Application for Resource Consents
Greater Wellington Regional Council

Relating to
Dry Creek Replacement Cleanfill (DCR Project)
Judgeford, Porirua
Winstone Aggregates (A Division of Fletcher Concrete and Infrastructure Ltd)

Application Form and
Description and Assessment of Effects on the Environment

November 2012

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PART ONE – RESOURCE CONSENT APPLICATION FORM

FORM 9

APPLICATION FOR RESOURCE CONSENTS
UNDER SECTION 88 OF THE RESOURCE MANAGEMENT ACT 1991

TO: Greater Wellington Regional Council
PO Box 11646
Wellington

Attn: Mr Christopher Fern
Resource Advisor
Environmental Regulation

1 Winstone Aggregates, a division of Fletcher Concrete and Infrastructure Ltd, applies for resource consents for the activities described below.

2 The activity to which the resource consents relate is the establishment, operation, maintenance and eventual closure of a cleanfill site on rural land near Judgeford, and all associated activities, as described in the Description and Assessment of Effects that accompanies this application.

3 The names and addresses of the owner of the land to which the activity applies are Mr Malcolm Wayne Judd, Ms Susan Victoria Judd and Ms Katrina Louise Ross, of State Highway 58, Pauatahanui. The area of land to which the application applies is some 13.87ha of a larger property, Section 15, Block IV Belmont Survey, Lots 1 and 2, DP 367887, Identifier 275739, Wellington Land Registration District. For the sake of completeness, it is noted that mitigation and compensation planting and associated works will be undertaken on the adjacent Lot 3 DP367887. Those activities are permitted activities and do not form part of the application.

4 The location of the proposed activity is to the west of State Highway 58 and generally to the north of unformed Felix Road, within Porirua City, as shown on the attached site plan, and in the plans included with the Description and Assessment of Effects that accompanies this application.

5 The type of resource consents sought are:

(a) A discharge permit for the discharge of sediment to freshwater during the construction stages of the proposed cleanfill.

(b) A discharge permit for the discharge of sediment to freshwater on an ongoing basis.

(c) A water permit for the diversion of water associated with the construction and management of the cleanfill activity.
(d) A land use consent for the reclamation of the existing stream beds in the area of filling shown on the attached plan.

(e) A discharge permit for the discharge to land of material which may not always fully comply with the definition of cleanfill in the Regional Soil Plan.

(f) An air discharge permit (sought on a precautionary basis)

(g) A land use consent for roading and tracking and soil disturbance activities.

6 The following additional resource consents are required in relation to the proposed activity:
   – Land use consent from Porirua City Council
   – Land use consent from Hutt City Council.

The first is being sought at the same time as this application. The second applies to a very small sliver of land within the Hutt City boundaries comprising a small area of paper road and is being sought separately, following discussions with that Council.

7 Attached, in accordance with Schedule 4 of the RMA, is a Description and Assessment of Effects on the Environment in the detail that corresponds with the scale and significance of the effects that the proposed activity may have on the environment, including information required in terms of the various Regional Plans.

8 The term of consent which is sought for the consents other than the land use consent above is 35 years.

Signed on behalf of Winstone Aggregates

29 November 2012.

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Application Site

Plan showing outline of full extent of proposed cleanfill footprint and access works.
Part Two: Description and Assessment of Effects on the Environment

1 INTRODUCTION

1.1 Background

Winstone Aggregates (Winstones) currently operates a large cleanfill operation at Dry Creek, Lower Hutt. This site has operated since the early 1990s and meets a market demand for the disposal of cleanfill within the Hutt Valley, but also further afield throughout the wider Wellington urban region. The site is reaching the end of its practical life, and is expected to reach capacity by at least 2015.

Cleanfill is generated by both small development projects and large infrastructure projects which have an excess of fill which cannot be disposed of on-site. There is a need for the ongoing availability of appropriately-located and well-managed long-term cleanfill disposal facilities as part of the urban region’s overall waste management.

Site and operational requirements for long-term cleanfill activities include a site that is amenable to safe and appropriate containment of cleanfill material, locational convenience to the market for such facilities, and on-site management that enables efficient acceptance and safe permanent disposal of cleanfill.

As well as the benefits of a cleanfill activity, cleanfill construction and operation has a range of associated actual and potential adverse effects on the environment. The choice of site for a cleanfill operation and how the activity is developed and operated needs to take into account the avoidance, remedy or mitigation of all actual and potential adverse effects.

Winstones has identified an appropriate site for the continuation of its Dry Creek operations, and is seeking approvals to establish and operate the replacement facility, to be known as the Dry Creek Replacement (DCR) cleanfill.

1.2 Purpose of this Document

The purpose of this document is to provide the information necessary to support applications for resource consents from the Greater Wellington Regional Council to enable a cleanfill operation on the proposed site.

This document has been prepared in accordance with the requirements of the Resource Management Act 1991 (the RMA) and includes an Assessment of Effects on the Environment (AEE). It contains a description of the proposal, an outline of the statutory framework within which the application must be assessed, an assessment of the actual and potential effects of the activities on the environment, and a
description of the ways in which any adverse effects arising from the activities are proposed to be avoided, remedied or mitigated, as required by the 4th Schedule of the RMA. It is accompanied by specialist technical appendices.

This document relates specifically to the parts of the project that relate to consents from the Greater Wellington Regional Council (the GWRC). However, resource consent is also required from Porirua City Council (PCC) for the construction and ongoing operation of a cleanfill operation and associated access on the same site. Resource consent from PCC is being applied for at the same time as this consent application. It is anticipated that the applications will be handled by the Councils in parallel, with the GWRC being the lead agency.

A sliver of land that forms part of the cleanfill operation lies within the boundaries of Hutt City Council (HCC), and land use consent is required for this area. This is considered to be a minor matter, and will be the subject of a separate resource consent.

1.3 Structure of this Document

This document has been structured to meet statutory requirements, and to facilitate an understanding of:

- the physical works and activities associated with the proposed cleanfill operation
- the actual and potential effects on the environment associated with the activities
- methods to avoid, remedy or mitigate those effects.

Part One of this document contains the Resource Consent Application Form (Form 9) to GWRC for the necessary resource consents.

Part Two of this document contains the supporting information for the application. This is a description and assessment of effects on the environment. It contains the following sections:

- Section 1 – the introduction, which sets the scene for the information to follow
- Section 2 – an outline of the environmental setting within which the activities will occur
- Section 3 – a description of the proposed activities for which consent is sought
- Section 4 – the relevant legislative and policy framework that must be considered for the application
- Section 5 – the assessment of effects on the environment and description of proposed mitigation and, as relevant, offsets
- Section 6 – draft conditions to achieve the mitigation proposed
- Section 7 – an outline of other relevant information, including a summary of the consultation undertaken by the applicant in relation to the proposed activities and alternatives considered
- Section 8 – a summary and conclusion.

Appendices containing technical reports and further information are also provided, and are referred to in this document as appropriate.
1.4 Regional Consents Sought

The site of the application is within the Wellington Region and must be evaluated in terms of the RMA and the relevant regional plans. A more detailed analysis of the consent requirements is provided in section 4 of this document, but, in summary, the following regional resource consents are considered to be required:

Discharge permits (section 15 RMA):
- for discharges of sediment to freshwater during construction
- for discharges of sediment to freshwater on an ongoing basis
- for discharge of material (cleanfill) which may not always fully comply with the Regional Soil Plan definition of cleanfill
- for discharges to air (on a precautionary basis).

Water permit (section 14 RMA):
- for the diversion of water in water courses within the application area

Land use consent (section 13 RMA):
- for the reclamation of the beds of water courses, and associated activities within the application area for roading and tracking activities and soil disturbance activities that may exceed permitted activity standards in the Regional Soil Plan.

Pursuant to section 123 of the RMA, a term of 35 years is sought for the discharge and water permits.

1.5 Land Ownership and Paper Road

The site to which the application relates comprises approximately 13.87ha of the title, Section 15, Block IV Belmont Survey, Lots 1 and 2, DP 367887, Identifier 275739, Wellington Land Registration District. The overall title is approximately 336ha.

Winstones has negotiated a long-term contract with the landowner, subject to obtaining resource consents. This includes development and use of the footprint of the cleanfill area, necessary works relating to water management beyond the footprint, and small areas for screen planting. The applicant proposes the use of further area of land for the purposes of mitigation and environmental offsetting. This land is within the same ownership and is described later in this report.

Copies of the Certificates of Title are provided in Appendix 1. Also within Appendix 1 is an aerial photo showing nearby land parcels and land ownership.
It will also be apparent that the application affects an approximately 200m length of paper road, Felix Road. The centre-line of the paper road forms the boundary between the districts of Lower Hutt City and Porirua City, and the two local authorities own half of the road width each. While a land use consent is required for this area, it is considered to be a minor matter and will be the subject of a separate resource consent.
2 ENVIRONMENTAL CONTEXT

2.1 Location and Geography

The proposed DCR cleanfill site is located off State Highway 58 (SH58) approximately 4km to the northwest of Dry Creek (see Figure 2.1). The site is to the west of the state highway, and will require a new access approximately in the location of its junction with Felix Road (a paper road). The site of the activity is on land owned by the Judd family, who run the site as a dry stock (sheep and beef) farming operation.

The topography in the locality is a valley form through which SH58 passes, with sloping sides containing upper tributaries and headwaters of the Pauatahanui Stream in a series of side valleys. The Belmont hills rise to an elevation of 380m to the south and west of the application site. The application site itself consists of parts of a spur and side valley system, including both flat and gently sloping land. There are some small areas within the footprint of the proposed cleanfill which have slopes in excess of 45°, particularly at the upper end of the site in association with the stream.

The proposed cleanfill operations are to be focussed within the lower sections of a side gully on the south side of SH58 with the land leased to Winstones as required. Figure 2.2 shows the general layout of the proposed cleanfill site in the context of SH58 and the surrounding area. As described, the proposed cleanfill operation is located in the lower part of a side gully and has been designed to largely avoid the regenerating and mature native vegetation in the upper gully. The plans in Appendix 2 show the staged development and how it will impact on the existing land and landform over time.

