustainable use and development of a physical resource and any adverse effects of the activity on the environment are avoided, remedied or mitigated. The critical issue of this consent is whether the adverse effects of the stormwater discharge are no more than minor.

These principles underpin all relevant Plans and Policy Statements, which provide more specific guidance for assessing this application.

## 5.2 Tasman Regional Policy Statement

The Regional Policy Statement seeks to achieve the sustainable management of land, water and coastal environment resources. Objectives and policies of the Policy Statement clearly articulate the importance of protecting land resources from inappropriate land use and development.

Because the Tasman Resource Management Plan was developed to be consistent with the Regional Policy Statement, it is considered that an assessment under the Plan will satisfy an assessment against Policy Statement principles.

# 5.3 Tasman Resource Management Plan (TRMP)

The most relevant Objectives and Policies to this application are contained in:

#### Chapter 33

This chapter articulates Council's key objectives.

The most relevant Rules which follow from these imperatives are contained in Chapter 36.

The following Policies and Objectives have been considered relevant for this proposal:

## 33.1.0 Objective

The discharge of contaminants in such a way that avoids, remedies, or mitigates adverse effects while:

- (a) maintaining existing water quality; and
- (b) enhancing water quality where existing quality is degraded for natural and human uses or values.

#### **Policies**

- 33.1.1 To recognise and provide for the uses and values of water through a system of classification that establishes the water quality standards required to protect the water quality needs of those uses and values.
- 33.1.2 To avoid, remedy, or mitigate the adverse effects of discharges of contaminants so that both individually and cumulatively with the effects of other contaminant discharges, they enable the relevant water quality classification standards to be complied with.
- To seek to improve water quality where existing water quality is lower than the requirements of any water classification or water conservation order.
- 33.1.4 To ensure that water quality is not degraded where the existing water quality is the same or higher than the relevant water classification or any water conservation order.
- 33.1.5 To ensure that existing water quality is not degraded after reasonable mixing as a result of any discharge of contaminants into water and to take

into account the following criteria when determining what constitutes reasonable mixing:

- (a) The depth, width and flow characteristics of the receiving water body, including the nature and extent of mixing which may occur and the assimilative capacity of the water.
- (b) The extent of the mixing zone and the likely adverse effects on aquatic life or ecosystems within the mixing zone.
- (c) The characteristics of the discharge, including the presence of toxic constituents.
- (d) The community (public) uses and values of the water or any mixing zone including those specified in the plan, any water conservation order or water classification for any water body.
- 33.1.6 To take into account the following factors in determining the significance of actual or likely adverse effects on the receiving water of or from contaminant discharges:
  - (a) Any water classification given in any schedule to Chapter 36 or water conservation order.
    - (b) Existing water quality of the receiving water.
  - (c) The significance or sensitivity of the aquatic life or ecosystem.
  - (d) The extent of the water body adversely affected.
  - (e) The magnitude, time of year, frequency and duration of the adverse effect(s), including any cumulative effects as a result of the discharge.
  - (f) The range and intensity of uses and values of the water body.
  - (g) The conflicts between uses and values of the water body.
  - (h) The nature of the risks of adverse effect(s).
  - (i) Any relevant national or international water quality guidelines or standards, or water conservation order.
- 33.1.8 To avoid, remedy or mitigate the adverse effects of non-point source contamination arising from land use and discharge activities by a mixture of methods including regulation of discharge activities, and particularly through advocacy of best management practices; and to review the mixture of methods used if environmental monitoring shows that water quality standards are not being maintained.
- To seek to improve water quality by appropriate riparian and coastal land management.
- 33.1.10 To promote and encourage discharge of wastes to land or constructed wetlands in preference to discharge to water where:
  - (a) discharge to land or constructed wetlands has less actual or potential adverse environmental effects than discharge to water;
  - (b) land disposal system design and operation is such that adverse effects on the environment, including soil and surface and groundwater quality are avoided, remedied or mitigated; and
  - (c) the discharge to land is the best practicable option.