The site is currently used for grazing sheep and cattle. The upper part of the valley beyond the site has been subject to minimal recent grazing, and has a mixed cover of regenerating indigenous vegetation. An unnamed tributary of the Pauatahanui Stream flows south to north within the footprint of the proposed cleanfill in a series of pools and faster-flowing stream sections. The tributary is fed by intermittent side streams. The tributary passes under SH58 in a culvert to join the upper reaches of main Pauatahanui Stream.

The Belmont Regional Park borders the site to the south and comprises regenerating vegetation with no developed recreational tracks or facilities in the immediate vicinity. Other surrounding land uses are predominantly agricultural.

Opposite the proposed cleanfill site in elevated positions on the north eastern side of SH58 are a number of small blocks of land mostly in rural residential use. These are largely accessed from Mt Cecil Road. Beyond this area on the higher slopes is an extensive area of planted forestry.

The site is within or close to the boundaries of Hutt City and Porirua City administrative areas. It is also in close proximity to Upper Hutt City’s boundary. The site and wider area is within the GWRC’s area. SH58 is owned and administered by the New Zealand Transport Agency (NZTA).
Figure 2.1 Winstone’s operations in the vicinity of proposed DCR cleanfill

Figure 2.2 Location and layout of proposed DCR cleanfill
The locality receives an average annual rainfall of approximately 140cm. Winds\(^1\) are predominantly, and strongest, from the north-west, with a proportion from the south-east.

### 2.2 Site Geology

A description of the site’s geology is provided in Appendix 3, “Dry Creek Replacement Clean Fill Feasibility Geotechnical Assessment”.

This geotechnical assessment indicates that the site is underlain by deeply-weathered greywacke, with residual greywacke soils formed in some areas, particularly on gully sides. This material is overlain by loess and alluvium 1 to 2m in depth over the flatter part of the site, with an anticipated greater depth in depressions and minor gullies. The main tributary channel also contains this material.

A minor fault traverses the upper part of the gully alignment. This was not observed within the footprint of the proposed cleanfill, but the orientation of the gully suggests it is fault controlled. This is not an active fault and is not a concern in terms of the cleanfill activity.

### 2.3 Natural Drainage System

As described above, the proposed site is within the upper reaches of the Pauatahanui catchment. The Pauatahanui catchment has an overall area of around 43.4 km\(^2\) and the main stem of the Pauatahanui Stream has a linear length of 9.6km. In the vicinity of the site, the main stem runs alongside and to the east of SH58. The upper catchment contains pockets of bush and shrubland, while the middle and lower catchment is largely in exotic pasture with shelter belts. Pauatahanui Inlet is a sensitive estuary and wetland area, which has suffered from excessive sedimentation over the past 40 years due to land development.

The tributary of Pauatahanui Stream which would be mostly affected by the proposed cleanfill is unnamed and joins the main stem approximately 8.6km upstream of Pauatahanui Inlet, immediately to the west of SH58. The tributary drains part of the north-western face of the Belmont hills. It has a catchment area 0.5km\(^2\), a total length of 1.5km and a maximum elevation of 350m above sea level, falling to an elevation of 120m at its confluence with Pauatahanui Stream. The upper catchment of the tributary is a mixture of pasture with large areas of regenerating bush. The lower reach is in pasture and is grazed with no significant riparian vegetation and little, if any, stream bank fencing.

The tributary passes through a culvert under SH58 before joining the upper reaches of Pauatahanui Stream. This culvert has a large overhang at its downstream end, forming a restriction to the passage of fish upstream.

The tributary has a typical wetted width of 1 to 2m and predominantly gravel, cobble and bolder substrate. It has a moderately steep gradient towards the upper end of the sub-catchment beyond the

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\(^1\) As modelled for the site – see discussion in section 5.6.2 of this report.
proposed cleanfill site. Closer to SH58 there is a lower gradient, lower flow rate, a soft substrate, and occasional deep pools. Here there is an almost complete lack of riparian vegetation, and unrestricted stock access to the stream. There are a number of small seeps and some small surface wetland areas which are trampled by stock. Figure 2.3 shows the main tributary and its context.

Figure 2.3 DCR Stream Systems
There are three other smaller unnamed watercourses that drain parts of the site area. They pass under SH58 through smaller culverts to join the main stream, upstream of the main tributary affected by the project.

Appendix 4 “Dry Creek Replacement Cleanfill – Stormwater Assessment Report”, provides an introductory description of the hydrology of the site, focussing on the main tributary.

### 2.4 Aquatic Ecology

The present aquatic ecology values of the main tributary affected by the application have been investigated. Details are given in the report “DCR Cleanfill, Pauatahanui: Assessment of Effects on Stream Ecology”, included as Appendix 5 to this report.

There are two additional minor short watercourses which the cleanfill will affect. These drain from the Belmont Regional Park and pass under SH58 upstream of the main tributary on the site, to join the upper reaches of the Pauatahanui Stream. They are almost certain to be ephemeral/intermittent in nature and have not been subject to specific investigation as to their aquatic ecology. However, it is likely to be less diverse than that of the main tributary.

The main subcatchment affected by the project consists of a permanently-flowing main stem and several tributaries, most of which appear to be ephemeral/intermittent. The headwaters of this subcatchment are within an area of regenerating bush, rarely disturbed by grazing animals, but the lower parts run across open pasture with full stock access to the stream bed.

As noted above, the main tributary has a typical wetted width of 1m – 2m. It has an average centre channel depth of 0.13m and a total discharge under normal conditions of approximately 20 litres/second. It is described as being capable of supporting a diverse and abundant invertebrate fauna, but with limited value as fish habitat due to the culvert acting as a barrier.

The water quality in the proposed cleanfill footprint has been found to be reasonable, with slight nutrient enrichment associated with agricultural land runoff. Higher quality water is found upstream of the site, as evidenced by the findings of the ecological surveys. The macroinvertebrate community is extensive and diverse in the upper area, including taxa from pollution-sensitive groups. Within the footprint area, diversity is still good, but a reduced range of species indicates lower water quality.

Fish surveys revealed populations of long-finned and other eels, banded kokupu and koura within the tributary, both within and above the proposed site. There is less diversity of species here and in the immediately adjacent reach of the Pauatahanui Stream than has been recorded elsewhere in the catchment.
2.5 Terrestrial Ecology

The existing vegetation is described in the report “Dry Creek Replacement Cleanfill, SH58, Porirua: Assessment of Terrestrial Ecological Effects”, included as Appendix 6 of this report.

Above the application site, the vegetation of the upper gully consists of almost entirely of early successional pioneer communities typical of the Belmont and Judgeford Hills, predominantly secondary regenerating forest and scrub dominated by manuka. The manuka and kanuka tends to occupy the north-facing slopes, with broadleaf species, including mahoe, are dominant in wetter areas including south-facing slopes and gullies. This vegetation is almost contiguous with larger areas of regenerating indigenous broadleaved vegetation further to the west and south, largely within the Belmont Regional Park.

Within the area directly affected by the application there is some regeneration by tahinau, manuka and other small shrub species. The extent of this area (where vegetation exceeds 3m in height) which will be disturbed is estimated at 0.7ha. The dominant vegetation within the application area is grass pasture land.

There are a number of seepages above and within the site. Those higher in the catchment demonstrate greater diversity of species, and are not as affected by stock grazing as are those within the proposed cleanfill area and downstream of it.

A limited range of bird species was noted, and the lizard population appears to be very small.

2.6 Physical Resources

The main physical resource in the vicinity is SH58, immediately to the north-east of the site. SH58 provides the only main road connection between the Hutt Valley and the Porirua urban area. It carries approximately 15,600 vehicles per day in both directions. It will connect in the future to the planned Transmission Gully Road of National Significance.

Other physical resources in the area include Mt Cecil Road. This is effectively a cul-de-sac, with a small number of dwellings accessing to it. Some of these dwellings are within line-of-sight of the proposed cleanfill.

A Transpower 220kV line runs in an elevated position to the south-west of the application site, connecting the Judgeford and Haywards substations.

2.7 Tāngata Whenua Context

The site is within the rohe of Ngati Toa who have mana whenua status. The iwi is represented by Te Runanga O Te Toa Rangatira, based in Porirua.
For reasons of history, Te Ātiawa Whānui and others also have a residual interest in the area. They are represented by the Port Nicholson Block Settlement Trust and the Wellington Tenths Trust.
3 DESCRIPTION OF PROPOSAL

3.1 General

Resource consents are sought for the development and operation of a staged, long-term, cleanfill activity on the site, as a replacement for the current Dry Creek cleanfill.

Key aspects of the proposed activity are described and discussed below under the headings of:

- site access
- cleanfill development, including staging
- water management systems
- geotechnical and cleanfill design
- operations and management
- environmental offset / compensation proposal

Table 3.1 provides a summary of key information about the proposal.

Table 3.1 DCR Key Information

<table>
<thead>
<tr>
<th>Stage</th>
<th>RL Max</th>
<th>Estimated Duration</th>
<th>Stage Volume</th>
<th>Stage Area</th>
<th>Stream Piping Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>RL158</td>
<td>6 months</td>
<td>-</td>
<td>1.96ha</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>7 years</td>
<td>220,000m³</td>
<td>1 &amp; 2 = 4.39ha</td>
<td>280m</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>20 years</td>
<td>530,000m³</td>
<td>1, 2 &amp; 3 = 6.89ha</td>
<td>80m</td>
</tr>
<tr>
<td>4</td>
<td>RL200</td>
<td>30 years</td>
<td>1,000,000m³</td>
<td>1, 2, 3 and 4 = 13.87ha</td>
<td>400m</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>57 years + 6 months</td>
<td>1,750,000m³</td>
<td>13.87ha</td>
<td>760m</td>
</tr>
</tbody>
</table>

3.2 Site Access

Access to the site is proposed through a new controlled access point onto SH58. The site will be secured out of hours. The access and its intended management are fully described in the report in Appendix 7 – “Winstone Cleanfill, Haywards Hill – Transportation Assessment Report”.

The location for access takes into account sightlines and acceleration distances on SH58. It is proposed to remove an existing substandard passing lane in this location which will provide the opportunity to develop a high standard at-grade intersection for the site. A new right-turn lane is proposed to be developed in accordance with the New Zealand Transport Agency (NZTA) State Highway Design Standards and Austroads Guidelines. A new left-turn deceleration lane will also be developed on the downhill section from the south. It is proposed that the access road itself meet NZTA requirements at
the intersection in terms of maximum grade at the approach onto SH58 (5% grade for first 20m) and lane widths (allowing for two lane exit).

The access road into the property will also be designed to meet or exceed the minimum standards of the District Plan and the Council’s engineering standards, including grades, widths of seal, horizontal curvature and other requirements.

To achieve the above, modifications to SH58 are also required (although not directly part of the applications). It is proposed to shift the existing road centreline, and with it the northbound traffic lane of the highway toward the site so as to develop a right-turn bay into the site from the north, and an associated acceleration lane for right-turning traffic leaving the site and travelling south. There will also be a deceleration lane for traffic approaching the site from the south on the western side of the highway. These will be developed in accordance with NZTA’s Manual of Traffic Signs and Markings (MOTSAM) for a rural highway intersection. No merge lane is required on the left-turning exit from the site. Traffic exiting the site will be travelling downhill which will enable adequate acceleration to merge safely without the additional merge lane.

Upgrades will be achieved primarily with the use of resurfacing and new roadmarking, rather than any major widening or realignment of the main carriageway. It is proposed that this work will be done at the applicant’s expense in advance of any works on the site itself. This will be subject to a specific construction and traffic management plan, to be agreed with the NZTA (ideally in conjunction with PCC).

### 3.3 Cleanfill Development

#### 3.3.1 General

It is proposed to develop the cleanfill on a staged basis. The total extent of the stages is shown in the plan attached to the application in Part One of this document, and each of the four stages is shown as a separate plan in Appendix 2.

In summary cleanfill activity will commence with the construction of the intersection and an access road off SH58 and the development of a level area for cleanfill reception set back approximately 250m from the junction with SH58 and largely on the paper road. The development will work its way a further 500m across the fill face to a retaining and supporting structure to the west of SH58, including clean filling to RL 142m. This development is referred to as Stages One and Two. Stage Three allows filling up to RL 158 and Stage Four fills the site to RL 200 with the establishment of a gently mounded platform over most of the area (excluding access road and batter area).

Specific stage details are provided in Sections 3.3.2 to 3.3.5 of this document.

The final fill will result in a contoured surface which is largely suitable for stock grazing, although some of the steeper batters may be planted with indigenous vegetation for long term stabilisation and
amenity purposes. In addition, there will be some screen planting on some batters and in the vicinity of the toe of the fill.

On-site facilities include a small office and amenity building, which will be located as shown on the plans, allowing for on-site queuing, vehicle storage and parking. The weighbridge will also be located in this vicinity. These, along with the other necessary operational and site management facilities will be constructed during Stage 1. Most will remain in the same location for the term of the activity on site, although some operational facilities will necessarily need to move with the staging of the cleanfill.

Reception and working areas of the operation will be fenced for security and the active fill area and revegetation areas will be subject to temporary fencing for stock management.

Effectively, the existing Dry Creek operation will simply be transferred to the proposed DCR site including the reception and inspection office. It is expected that a standard of site management similar to that at the current Dry Creek operation will be achieved.

### 3.3.2 Stage One – Access and Pre-Filling Activities

Appendix 2 shows the footprint of the area affected in this Stage. Figure 3.1 gives an indication of the nature of the area affected by the Stage One development and its wider context. In this photo, the SH58 access point is close to the left-hand side of the photo, and the reception area slightly downhill from the small shed near the centre of the photo.

Stage One is expected to take approximately 6 months, and will be undertaken in conjunction with works on SH58 which will give access to the site and activity.

This initial stage of works involves achieving a safe and long term access to the site. This work involves a cut to fill operation at the SH58 intersection in addition to undertaking the associated works on SH58 described in section 3.2 of this report.

As can be seen on the Stage One plan in Appendix 2, the access road will be formed in its long term location to approximately RL 158, including the reception and parking area. Once formed, this access will either be stabilised with metal or sealed to ensure long term functionality.

The access involves work on part of the paper road, Felix Road. This has been noted in section 1.5 of this report. The paper road area will involve a degree of cut and fill earthworks in forming the access and the area for reception and parking.

Beyond this point the access track will continue to the north to provide access to the toe of the fill area. As shown on the Stage One plan, this access will be placed behind the immediate ridge on the site (to the east and between the access and SH58), which will remain intact throughout this stage of works (and largely intact throughout the life of the cleanfill).
Fill activity during this stage will comprise any excess cut material from the access formation and also will involve the importation of cleanfill to achieve final Stage One contours. Filling within the small gully systems will be to engineering standards, and will involve installation of subsoil drainage.

![Figure 3.1 View Towards Access Location and Stage One Area](image)

Topsoil from the footprint of the works will be stripped and subsequently stored on-site in a way that provides for utilisation on batters and for future stage rehabilitation works. These stockpiles will be located within the footprint of the wider cleanfill area at all times.

Erosion and sediment controls will be put in place during Stage One to ensure that discharges are minimised and effects managed appropriately. For this stage of works the design will be based around four sediment retention ponds to be established around existing drainage outlet points. Three of these four ponds will remain in place for future stages or works. The location of these ponds and their catchments is shown in the plans attached to the Erosion and Sediment Control Plan, Appendix 8 to this report, which also includes a general description of their design and operation. Sediment Retention
Ponds 1, 2 and 3 will be operational throughout Stage One, with continuing roles for the life of the cleanfill operation as described in section 3.4.2 of this report and Appendix 8.

During the six-month period of construction, there will be little traffic accessing the site as only site construction workers will be involved, with possibly a limited imported volume of cleanfill if on-site volumes are insufficient.

Machinery on-site is expected to include (or similar):

- a 20 tonne excavator
- a motorscaper
- a bulldozer/compactor
- a water cart.

Further ancillary machinery will also be associated with activities such as the completion of the SH58 improvement works and revegetation of the accessway batter slopes.

3.3.3 Stage Two – Shear Key and First Fill Lift

The Stage Two footprint and contours are shown in Appendix 2.

The Stage Two works involve several critical operations including shear key establishment, toe buttress development, piping of a portion of the main tributary and also the commencement of filling.

The purpose of the shear key and buttress is described in section 3.5 of this report.

Shear key establishment will be undertaken in the vicinity of the toe of the fill, some 25m to the west of SH58. This involves working across the main tributary stream system to install the start of long-term drainage and the shear key footings. A fine weather window will be identified and a stream diversion put in place through either a physical diversion channel or through a pumping regime. This will effectively allow a “dry” environment to be established for the two weeks needed to construct the shear key. Dirty water will be pumped for treatment in Sediment Pond 4, constructed as part of Stage One works.

A key component of Stage Two works is associated with piping of approximately 280m of tributary length and other associated drainage to allow for the first fill lift. The construction methodology will involve installation of the pipe network in an “offline” location as much as practical and diverting tributary flows into the completed pipe network as work progresses. As well as the main pipe, smaller pipes will intercept any springs and seepages within the fill area and pipe them to the main tributary pipe system. Some surface water may also be intercepted and directed into this piped system via “rock chimneys” in the fill surface, as described in Appendix 8. The inlet and outlet design for the pipe network will be similar in nature to that utilised within the existing Dry Creek operation, as described in Appendices 4 and 8.
Stage Two includes progressive culverting of the stream over a length of some 280m as the filling proceeds. As the fill rises the toe buttress, described further in section 3.5 of this report, will be constructed above and behind the shear key, as shown in Appendix 2. In addition, an open channel will be progressively constructed along the northwestern edge of the fill, as shown on the Stage Two plan in Appendix 2 and described in Appendix 4 and 8. This will be formed by means of a compacted bund on the existing land surface where the fill meets natural ground. It will be planted as necessary and may have some rock protection installed in places. This channel will act as an overland flow path for flood events and will also intercept any ephemeral / intermittent streams or springs encountered above the finished cleanfill contour.

The toe batter will be constructed on a gentle IV:2H slope, with regular benches. These benches will be designed to intercept surface water flow and drain back into the cleanfill. As the toe of the fill reaches a bund height of RL 142, the existing farm access track will need to continue to be maintained and will be established as necessary across the face of the fill at approximate RL 140. This is shown on the Stage Two plans in Appendix 2.

The face of the toe batter will discharge into Sediment Retention Pond 4. Further sediment retention ponds may be required to be established along the face of the toe to avoid long flow paths and ensure appropriate stormwater treatment.

During Stage Two it is proposed to plant a line of trees northwest of the cleanfill which will grow as the cleanfill height increases, to provide relief from the benched contours of the toe buttress. This is as shown in Appendix 9 “Assessment of Landscape and Visual Effects”.

Once the toe is established, filling with clean fill will occur to the south-west designed and managed to establish an essentially flat platform at an approximate RL 142. This filling activity will require the access from Stage One to be relocated and raised as filling progresses.

The cleanfill operation will include the progressive stripping and storage of topsoil as required, to provide the necessary footprint for filling. Topsoil will be stripped as needed and stockpiled on the extremities of the site to allow for ease of respreading through the future stages of the fill operation. The area for the placement of fill will be limited to no more than 5.0ha open ground at any one time. Stage Two involves fill volumes up to RL 142m. This equates to approximately 220,000m$^3$ to be imported onto site. The duration of Stage Two is dependent upon fill supply. It is expected to be over an approximately 7 year period.

Machinery on-site will include:

- a 20 tonne excavator
- a bulldozer/compactor working at the fill face
- a bulldozer/compactor working on the fill surface
- a water cart
- truck movements to and from the site
3.3.4 Stage Three – Fill Lift to RL158

The Stage Three footprint and contours are shown in Appendix 2.

Stage Three works involves several activities. As with the earlier stages the development will be subject to detailed design to ensure best layout and sequencing within the footprint of this stage. The key activities are as outlined below.

The culvert length will require extending to RL 158 to allow for the next fill lift. This involves the piping of a further approximately 80m of tributary length (undertaken in stages as works progress) and other associated drainage to allow for the second fill lift.

This piping activity may not occur as the first activity within this stage. Other activities such as the front batter establishment and filling itself may be able to progress first within the footprint, if practicalities and environmental controls allow for such a sequence.

The front batter will require extension from RL 142 to RL 158. This will occur at the same batter slope and with the same methodology as the first lift. Topsoiling and stabilisation of this front face will continue as the fill progressively moves towards RL 158.