And

## 33.3.0 Objective

Stormwater discharges that avoid, remedy or mitigate the actual and potential adverse environmental effects of downstream stormwater inundation, erosion, water contamination, and on aquatic ecosystems.

#### **Policies**

- 33.3.1 To require all owners, particularly the Council as stormwater asset manager, of all or part of any stormwater network to avoid, remedy, or mitigate adverse effects of stormwater discharges.
- 33.3.2 To advocate works to restore and protect stream or coastal habitats and improve and protect water quality affected by stormwater and drainage water discharges.
- 33.3.3 To manage the adverse effects of stormwater flow, including primary and secondary flow management, and the potential for flooding and inundation.
- To avoid, remedy or mitigate the potential for erosion and sedimentation arising from stormwater run off.
- To avoid, remedy or mitigate the adverse effects of stormwater on water quality and the potential for contamination.
- 33.3.6 To maintain or enhance stormwater infiltration to enhance groundwater recharge.
- To require all owners of all or part of any stormwater drainage network to avoid, remedy, or mitigate the adverse effects of stormwater discharges.
- To require the use of low impact design in the management of stormwater discharges in any new development where practicable.
- 33.3.11 To take into account the long-term management of stormwater drainage in consideration of land development, including subdivision and land-use changes.

#### 6. ASSESSMENT

Pursuant to Section 104(1)(a) of the Resource Management Act, the following effects assessment has been set out:

## **6.1 Proposal Summary**

The applicants advise "A water supply will ... be required to assist the establishment and ongoing maintenance of the vast areas of landscape area and enhancement plantings. In recognition of this, and following sustainability principles, roof water will be collected and stored in the stormwater storage pond proposed. This pond will also store excess stormwater runoff. The purpose of this storage pond, is not only to

assist in the management of stormwater, but to provide an alternative water resource for re-use for irrigation of the site and also within the Golf Course.

As noted above, roof water will be discharged directly (sic) the storage pond. Stormwater from off the accessways and ground is designed to collect and travel along a stormwater swale located along the western boundary. A subtle swale is in fact already present along part of the existing undeveloped portion of the site. The purpose of the swale proposed is to serve as a stormwater management (collection and filtering) mechanism which would see the water eventually discharge into the stormwater detention pond for re-use. Overflow from this pond is proposed to travel within another open swale then pass under the access road ( within a culvert) and then again into a swale before discharging to (sic) new inter-tidal inlet area, being an extended part of the Waimea Inlet. Refer to new stormwater report and details. In summary, stormwater is proposed to be managed and re-used in a manner that is in accordance with low impact and sustainable principles ..."

Annexure H of the Application contains an "Assessment of Stormwater Disposal and Water Reticulation" dated 23 December 2008 prepared by W.R.Andrew Ltd, Consulting Engineers.

Detailed engineering plans have not been provided at this stage and they require to be provided as part of this resource consent.

#### 6.1.2 Actual and Potential Environmental Effects

## 6.1.3 Stormwater Discharge Issues

The actual and potential effects of the application relating to how the works are undertaken and remedied are considered to be issues as follows:

(a) Will the development result in adverse effects on the coastal marine area and adjacent land associated with stormwater run-off?

## **Stormwater Attenuation Assessment**

The use of overland flow and holding ponds of the proposed stormwater system provides a level of protection against increased stormwater runoff volumes occurring as a result of the development.

## **Runoff Quality Assessment**

The applicant's Annexure H Consultant Engineers' report did not discuss in detail the effects of the proposed development on the quality of stormwater discharged from the subject site. Expected contaminants in runoff include suspended solids, increased biochemical oxygen demand (BOD<sub>5</sub>), pathogens, metals, hydrocarbons, toxic trace organics, nutrients and litter.

The W.R .Andrew Ltd Consulting Engineers Report advocates that "Stormwater is to be retained where possible for reuse as irrigation. The size of the holding tank/pond has not yet been finalized. No brief was provided for water reticulation other than it is required to meet TDC design standards....