As part of these works the access provisions previously utilised to the toe of the fill will be removed and the permanent access will be provided to RL 158. This access will likely be formed from stabilised granular material to this point. With the access in place, filling will then occur at an established tip head and will work from the front to the back of the fill with topsoiling and seeding occurring as final grades is achieved.

The overland flowpath will be continued around the finished fill footprint on the western extent of the footprint. As with the earlier stage, this will also be designed as a surface stream to intercept and take flows from the side tributaries and will be progressively established as final contours are achieved.

Fill volumes up to RL 158 equate to approximately 530,000m$^3$ of cleanfill to be imported onto site. As with Stage Two the area within which this fill will be placed will be limited to no more than 5.0ha exposed ground at any one time.

The duration of Stage Three is dependent upon fill supply, however is expected to be over approximately a 20 year period. Machinery used on the site will be the same as for Stage Two.

3.3.5 Stage Four – Completion of Fill

The Stage Four footprint and finished contours are shown in Appendix 2.
Stage Four is essentially a replication of Stage Three, except that it also includes the establishment of the final overland flow path around the fill footprint and also the establishment of the fill back batter. Fill will be established to RL 190 which progressively moves towards RL 200 at the upper end of the footprint gully as shown on the Stage Four plan in Appendix 2.

Figure 3.2 shows the area of upper end of the proposed cleanfill – approximately 5m lower than the base of the large pine tree in the photo.
The culvert length will require progressive extending to RL 200 to allow for the completion of the cleanfill. This involves the piping of a further approximately 400m of tributary length and other associated drainage to allow for the final fill lift, using similar methodologies.

The front batter will require a further extension from RL 158 to RL 190 and, as with the previous stage, this will occur at the same batter slope and with the same methodology as the previous lift. Topsoiling and stabilisation of the front face will continue as the fill progressively moves towards RL 190.

At the top of the fill (RL 200) a gentle batter will be established back into the gully and the bypass channel will be established around the finished fill footprint on the western extent of the footprint. This has been designed as a replacement stream system and will also act as a flow path to take flows from the upper gully in a stabilised manner around the fill. The termination of the new stream channel is subject to design and it will be diverted back into the main tributary upstream to match the downstream junction at the toe of the fill embankment. At the completion of filling, it is intended to engineer the top of the culvert to provide additional stormwater capacity during storm events. The culvert will continue to collect water penetrating the fill, and will discharge this below the toe. While the top end of the culvert will not be sealed, the flow will be diverted into the replacement surface stream. Necessary bed and bank planting will be undertaken prior to this step.

Fill volumes for Stage Four equate to approximately 1,000,000m$^3$ of cleanfill to be imported on to the site. As with the earlier stages, topsoil will be placed and managed for reuse and the exposed ground area will be limited to no more than 5.0ha at any time. The final form of the cleanfill will have a level or gently sloping upper finished surface at up to a 1:4 slope to ensure appropriate drainage.

The duration of Stage Four is dependent upon fill supply. However it is expected to be over approximately a 30 year period. Machinery will be the same as for Stages Two and Three.

### 3.4 Water Management Systems

The management of the existing streams that cross the site and the stormwater which will be precipitated onto the site is a key design element. This is described in two specialist reports, Appendices 4 and 8 to this report – “Dry Creek Replacement Cleanfill – Stormwater Assessment Report” and “Erosion and Sediment Control Plan – Dry Creek Replacement”.

It is intended that on-site water management will meet appropriate standards before discharging from the site. Draft conditions to achieve this are provided in section 6 of this report. These include monitoring conditions and conditions relating to detailed design and management of the necessary site infrastructure and erosion and sediment control systems.
3.4.1 Small Streams South of the Main Tributary

There are two small streams which will be affected by the Stage One access earthworks. These are shown on the plans in Appendix 2, and plans attached to Appendix 8. The first stage of construction will involve construction of Sediment Retention Ponds 1, 2 and 3 below and above the areas to be modified. The small catchment for Sediment Retention Pond 3 will be initially unmodified, and then that pond will operate as a collector from the access earthworks, prior to water being piped to bypass the construction area. However, it is likely that this pond will also take runoff from the parking and reception area and soil stockpiles in the longer term. Sediment Retention Ponds 1 and 2 will collect stormwater from active working areas, which will be designed to drain into the two ponds.

Subsurface, as well as surface drainage systems will be required to be installed at this early stage of construction, to ensure that future scouring under the access road is prevented and to protect the permanent road alignment.

In the longer term, following planting in the first season, these areas will become stabilised and revegetated. Sediment Retention Ponds 1 and 2 will not be required in the long-term and it is anticipated that these will become artificial wetlands.

The indicative design and mechanisms involved in the sediment retention ponds are outlined in section 3.4.4 of this report.

It is not proposed to modify the existing culverts below SH58 (other than for minor modifications to improve fish passage and to manage debris) through which the water treated by these three sediment retention ponds will pass before joining the main stem of the Pauatahanui Stream.

3.4.2 Culverting of Tributary and Bypass Flow Path

The existing main tributary that crosses below the main area of cleanfill is proposed to be progressively piped as the cleanfilling proceeds. While the full length of the main tributary is 823m, only 760m of piping is required to culvert it. The pipe will be designed to take full flood flows from the upper catchment area, as described in Appendix 4. In addition, from Stage Two, there will be an alternative flood path on the north side of the fill area.

During the shear key foundation works, preliminary drainage for the fill will also be installed in and close to the existing stream bed. All stream flows will be around the works area and any “dirty” water that is located within the shear key excavation will be pumped to Sediment Retention Pond 4 shown on the plans attached to Appendix 8. On completion of the shear key the stream will be diverted back to its original channel upstream of the SH58 culvert location prior to the next works phase.

The pipe will be laid progressively through the stages (as has been done at Dry Creek) with the entrance always well above any cleanfilling activity to ensure separation of clean water flows.
However, over the length of the stream, there will be practical difficulties with construction of the various stages in a totally offline position. As a result there will be places where the culvert is placed directly within the existing stream bed. Where necessary, pumping around, using coffer dams and pump systems, will be carried out to ensure works are always undertaken in the “dry”. Further to this methodology, which is described in Appendix 8, progressive stabilisation will occur as works progress up the tributary system. Figure 3.3 shows the current stream bed in its typical form.

As well as the main pipe, there will be a system of pipes collecting water from any small springs or seepages disturbed by the filling, and subsurface drainage systems (e.g. perforated pipes) will be installed to collect seepage. Chimney drains, as described in Appendix 8, may also be used to collect surface water and transfer it to the subsurface piped system.

**Figure 3.3 Tributary of Pauatahanui Stream to be Piped**
The other component of surface water management is the proposed surface water channel to be constructed on the northwestern side of the fill, in accordance with the descriptions in Appendices 4 and 8. This will intercept the northern tributaries of the gully as the fill advances. It is essentially a bunded channel on natural ground at the edge of the fill which will be designed as a stormwater bypass. The soil surface and existing vegetation will provide a seal, and there will be additional planting, and, if necessary, rock lining in steeper places. This will provide protection for the new channel from scouring and also help create a variety of future habitat.

At the completion of the fill, the main pipe will be engineered to provide an alternate pathway for storm event flows, with the inlet raised appropriately above the inlet invert of the diversion channel. Internal drainage will continue within the fill, and the main pipe will continue to contribute to some downstream flow.

It is not intended to modify the existing culvert below SH58, other than the early stage improvement of overhangs to enable improved fish passage.

3.4.3 Stormwater and Sediment Management

Erosion and sediment controls will be put in place during Stage One to ensure that adverse effects of sediment-laden discharges are minimised and effects managed appropriately. For the initial stage of works the design will be based around four sediment retention ponds to be established around existing drainage outlet points. Three of these four ponds will remain in place for future stages or works, with Sediment Retention Pond 2 being retired as a wetland once the access area is established.

Sediment Retention Pond 1 will be located immediately south of the access to SH58. This will be located within the existing gully system and will remain as a long term pond throughout the operation of the fill site.

Sediment Retention Pond 2 will be a temporary pond located at the toe of the fill embankment as shown on the Stage One plan in Appendix 2. This sediment retention pond will discharge over a grass buffer zone prior to discharging into the existing gully. This sediment retention pond will be temporary from the perspective that it will very quickly have only a stabilised fill batter discharging to it. The fill batter will be topsoiled and stabilised with a grass cover as work progresses up the slope. The sediment retention pond can however remain post this stabilisation as a “safety measure” whilst other works continue.

Sediment Retention Pond 3 will be located on the north western extent of the access formation as shown on the Stage One plans. The sediment retention pond will be utilised for treatment of runoff from potential topsoil stockpile locations and also will provide long term water quality treatment for the development of future stages. In addition, it will be used as a source of water to fill storage tanks on the site for dust management purposes, and will itself contain water for this purpose. The sizing and design
detail will be determined as part of the Annual Management Plan process, but it may be oversized for this purpose.

Sediment Retention Pond 4 is to be located between the future toe of the fill and SH58. This sediment retention pond will provide not only short term Stage One treatment, particularly from the upper stages of the access road, but also longer term water quality treatment for future stages.

Figure 3.4 shows the general location of the fill toe and Sediment Retention Pond 4, in the centre of the photo.

These four ponds are the primary treatment areas outside the fill area itself. There may be additional, more temporary, sediment retention ponds developed on the fill surface as filling proceeds. These would be subject to specific location and design approval by GWRC, as part of the ongoing management approach.
All sediment retention ponds will be appropriately designed and constructed, with appropriate use of geotextiles. The ponds will use floating decants to limit sediment discharge. Preliminary details are given in Appendix 8. They will require regular cleaning and maintenance, using procedures to be detailed in the Cleanfill Management Plan.

During filling the surface of the fill will always be sloped to the south west to ensure drainage to the back of the fill. Any runoff from the face of the fill will either be diverted back into the fill through the reverse slope of the benches, or managed through the earlier stage sediment retention ponds. The platform area will be managed via a combination of ponds or drainage to “chimney drains” (where the surface is stabilised and treated) with the same design as those at the existing Dry Creek operation. These will be connected via a granular chimney to the pipe network manholes and allow drainage through the fill. As noted, any surface runoff at the back (south western extent) of the fill will be treated through smaller sediment retention ponds.

These measures are shown on plans attached to the Erosion and Sediment Control Plan in Appendix 8. The plans show the location of the main ponds and the main directions of both clean and dirty water drainage.

The final form of the cleanfill will slope gently forwards to the north and west so that all drainage is across the stabilised and planted fill surface to the bypass channel and the batter slope. The batter slope is formed with the benches sloping gently backwards, so that surface water is captured and directed back into the cleanfill itself.

### 3.4.4 General Principles

The general principles which will be applied to sediment, erosion and water management on-site are set out in Appendix 8, the preliminary Erosion and Sediment Control Plan. It is intended that an Erosion and Sediment Control Plan should be prepared as part of an overall Cleanfill Management Plan, which will be prepared and regularly reviewed. The outline of such an approach is included in draft conditions in section 6 of this report. Inherent in the overall approach is water quality monitoring, annual reporting and adjustment of systems (design if necessary, and management) if unforeseen circumstances eventuate.

The overall principles of the approach are:

- careful design, approval of design, and construction in accordance with the design
- competent on-site management of construction and operational stages, including monitoring and maintenance
- as far as practicable, avoidance and minimisation of sediment runoff through erosion processes by minimising exposed surface areas, managing slopes, and progressive stabilisation and rehabilitation
- application of the principles in GWRC’s Erosion and Sediment Control Guidelines, Chapter 3
- exposed surface areas not to exceed Sha at any time
• revegetation and grassing as soon as practicable (including stockpiled top soil resource)
• surface fill compaction, but management of this so that excessive fines are not created (minimising both potential dust and fine sediment in runoff)
• working in existing watercourses to be minimised
• regular maintenance of drainage channels, and pipe and sediment retention systems – clean out as necessary
• undertaking construction works, and particularly works that may impact streams, at suitable times, including avoiding works during flooding
• anticipating significantly adverse weather conditions and securing the site as far as practicable.

An overall responsive approach will be adopted, so that any potential issues are identified and addressed at the earliest possible time.

3.4.5 Water for Dust Control

Dust control requires an available source of water. Rather than abstracting water from on-site streams Winstones proposes to collect and store water on-site. It is intended that Sediment Retention Pond 3 will be designed with sufficient additional capacity. As well as functioning as a stormwater treatment system, it will also collect and hold stormwater to fill on-site tanks comprising storage systems for dust cart use. It is intended that water from Sediment Retention Pond 2 may be utilised as a backup water supply (with appropriate measures in place to ensure sediment control functionality is not impacted). Details of this system will be included in the Cleanfill Management Plan.

3.5 Geotechnical and Cleanfill Design

3.5.1 General

A geotechnical report on the site and relevant elements of cleanfill design is presented as Appendix 3 to this report.

The report describes the ground conditions of the site. As noted, the underlying geology is weathered greywacke. The site is some 2km north of the main Wellington fault scarp, and there is a minor (inactive) fault in the gully to the west of the site which may have influenced catchment development.

Other surficial material includes Holocene terrace deposits over the lower parts of the site, residual soils in the upper parts, and some alluvium in the vicinity of the streams. The site shows little evidence of slope instability.

The report concludes that the site is suitable for the cleanfill activity, subject to appropriate foundation treatment on the downhill face, including seismic design. Although some displacement in a significant earthquake could be expected, this would be displacement to a maximum of a metre and would not endanger and person, adjoining property, or the operation of SH58.
There are some weathered greywacke outcrops on the site. This material may be suitable borrow material for construction of shear key and/or toe buttress, as well as for batter armour formation. Further work is necessary to prove the suitability of this material.

3.5.2 Shear Key and Toe Buttress

The shear key is an element of the cleanfill design intended to provide support for the remainder of the cleanfill structure and to resist lateral forces including fill and ground-water pressure, as well as providing seismic support. For the purpose of this cleanfill, the geotechnical report, Appendix 3, recommends excavation to bedrock of the existing wet low-strength material in the toe area of the proposed cleanfill across a 30m width, and replacement with engineered weathered rock fill, with subsurface drainage, to an appropriate detailed design specification. The rock fill of the shear key will be built up 5m to 10m above the tributary bed across the width of the gully. It will then be continued as a toe buttress forming the batter face of the fill of decreasing width to a minimum 5m at the top of the filled face (158m, completed in Stage Three).

Once the permanent stream piping and any other necessary drainage through the shear key is established, then the toe of the fill will be established. This will be developed from low grade granular fill (not cohesive material) with necessary geotechnical and structural strength, with a drainage blanket to be established behind this toe. The granular fill will be sourced through either an on-site borrow pit, dependent upon the resource available, or imported from an off-site source, or derived from incoming fill. If sourced from on-site it will be done so within the fill footprint area and will be independently managed from an erosion and sediment control perspective. A volume of 5,000m$^3$ material is expected to be required for this activity. This toe is expected to be on a 2:1 batter slope with benches established as the fill is raised over time. The benches will slope slightly backwards to provide drainage into the fill. The outer face of the batter will be stabilised with topsoil as the works progress and grass established to allow for future grazing. A stock access track will be provided across this face.

3.6 Operations and Management

The operations and management components of the cleanfill activity involve on-site construction management at various stages of the activity, and ongoing cleanfill acceptance and deposition on the site. Associated activities involve maintenance of installations such as stormwater treatment systems, monitoring as required and general site house-keeping. Work will be undertaken in accordance with consent requirements, a range of other relevant legislation, and a site Cleanfill Management Plan. Table 3.1 shows the range of on-site activities at any time.

Table 3.2 Summary of DCR Proposed Activities

<table>
<thead>
<tr>
<th>Description</th>
<th>Key Land Use Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area of Cleanfilling</td>
<td>Mobile plant, operation and refuelling, cleanfill placement and compaction</td>
</tr>
<tr>
<td>Includes filling activity, tributary works, access provision, shear key foundation</td>
<td></td>
</tr>
</tbody>
</table>
### Description | Key Land Use Activities
--- | ---
and toe batter construction | Amenities room  
Vegetation clearance  
Any stockpiled material and fill “quarantine” area

**Balance of Property** | Continues to be grazed by landowner

**Water Management**  
Various sediment retention pond structures  
Tank and pond storage of water for dust control | Water treatment  
Pond cleaning and removal of sediment  
Water-cart refilling for dust management

**Buildings/Structures**  
Site buildings at reception area and near cleanfilling area | Workshop activities, office and amenities building  
Storage of hazardous substances, including diesel fuel  
Portaloos or similar at office and working areas  
Water storage tanks

**Access**  
Site access | Vehicle access from SH 58

### 3.6.1 Construction Stages

The development stages of the cleanfill are spread out over many years. Construction stages involve initial stages of access and reception area development, shear key, toe buttress and water and sediment management system construction, and progressive stages of topsoil removal, replacement and planting, extension of piped drainage systems and the overland flow channel, and additions to surface drainage systems and/or resizing of sediment treatment systems over time.

Detailed design of earthworks, and stormwater management systems will be undertaken and provided to GWRC for approval (possibly in consultation with PCC) prior to their staged installation over time, in accordance with the Cleanfill Management Plan. Any additional consents (such as Building Act consent for the shear key design, if necessary) will be obtained.

Any external contractors involved in the construction stages will work within Winstone’s contract specifications, which will include conditions of consent and approved plans.
One or more borrow pits may need to be established as part of the fill construction. This would be within the direct footprint of the cleanfill itself. If established, such borrow areas would be independently managed in terms of water management. The rock product would be utilised within the cleanfill footprint.

As with other parts of the construction activity, this would be integrated within the details provided to GWRC for endorsement.

### 3.6.2 Cleanfill Acceptance, Management and Monitoring

Cleanfill management and monitoring will be carried out as documented in a Cleanfill Management Plan to be endorsed by GWRC. The Cleanfill Management Plan will include details on the methods of site management, including acceptance/rejection and placement and compaction of cleanfill, dust and noise management and other matters.

All material received at the proposed Dry Creek Replacement facility will be cleanfill, determined in accordance with the description of cleanfill in the MfE Cleanfill Guidelines (2002) Table 4.1 with the additional conditionally acceptable material outlined below. The operation is essentially replicating the existing Dry Creek proposal, which has operated for many years in accordance with such guidelines.

Conditionally acceptable materials are reinforced concrete, and small amounts of vegetative material such as untreated timber and topsoil. Concrete slurry is also accepted.

To avoid the chance of contaminated or other unacceptable material being placed in the cleanfill, the following procedure is used:

- a visual inspection of incoming material is made at the site office looking for:
  - any load that smells septic/acid/rancid/fragrant/of hydrocarbons or other odours
  - bright or distinct colours – black/red/orange/blue/green/white
  - obvious staining
  - putrescible or viscous material
  - non-compactable loads
  - asbestos
- the details of all loads are recorded at the site office
- if the load is acceptable, the registration number of the truck and the origin of the load are recorded
- the carrier is asked as to the source of the material, the estimated quantity, and the developer. A record of all these details is kept
- if the carrier is turned away they are given written advice explaining why their load was refused entry
- if accepted, the trucks are required to back up to the active tipping face or to a designated stockpile area as directed
• when tipped, the material is visually inspected by cleanfill personnel. If prohibited substances are present or suspected, tipping in that area will be halted until the substance is removed. The registration number of the truck and the origin of the load is then recorded. The carrier is questioned as to the source of the material, the estimated quantity, and the developer.
• the substance is required to be removed by the carrier, or an alternative arrangement is made. A written warning may then be issued to the carrier and the developer.

The cleanfill operation will involve placement and compaction of fill using both tracked and wheeled earthmoving equipment. Fill may not be able to be placed and compacted when it is excessively wet or significantly above its optimum moisture content, so any saturated cohesive materials may be stockpiled in a separate area to allow moisture content to reduce before compaction. Containment cells may be utilised and capped over until material is ready for permanent filling.

Some concrete slurry waste will be received in a relatively wet state and contained within a bunded semi-lined (with impermeable material) area before being encapsulated within the cleanfill. Volumes of slurry accepted are in the order of 50m$^3$, or 8 six-wheel trucks per week on average. This reflects the existing operation at Dry Creek where such material is deposited within bunds located on the top platform area.