All surface runoff from the site is to discharge into a holding pond with a standpipe overflow. This discharges to a riprap protected swale and culvert under the road with final outfall to the new tidal lagoon. Roof water is discharged directly to the stormwater system. Runoff from sealed surfaces and landscaped areas is to be filtered by sand/gravel subsoil drains before entering the stormwater system. This filtration system will cope with light rain and the initial run off from a storm event and will screen any hydrocarbon contamination washed off the road surface. This screening will help reduce potential pollutants reaching the estuary. Once this initial runoff has been screened the runoff will be relatively clean so excess water can drain by swale or surface drain directly to the sump and the piped system. Along the western boundary of the complex a landscaping swale is proposed. This swale will convey stormwater runoff from part of the roof and overflow from the landscaping water features.

The stormwater system is a "flooded" system as the outlet to the pond is submerged. The hydraulic gradient between the outfall and pond is based on an outlet level of 1.84m (TDC datum) (From TDC Engineering Standards, 0.1m below MHWS). The inlet level is taken as the level of the standpipe. The hydraulic gradient for the site drainage is based on the pond being full, so to achieve the required falls the ground level in the north east corner of the site needs to be 1.5m above the level of the pond.

During a storm event exceeding the design rainfall intensity the secondary flood path will be via swales and roading system to the estuary."

Indicative Stormwater Plans were supplied by Peter Rough Landscape Architects Limited.

The overland flow through swales is expected to provide suitable treatment of the stormwater. Most of the loading of the likely metals and hydrocarbons is adsorbed to the suspended solid fractions and will therefore be removed as the overland flow passes through the swales and into the new tidal lagoon.

Overall, it is considered that the stormwater discharges resulting from the proposed development will not adversely affect water quality to a more than a minor degree and, that suitable conditions could be attached to any consent approval to mitigate any effects.

## 6.1.4 Summary of Assessment of Effects

In summary, potential adverse effects on the environment, in terms of the diversion and discharge of stormwater at the proposed development, are in my opinion minor and the proposal is generally consistent with the objectives and policies in the Tasman Resource Management Plan.

## 7. SUMMARY

#### 7.1 Principal Issues

The principal issue of whether the proposed development can be adequately serviced in terms of stormwater attenuation (diversion and discharge) so the effects on the environment will be no more than minor.

## 7.2 Statutory Provisions

The application is a Discretionary Activity under the provisions of Chapters 33 and 36 of the TRMP at the time the application was lodged.

Overall however the application is a **Non-Complying Activity** as a result of the proposed disturbance in the Coastal Area ( RM080892).

As the application is a Non-Complying Activity. The Council must consider the application pursuant to Section 104 of the Resource Management Act 1991.

The matters for the Council to address in Section 104 are:

- Part 2 matters:
- the actual and potential effects on the environment of allowing the activity (Section 104 (1)(a));
- relevant objectives and policies in the Tasman Regional Policy Statement, and the Tasman Resource Management Plan (Section 104 (1) (b));
- any other matter the Council considers relevant and reasonably necessary to determine the application (Section 104 (1)(c)).

As the activity is a Non-Complying Activity the Council must, if it is of the mind to grant the consent, also be satisfied under Section104D that:

either the adverse effects of the activity on the environment will be minor; or ,

the proposed activity will not be contrary to the objectives and policies of a proposed plan and/or plan (these are effectively additional tests that must be checked before a consent is to be granted).

The adverse effect on the environment of the stormwater discharge as proposed in the application RM080891 will be minor.

## 7.3 Objectives and Policies

The proposal is generally consistent with the relevant objectives and policies in the Tasman Resource Management Plan.

## 7.4 Section 104D of the Resource Management Act

Given the above it is considered that the stormwater discharge application as submitted satisfies both tests of s104D of the RMA.

The adverse effect on the environment of the stormwater discharge as proposed in the application RM080891 will be minor.