After placement, material is generally distributed into thin layers to allow compaction. The overall slope of the working area will be designed to fall to appropriate surface drainage systems as earlier described. Repeated trafficking of soils by wheeled machines will be avoided to prevent over-compaction of soils. If subsoil becomes over compacted, it will be ripped prior to closure or any particular area and spreading of the topsoil layer.

Final surfaces will be re-topsoiled and sown with pasture grass species and appropriate fertiliser application in the autumn following completion. Where planting of other species is involved (e.g. alongside the access road) this will be timed similarly. A maximum of 5.0ha will remain exposed at any one time.

The effectiveness of the existing operation at Dry Creek means that there can be a high level of confidence that the approach to cleanfilling manages and contains potential contaminants and that its permanent disposal is safe.

3.6.3 Hours of Operation

Staff numbers are expected to be maintained at 2 to 6 full-time persons for normal operations.

General hours of operation will be 6am to 5pm Monday to Friday. On Saturday opening hours will be 6am to 12pm. Operations outside these general operating hours may be required in emergency circumstances such as essential maintenance or slip repairs.
In addition, Winstones is seeking the ability to operate extended hours on specific contract requirements. This is for periods of up to four days at a time, up to four times a year. This is more a district than a regional matter, and conditions to enable this are incorporated in the draft conditions in section 6 of this report.

A limited number of trucks may park on site overnight from time to time and on-site machines will park in convenient locations overnight.

3.6.4 Ancillary Activities

Few ancillary activities are associated with the cleanfill activity.

There may be some washing of truck/trays carried out on site. This would comprise the cleaning of truck trays, but not the undercarriage of machinery. A wheel wash is not planned to be included and measures to control sediment tracking on the road will be focussed around tip head management and maintaining stabilised entranceways.

A water cart will be used for dust control during the dry months and when required at other times. This will rely on water collected and stored on-site as described earlier.

There will be some on-site storage of hazardous substances, including diesel fuel. No distribution, product mixing or blending activities need to be provided for at this operation, and there will be no explosives used or stored.

Traffic management on-site will largely follow the daily patterns of movement experienced at the existing Dry Creek operation. On-site traffic management is controlled from the main office, using traffic management systems such as cones as necessary. Site roads will be progressively relocated in accordance with the Cleanfill Management Plan to minimise retracking over filled parts of the cleanfill.

3.6.5 Contents of the Cleanfill Management Plan

As the project is a very long-term one, within the context of the overall resource consent it is considered appropriate to develop and set out details for each stage, and to provide them to the GWRC for agreement by way of the Council’s endorsement, prior to the development of each stage. Stages 1 and 2 would be addressed together.

A Cleanfill Management Plan, incorporating an Erosion and Sediment Control Plan, is the proposed way by which the ongoing development would proceed.

The draft conditions in section 6 of this report set out the likely scope and content of such a plan. It is proposed that this plan would be provided to GWRC for endorsement, and to PCC for comment, on the expectation that PCC would liaise with the applicant and GWRC on any issues. Timeframes for these processes will be needed but have not yet been incorporated within the draft conditions.
In addition, it is proposed that there will be a requirement to submit an Annual Management Plan, with contents and process as set out in the draft conditions. Together, these plans will provide for a comprehensive and responsive management relationship between the cleanfill operator and the Councils.

3.7 Environmental Offset/Compensation Proposal

In recognition that the proposal involves a significant change to the current character of the area it affects, particularly the tributary stream area which will be piped, the applicant has included in the project a component of environmental offset. This involves fencing of land, which is part of the same property, in the upper reaches of the main stem of the Pauatahanui Stream on the east side of SH58, directly opposite and slightly south of the filled area. This is based on Biodiversity Offset model principles, which are beginning to be accepted in circumstances where full avoidance or adequate mitigation of effects is not possible.

The DCR cleanfill will involve the removal, within its footprint, of 952m of perennial stream, as well as 706m of intermittent and headwater streams. The offset mitigation proposed, set out in Figure 3.5 involves:

1. Revegetation planting of 15m wide riparian margins and exclusion from stock of 1,510m of degraded perennial stream, and 440m of degraded intermittent and headwater stream sections (to a plan to be approved by GWRC);
2. Removal of two fish barriers within the Pauatahanui Stream; and
3. Monitoring of the mitigation programme to ensure that sites are planted, that plantings establish, that fish barriers are removed and that pest control is undertaken for a protracted period until indigenous riparian planted areas have established.

The riparian enhancement will be undertaken in three stages commencing at years 1, 5 and 25. This staging broadly matches the timeline for equivalent piping of stream undertaken as part of the cleanfill development. The riparian enhancement programme aims to contribute towards stream enhancement and improved habitat quality by:

- Prevention of domestic stock access through new and upgraded perimeter fencing;
- Increasing channel and bank stability through dense native plantings;
- Improving the light climate and water temperatures of the stream by providing vegetation shading;
- Improving inputs of terrestrial carbon to the watercourse through diverse riparian plantings; and
- Increasing terrestrial habitat diversity through planting flower and fruit bearing plants.

The proposed 15m riparian margins will provide an indigenous habitat corridor of at least 30 metres along the length of the mitigation reaches by the time the project is completed.
While the applicant considers that there is no requirement to offset the small clearing of bush proposed, distinct areas of land within the cleanfill footprint will be retired from farming and planted (see Assessment of Landscape and Visual Effects Appendix 9, Figure 16). As there is no requirement to offset the bush being lost, this retirement is proposed as environmental compensation.

Figure 3.5 Areas for environmental offset (stream and riparian planting), and fenced area for retirement
4 STATUTORY CONTEXT AND CONSENT STATUS

This section reviews the proposed activities in terms of the RMA and the applicable regional plans.

As the cleanfill activity is relatively complex in terms of its interaction with the environment, a number of separate regional consents will be required.

4.1 RMA 1991

The following limitations apply under the RMA (paraphrased):

- **Section 13** – in relation to the bed of a river or stream, no person may:
  - use, erect, place, alter etc., any part of a structure in, on or under or over it; or
  - drill, tunnel or otherwise disturb it; or
  - introduce plants into it; or
  - deposit any substance in, on or under it; or
  - reclaim or drain it,
  unless expressly allowed by a national environmental standard, a rule in a regional plan, or a resource consent.

- **Section 14** – in relation to water, no person may:
  - take, use, dam or divert water
  unless expressly allowed by a national environmental standard, a rule in a regional plan, or a resource consent.

- **Section 15** – in relation to discharges, no person may release:
  - a contaminant into water; or
  - a contaminant onto or into land which may result in the contaminant entering water; or
  - a contaminant from an industrial or trade premise into air; or
  - a contaminant from an industrial or trade premise onto land,
  unless expressly allowed by a national environmental standard or other regulation, a rule in a regional plan, or a resource consent (note that an industrial or trade premise include premises used for disposal of waste materials).

Thus for the cleanfill activity, a range of regional consents may be needed, depending on the contents of the relevant regional plans.

4.2 Wellington Regional Plans

Rules that apply to the cleanfill activity are set out in the following sections.
4.2.1 Regional Freshwater Plan (operative 1999)

Rule 5:

“The discharge of any contaminant or water into freshwater which is not provided for in Rules 1, 2, 3, 4 or 6.”

Status: Discretionary

Comment: Permitted activity rules 1, 2, 3, 4 or 6 do not apply to the cleanfill activity. The cleanfill activity will result in discharges to tributaries of the Pauatahanui Stream. This is a catchment which is listed as a river or stream with surface water to be managed for aquatic ecosystem purposes (Appendix 2, Part B), rather than in its natural state, which Rule 6 makes non-complying. Discharges of contaminants include sediment discharges during construction, and on an ongoing basis.

Rule 16:

“The taking, use, damming or diversion of any freshwater, that is not specifically provided for in any other rules in this Plan.”

Status: Discretionary

Comment: Although the cleanfill activity does not take, or use freshwater, the cleanfill activity diverts water from several tributaries in the upper reaches of the Pauatahanui Stream. It is not thought that the diversion involves damming of the tributaries (as water is not retained), so it is not a non-complying activity under Rule 17.

Rule 50:

“The reclamation of the bed, or any part of the bed, of any lake or river that is included in Policy 4.2.10 .... is a non-complying activity.”

Status: Non-complying

Comment: The cleanfill activity will reclaim parts of un-named tributaries of the upper reaches of the Pauatahanui Stream. This is referred to in Policy 4.2.10, as it includes all rivers, streams and wetlands in Appendix 2, Parts A and B.

4.2.2 The Regional Plan for Discharges to Land (operative 1999)

Rule 10:

“Except as allowed by Rule 9(1), the discharge of contaminants onto or into land used for the disposal of waste materials, with the exception of land used exclusively for cleanfill disposal, but including disposal at a landfill, rubbish dump or tip.”

Status: Discretionary Activity

Comment: The activity is a cleanfill activity, but some fill may not meet the very strict definition of cleanfill in this Plan. Rather, the applicant seeks to discharge cleanfill as included in the MfE Guide to the Management of Cleanfills, Table 4.1, along with some conditionally acceptable items. Thus consent is sought on a precautionary basis in terms of this rule.
4.2.3  Regional Soil Plan (operative 2000)

Rule 1(2):
“Any roading and tracking activity that is located in Area 2 and, during any 12 month period, will result in a road or track having a continuous length of new upslope batter extending for greater than 200 metres with a height of greater than 2 metres measured vertically.”

Status: Restricted discretionary

Comment: It is possible that the provisions of rule may be exceeded, particularly in relation to the site and cleanfill access. Discretion is limited to 11 items set out below the rule in the Plan. These include; the duration of the consent; the carrying out, of and compliance with, measurements, samples, analyses, surveys, investigations, or inspections; provision of information to GWRC; payment of administration charges; the methods of sediment retention and sediment run-off control; rehabilitation measures; effects on soil conservation and water quality; the minimisation of vegetation, soil, slash or any other debris entering water; steps to be taken to avoid, remedy or mitigate the effects of the activity on slope stability; and effects of the activity on tāngata whenua values.

Rule 1(2):
“Any soil disturbance on erosion prone land that involves the disturbance of greater than or equal to 1,000m\(^3\) or soil, within any 10,000m\(^3\) area and within any continuous 12 month period.”

Status: Restricted discretionary

Comment: The proposed cleanfill site is within Area 2 in the Plan. Erosion prone land is defined as land in Area 2 with a slope greater than 28 degrees. There are areas within the cleanfill footprint where it is likely that the limitations of the rule may be exceeded by the cleanfill preparation and operational activity. Discretion is limited to 11 items set out below the rule in the Plan, which are the same as those that apply to Rule 1(1), noted above.

4.2.4  Regional Air Quality Management Plan (operative 2000)

Rule 23:
“The discharge of contaminants into air from any process or activity explicitly excluded from Rules 1-22, or any process or activity covered by Rules 1-22, but which does not meet the conditions attached to those rules.”

Status: Discretionary

Comment: A consent is sought on a precautionary basis in terms of this rule for the discharge of dust from the cleanfill activity. Rule 20 provides for landfilling and composting activities except where waste materials are accepted from sources other than the property on which the filling takes place. Although the activity is a cleanfill activity and therefore not technically a landfill as defined, it may not meet the narrow definition of cleanfill in the Plan (see comments with respect to the Regional Plan for Discharges to Land above). It is anticipated that the activity would meet the Rule 20 requirement that there be no dust from the activity which is offensive, objectionable, noxious or dangerous at or beyond the boundary of the property.
4.2.5 Summary of Consents Required

A range of consents is required in terms of the four regional plans that are relevant to the activity. These include:

- discretionary activity consents for discharges into water during construction and operation of the cleanfill
- discretionary activity consent for diverting tributaries of the Pauatahanui Stream
- non-complying activity consent for reclaiming parts of the beds of tributaries of the Pauatahanui Stream
- discretionary activity consent for a slightly wider range of cleanfill material than the relevant plan provides for
- restricted discretionary activity consent for on-site roading and tracking that may exceed permitted activity limitations
- restricted discretionary consent for the extent of land disturbance which may exceed the permitted activity limitations on steeper land, defined as erosion-prone.

4.3 Relevant Objectives and Policies of the Plans

There is no requirement for an AEE to outline or analyse the relevant RMA policy framework in relation to an application. However, an understanding of the policy context of the plans which trigger the need for consents can contribute to an understanding of the focus of the effects assessment that must be undertaken. This section sets out a summary and/or paraphrases key policies and policy areas in the plans referred to in the previous section.

4.3.1 Regional Freshwater Plan

This plan has a number of general objectives and policies, and then more specific objectives and policies that relate to the aspects for which specific rules have been developed.

The general objectives and policies are directed at protecting the mauri of water and respecting the relationship of tāngata whenua with waterbodies (Objectives 4.1.1 to 4.1.3), protecting natural character; protecting ecosystem habitat values and the life-supporting capacity of water and aquatic ecosystems (Objectives 4.1.4 to 4.1.6); maintaining or enhancing amenity and recreational values associated with water (Objectives 4.1.7 and 4.1.8); managing flood hazard risks (Objectives 4.1.9 and 4.1.10), and providing for the use and development of freshwater resources, subject to managing adverse effects and enabling community involvement (Objectives 4.1.11 to 4.1.17).
These general objectives are expanded through numerous policies. Principle amongst them in relation to the DCR project are (summarised):

- to have regard to topography, etc., natural flow characteristics, water quality, and ecosystems, habitats and species when considering natural character protection (Policy 2.4.9)
- to avoid adverse effects on identified wetlands, lakes, rivers and their margins when considering the protection of natural character. The is policy specifically refers to the Pauatahanui Stream (Policy 4.2.10)
- to avoid, remedy or mitigate adverse effects on aquatic habitats and freshwater ecosystems by having regard to maintaining biological and physical processes; feeding, breeding and sheltering habitat; diversity of aquatic life; fish life-cycles; and preventing irreversible adverse effects (Policy 4.2.11)
- promotion of the nationally-threatened fauna in listed waterbodies by managing water quality and flows, maintaining fish pathways, and avoiding adverse effects on areas important to life-cycle stages (Policy 4.2.13)
- encouraging the restoration or rehabilitation of freshwater resources, including wetlands, where appropriate (Policy 4.2.27)
- encouraging the development of industry guidelines and codes of practice (Policy 4.2.34)
- providing for activities which have effects that are no more than minor – as a guide, these encompass non-exclusive activities; activities that have localised and/or temporary effects on plants, animals and habitats; activities with no off-site adverse effects and no significant or prolonged decreases in water quality; no adverse effects on natural character, traditional tāngata whenua sites or uses; and no adverse effects on river bank stability (Policy 4.2.33)
- to apply appropriate conditions (Policy 4.2.35 and 4.2.36).

Specific objectives and policies that relate to water quality that are relevant to the application, summarised, include:

- to manage water quality in its natural state (subject to Policy 5.2.10). This policy specifically refers to the Pauatahanui Stream catchment (Policy 5.2.1)
- to manage (and where necessary, to enhance) water quality for aquatic ecosystem purposes (subject to Policy 5.2.10) (Policy 5.2.6 and 5.2.9)
- to have regard to specified water quality standards in Appendix 8 (subject to Policy 5.2.10) (Policy 5.2.8)
- to allow contaminant discharges which do not satisfy the above policies only in specified circumstances, including that the discharges are temporary and/or associated with necessary maintenance, or that exceptional circumstances justify granting the permits, and that it is consistent with the RMA’s purpose to grant consent (Policy 5.2.10)
- when considering resource consent applications, to have regard to the extent to which the discharge will avoid contamination that will have an adverse effect on the life-supporting capacity of freshwater and freshwater ecosystems, and how likely (meaning feasible and

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2 This includes Giant and Banded Kokupu in the Pauatahanui Stream catchment.
dependable) it will be that any discharges will avoid more than minor adverse effects on ecosystems (Policy 5.2.10A)

- to ensure that mixing zones allowed by conditions take into account the existing characteristics of the water and waterbody and the purpose for which it is being managed (Policy 5.2.11)
- to encourage discharges to land where there are less adverse effects than discharging to water and there are no significant constraints to doing so (Policy 5.2.13)
- to encourage treatment of stormwater (Policy 5.2.14)
- to promote a reduction in non-point source discharges (Policy 5.2.15).

The **water quantity and the taking, use, damming or diversion of freshwater** objectives and policies relative to the application, are summarised below. Note that, as no actual water take from a water body is proposed, a limited number of provisions are relevant. These relate to the diversions associated with the project.

- people are able to divert surface water, while ensuring that flows in rivers maintain the natural and amenity values of the waterbodies (Objective 6.1.1)
- when considering applications, to take into account the extent of adverse effects on the life-supporting capacity of freshwater and associated ecosystems (Policy 6.2.4A)
- to provide for minor or temporary diversions when they are associated with authorised works or resource consents (Policy 6.2.14)
- to allow the diversion of water provided that adverse effects are avoided, remedied or mitigated, and provide that significant adverse effects on natural and amenity values, water quality and flows, biological and physical processes, fish passage, sediment transport, flood hazard, bank stability, if not adequately offset, are avoided (Policy 6.2.15)
- to encourage water conservation (Policy 6.2.19).

The relevant objectives and policies for the **use of beds of rivers and lakes and development on the floodplain** include (paraphrased):

- appropriate uses of beds of rivers are allowed provided there is no increase in flood risk and adverse effects are avoided, remedied or mitigated (Objectives 7.1.1 and 7.1.2)
- to not allow the use of river beds for uses that have significant adverse effects on a range of uses and qualities including tāngata whenua values, natural and amenity values, water quality, flood hazard, bank stability, and water quantity (Policy 7.2.2)
- to ensure that the reclamation or drainage of a river bed is only carried out when there are no practicable alternatives, there are significant benefits to the community and it is consistent with Policy 4.2.10 (see earlier reference – natural character protection) (Policy 7.2.15).

### 4.3.2 Regional Plan for Discharges to Land

This plan has a range of objectives and policies addressing primarily land contamination, hazardous substances, and waste discharges.
Relevant to the application are objectives that regional landfills\(^3\) are sited rationally, with respect to community benefit and environmental considerations (Objective 4.1.2) and that any adverse effects from discharging solid contaminants to land are avoided, remedied or mitigated (Objective 4.1.3).

Policies seek to:

- encourage waste management on the basis of the accepted hierarchy by, *inter alia*, taking responsibility for the safe and effective management of the residual wastes\(^4\) (Policy 4.2.1)
- discourage the siting of new landfills in areas vulnerable to natural hazards, or which support vulnerable ecosystems, including wetlands, native bush and recognised wildlife habitats (Policy 4.2.6)
- to ensure that residual solid waste disposal occurs ... by way of ... disposal in cleanfills (provided that the discharge is not subject to biological or chemical breakdown) (Policy 4.2.8)
- when considering applications, to particularly consider the nature of the wastes to be discharged; the location of the site and any risk management needed; the potential for any long-term contamination or other such effects; any effects of stormwater on surface and groundwater; effects on amenity and ecosystem health and any other site values, and discharge monitoring proposals (Policy 4.2.9)
- to require site-specific management plans (Policy 4.2.10).

### 4.3.3 Regional Soil Plan

The main objectives seek to maintain the productive potential and life-supporting capacity of the region’s soil resources, to manage and limit erosion (Objectives 4.1.1 to 4.1.3 and 4.1.8) and to maintain vegetation cover (Objective 4.1.10). Sediment runoff into waterbodies is to be managed (Objective 4.1.11). Treaty Principles are to be taken into account (Objective 4.17). These main objectives are expanded through policies that seek to:

- apply the ethic of stewardship (Policy 4.2.4)
- ensure consultation with tāngata whenua (Policy 4.2.13)
- maintain vegetation cover in erosion-prone areas, and maintain erosion control plantings (Policy 4.2.14)
- regulate soil disturbance activities so that they are unlikely to have significant adverse effects on, *inter alia*, erosion, flooding, water quality, downstream locations, culverts, and aquatic ecosystems
- apply recognised erosion control and land rehabilitation techniques.

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\(^3\) Noting that the proposal is for a cleanfill, for which consent is sought.

\(^4\) Residual wastes would include cleanfill, under the hierarchy.
4.3.4 Regional Air Quality Management Plan

The objectives of this regional plan seek that high quality air in the Region is maintained and protected, there is no significant deterioration in air quality in any part of the Region (Objective 4.1.1), and that discharges to air take into account local ambient air quality, health and amenity and the quality of ecosystems, water and soil (Objective 4.1.2).