The proposal is generally consistent with the relevant objectives and policies in the Tasman Resource Management Plan.

#### 7.5 Overall Conclusion

Overall, the writer's assessment is that the actual adverse effects on the environment are minor and the proposal is generally consistent with the objectives and policies, and matters of discretion in the Tasman Resource Management Plan.

Having considered the application in detail, having visited the site, and drawing on the Council's staff experiences of stormwater discharges, it is the writer's view that the adverse environmental effects of the proposed activity can be controlled to minimise them through the imposition of appropriate conditions.

## 8. RECOMMENDATION

The recommendation to grant or decline these applications for the diversion and discharge of stormwater is dependent upon the Committee's decision whether or not to grant the subdivision consent.

Having considered the application in detail, having visited the site, and drawing on the Council's staff experiences of stormwater issues, it is the writer's view that the adverse environmental effects of the proposed activity will be no more than minor, and that there is no reason why resource consent for stormwater should not be granted subject to the following recommended conditions.

#### 9. RECOMMENDED CONDITIONS

# 9.1 Discharge of Stormwater (RM080891)

 The discharge of stormwater shall be carried out in accordance with the details contained in the report prepared by W.R.Andrew Limited dated 23 December 2008 submitted with resource consent application.

Where there are any apparent conflicts or inconsistencies between the information provided and the conditions of this consent, the conditions shall prevail.

- 2. Engineering specification plans shall be provided to the Manager, Engineering and approved prior to the commencement of works on the stormwater system at the proposed development. The specifications shall be in general accordance with the requirements of Condition 1.
- Not withstanding Condition 1 the stormwater disposal systems shall be designed in accordance with Tasman District Council's Engineering Standards 2008. If the Consent Holder chooses to install a system that does not comply with Tasman District Council's Engineering Standards 2008, written approval from Council for that design must first be obtained.
- 4. The Consent Holder shall submit to the Council's Coordinator Compliance Monitoring a Stormwater Management Plan (SMP) before any land excavation or construction works begin. The SMP shall, as a minimum, include:
  - a) Design plans for the components of the stormwater system.

- b) A construction-phase sediment management plan which identifies how sediment shall be controlled so that the coastal marine area is protected from the deposition of sediment in accordance with the objectives and policies of the Proposed Tasman Resource Management Plan (TRMP). This plan should include structures and maintenance procedures for ensuring the ongoing effectiveness of sediment control measures.
- c) A maintenance plan which describes the long-term maintenance of the stormwater system, ensuring on-going effectiveness of stormwater treatment structures, weed management, erosion protection, pest fish monitoring and pest fish eradication.

The stormwater system shall be managed in accordance with the SMP.

- 5. A certificate signed by the person responsible for designing the stormwater management system or a similarly qualified or experienced person shall be submitted to the Council annually for the duration of the construction phase on the subdivided site. This shall certify that the system components present are constructed and installed in accordance with the details of the application and the conditions of this consent.
- 6. The discharge shall not cause or contribute to erosion of land, including the bed of any stream or drain. Bare ground shall be revegetated as soon as practical to minimise the generation of sediment.
- 7. The stormwater may be discharged into the ponds on site via land.
- 8. The discharge or diversion shall not cause the production of conspicuous oil or grease films, scums or foams, or floatable or suspended material in any receiving water.

#### Maintenance

- 9. All systems associated with the discharge (such as the interceptors, connecting drains, swales, water tables, tanks and soak pits) shall be maintained in effective, operational order at all times.
- All systems shall be checked on a regular basis as required, but not less than once every year, to prevent carryover of contaminants into the receiving environment.

#### General

- Stormwater system construction shall only be undertaken between 7.00 am –
  6.00 pm Monday Friday and 8.00 am 1.00 pm on Saturday. No work shall be undertaken on Sunday or any public holiday.
- 12. All erosion, sediment and drainage control measures and devices shall be regularly inspected, particularly after high rainfall events to ensure they are maintained in good working order.

#### Advice Note:

Maintenance works include the cleaning of sediment traps, regular checking of sediment fences etc.

- 13. The Consent Holder shall contact Council's Co-ordinator Compliance Monitoring at least 24 hours prior to commencing works for monitoring purposes.
- 14. The Consent Holder shall stop construction in heavy rain when the activity shows sedimentation that is more than minor in the view of the Council Co-ordinator, Compliance Monitoring.
- 15. All machinery on the work site shall be refuelled, and any maintenance works undertaken, in such a manner as to prevent contamination of land and surface water. Spillage of contaminants into any watercourse or onto land shall be adequately cleaned up so that there is no residual potential for contamination of land and surface water. If a spill of more than 20 litres of fuel or other hazardous substance occurs, the Consent Holder shall immediately inform Council's Co-ordinator Compliance Monitoring.

#### **Review of Consent Conditions**

- 16. Pursuant to Section 128 of the Resource Management Act 1991, the Consent Authority may review the conditions of this consent by serving notice for any of the following purposes:
  - to deal with any adverse effect on the environment that may arise from the exercise of this consent, and which is appropriate to deal with at a later stage.
  - b) to require the Consent Holder to adopt the best practicable option to remove or reduce any adverse effect on the environment;
  - to assess the appropriateness of imposed compliance standards, monitoring regimes and monitoring frequencies and to alter these accordingly;
  - d) to change the compliance standards imposed by conditions of this consent to standards that are consistent with any relevant Regional Plan, District Plan, or Act of Parliament.
- 17. The Council may, during the month of July each year, review any or all of the conditions of the consent pursuant to Section 128 of the Resource Management Act 1991 for all or any of the following purposes:
  - to deal with any adverse effect on the environment which may arise from the exercise of the consent that was not foreseen at the time of granting of the consent, and which is therefore more appropriate to deal with at a later stage; and/or
  - to require the Consent Holder to adopt the best practical option to remove or reduce any adverse effects on the environment resulting from the discharge; and/or

- c) to review the contaminant limits, loading rates and/or discharge volumes and flow rates of this consent if it is appropriate to do so; and/or
- d) to review the frequency of sampling and/or number of determinands analysed if the results indicate that this is required and/or appropriate;
- e) to require consistency with any relevant Regional Plan, District Plan, National Environmental Standard or Act of Parliament.

# **Expiry**

18. This resource consent shall expire on 20 July 2044.

#### **ADVICE NOTES**

- 1. Officers of the Council may also carry out site visits to monitor compliance with resource consent conditions.
- 2. The Consent Holder should meet the requirements of the Council with regard to all Building and Health Bylaws, Regulations and Acts.
- 3. Access by the Council or its officers or agents to the property is reserved pursuant to Section 332 of the Resource Management Act.
- 4. All reporting required by this consent should be made in the first instance to the Council's Co-ordinator Compliance Monitoring.
- 5. Council draws your attention to the provisions of the Historic Places Act 1993 that require you in the event of discovering an archaeological find (e.g., shell, midden, hangi or ovens, garden soils, pit, depressions, occupation evidence, burials, taonga) to cease works immediately, and tangata whenua, the Tasman District Council and the New Zealand Historic Places Trust should be notified within 24 hours. Works may recommence with the written approval of the Council's Environment & Planning Manager, and the New Zealand Historic Places Trust.
- 6. This resource consent only authorises the activity described above. Any matters or activities not referred to in this consent or covered by the conditions must either:
  - a) comply with all the criteria of a relevant permitted activity rule in the Tasman Resource Management Plan (TRMP);
  - b) be allowed by the Resource Management Act; or
  - c) be authorised by a separate resource consent.

7. Plans attached to this consent are (reduced) copies and therefore will not be to scale and may be difficult to read. Originals of the plans referred to are available for viewing at the Richmond Office of the Council. Copies of the Council Standards and documents referred to in this consent are available for viewing at the Richmond office of the Council.



Mike Mackiggan

**Consent Planner - Natural Resources**