Relevant policies include those that relate to air quality measurement and indicators, and more general policies that seek to avoid, remedy or mitigate adverse effects of discharges that are noxious, dangerous, offensive or objectionable (Policy 4.2.4), to avoid or minimise discharge at their source (Policy 4.2.5), and to avoid adverse effects on amenity values (Policy 4.2.7). For resource consents, the following must be considered (Policy 4.2.10):

- volume, composition and characteristics of the discharge
- frequency, intensity and duration
- ability to reduce discharges at source
- effects on human health and safety
- effects on amenity values
- cumulative effects
- effects of low probability but high potential impact
- positive effects of associated activities.

When considering conditions, the range of relevant listed items (Policy 4.2.10 and 4.2.12), and opportunities to avoid, remedy or mitigate adverse effects (Policy 4.2.13) must be taken into account.
5 ASSESSMENT OF EFFECTS AND PROPOSED MITIGATION

5.1 Introduction

The effects identified in relation to the regional consents required are described and discussed below. Proposals for mitigation of remaining effects, and, where relevant, offsets are also identified. Many of these are included in the draft conditions set out in the next section of this report.

A large number of specialist technical reports accompany the applications. These are provided as Appendices to this report. They should be referred to as relevant, as they give more detail as to the nature of the effects and the responses and mitigation proposed.

It is noted that an assessment of effects has also been prepared in relation to the resource consent application to the PCC and is included in that application documentation. This relates to many of the same matters. However, there are some aspects which are not particularly relevant to the regional consents being sought but are key considerations for the land use consent from the PCC. These particularly relate to transport infrastructure and traffic management, to noise, and to visual/landscape impacts of the application. Further details of these aspects can be seen in the application to PCC. Note however that all the specialist-technical reports have been referred to in some part of this report and all these reports are attached and form part of this application.

The effects described and discussed take into account the “permitted baseline” (including the permitted baseline in the district plan) and the existing environment.

The effects are set out and discussed below in no particular order.

5.2 Effects on Cultural Values

5.2.1 Background

Tāngata whenua have particular interests in freshwater, waterbodies and the health of aquatic ecosystems, and wider interest in general ecological health of the catchment, as well as an interest as past users of the wider catchment area.

Two tāngata whenua organisations have prepared cultural impact assessments on behalf of Māori people with interests in the area. These are provided as Attachments 11 and 12 to this report, and both are entitled “Cultural Impact Assessment – Dry Creek Replacement Cleanfill”. The most in-depth report is that prepared by Te Runanga o Toa Rangatira, who are mana whenua in the area.

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5 Although it could be argued that amenity aspects which are related to some regional consent considerations could include some of these matters.
5.2.2 Potential Effects

The cultural impact assessment from Te Runanga o Toa Rangatira provided conditional comments, acknowledging that to date they had been provided with only limited information about the project. The report is provided as part of the Runanga’s kaitiaki role, and identifies a general concern about the mauri of the natural environment. The importance of the Pauatahanui Inlet as a source of food is emphasised, along with the mahinga kai role of streams that flow into the Inlet.

The area has no known pa, kainga, cultivations or urupa, but there are old tracks in the general area. The area would have been used for hunting and gathering.

Ngāti Toa considers that the area has medium cultural significance to the iwi. The catchment has lost its forest and the streams have been degraded. In the area of the site, the mauri has been reduced by agriculture and structures in the stream beds, and the privatisation of the land has meant that there is no access for customary use. There is potential for regeneration of degraded environments.

Ngāti Toa expresses concern about loss of aquatic habitat, any effect that could result in further decline in native fish, and any reduction in water quality. The assessment is that there is potential for significant adverse effects on aquatic ecology and that environmental compensation would be needed to mitigate such effects.

Ngāti Toa seeks that the risk of sediment discharge that could affect the Inlet downstream is minimised.

Concern is also expressed about the contribution of the loss of the small area of vegetation to the cumulative losses of vegetation and natural habitat experienced in the catchment over more than 150 years, including the reduction in habitat for native threatened and at risk species.

Ngāti Toa seeks the imposition of an accidental discovery protocol, if consents are granted, in recognition that there is the possibility that taonga may be discovered.

The cultural impact report prepared by Raukura Consultants on behalf of the Wellington Tenths Trust and Port Nicholson Block Settlement Trust notes that the area is on a past (and present) main connection between the Hutt Valley and the Pauatahanui Inlet. It outlines the general history of the area and confirms the importance of the Pauatahanui catchment and the Belmont hills beyond, including their regenerating bush. It notes the current constraints in fish passage from the perched culvert on the main tributary and the likely limited range of fish species that would be able to access the headwater tributaries.

It emphasises the need for excellent on-site drainage, sediment and dust management, including that cut slopes and batters should be stabilised and hydroseeded, and that no contaminated material is accepted at the site.
It concludes that there is no evidence that Māori people used the area in the past. It advises that there is no need for an archaeological investigation or accidental discovery protocol.

### 5.2.3 Mitigation

The Ngati Toa Rangatira report suggests the following mitigation:

- environmental compensation involving stream restoration and enhancement, and retirement and replanting of land (this is described as the offset proposal in this report)
- involvement of Ngāti Toa representatives in decisions on the location of diversions, including site inspections and undertaking any cultural ceremony considered necessary prior to disturbance
- provision for fish passage, including improvements where there are existing obstructions, and provision for natural debris flows
- transfer of fish prior to works in stream beds
- stream fencing in areas identified for environmental compensation
- the Erosion and Sediment Control Plan must be implemented as an ongoing basis and its effectiveness monitored
- retirement of farm land, replanting, plant and animal pest control, in an integrated manner with stream-bed enhancement
- presence of Ngāti Toa kaumatua at times when bush is cleared
- ongoing monitoring, provisions of monitoring reports to Ngāti Toa, and involvement in solutions to unexpected issues through consultation
- development of a Memorandum of Understanding (MoU) between Ngāti Toa and Winstones if consents are granted, as a basis for Ngāti Toa’s kaitiaki role.

If these are all put in place, the assessment is that adverse cultural effects will be no more than minor. The application includes proposals relating to sediment and dust management methods, and details of the approach to managing the tributary streams on the site. It also includes provisions relating to acceptance of cleanfill material and avoidance of any contaminated material.

The applicant proposes to undertake minor works on the existing culverts under SH58 to improve their fish passage performance. While the main affected tributary will be progressively piped, over the life of the cleanfill it is expected that the species that are found in the existing tributaries will be able to move through the pipe system into the upper gully, as well as through the bypass stream when that advances sufficiently to have a semi-permanent or permanent flow. In the long-term, that replacement stream is expected to provide equal or better habitat quality than with the present stream.

The application however also includes proposals to fully offset the loss of stream habitat, as described below in section 5.5, and proposals for environmental compensation relating to vegetation loss as described in section 5.6 of this report.
In accordance with the suggestion from Ngati Toa Rangatira, and despite the suggestion from the Wellington Block Settlement Trust, that an accidental discovery protocol is not needed, a draft condition to that effect is included in the next section of this report. This is a precautionary measure, considered to be good practice, as there is evidence that tāngata whenua passed through the area in the past.

Winstones will, if consents are granted, progress a MoU with Ngati Toa on the basis proposed. In the meantime, Winstones will continue consultation on cultural aspects.

5.3 Effects on Water Quality

5.3.1 Background

As earlier described, the site of the application is in the upper catchment of the Pauatahanui Stream, which is identified in the relevant regional plan as a catchment with values which mean that it should be kept in its natural state. However, the site is a productive farming area and the stream has no current protection, and there is pasture runoff, stock trampling and informal vehicle crossings which currently mean that the water quality is high but less than pristine.

This is noted in the aquatic ecology report in Appendix 5.

5.3.2 Potential Effects

The proposed cleanfill has the potential, if not carefully managed, to further reduce water quality due to site disturbance and release of sediment during construction stages and during operation of the cleanfill activity. Site surface material includes a range of fine soils, clays, loess and other material which is readily released into water. This would not add chemical or other contaminants to the water, but would cause discoloration and turbidity.

The cleanfill operation has a significant potential to reduce water quality if it were to accept inappropriate or contaminated material, and/or to manage on-site operations in a way which contributed large sediment loads into the site surface drainage system through surface erosion, including dust.

The potential for such effects to occur is being avoided, remedied or mitigated through design of the cleanfill construction, which, as far as practicable, isolates the streams from the construction and filling operations and bypasses the clean water from the streams headwaters through the site. Further avoidance, remedy and mitigation will be achieved through development and implementation of an erosion and sediment control plan as part of an overall Cleanfill Management Plan. A draft of the erosion and sediment control plan is provided as Appendix 8. This includes indicative plans of the on-site catchment management, sediment pond retention structure design, principles for design and operation of the overall cleanfill to limit sedimentation, and site management requirements. These provisions form part of the application.
The draft plan also includes monitoring proposals, which are incorporated into draft conditions in the next section of this report. The draft conditions include discharge standards to be achieved after a short mixing zone.

It is anticipated that there will be some variation in water quality at times from the site, depending on rates of runoff and the particular stage of the cleanfilling operation. Construction stages involve a greater risk of sediment release than day-to-day operation of a well-designed and established cleanfill.

Overall, adverse effects are considered to be able to be maintained at a minor level.

5.3.3 Mitigation

Mitigation in relation to water quality effects is integrated into the project description as outlined above.

It is acknowledged that there may be some residual adverse effects on water quality from time to time from the operation.

The applicant has incorporated offset within the application. It is proposed to offset the 952m of permanently flowing stream and a further 706m of intermittent and headwater stream which will be progressively lost as the cleanfill development progresses. The offset proposal will remove stock from, and enhance the riparian vegetation over greater lengths of stream at the head of the main stem of the Pauatahanui, directly across SH58 from the site.

This is shown through the analysis in Appendix 10 to make an approximately equivalent contribution to habitat lost. The benefits to water quality from the reduction in trampling and access, and from improved shading, and from permanent protection can be considered to contribute to offsetting the intermittent reduction in water quality further down the stream, due to unavoidable sediment discharges from the cleanfill vicinity at times of heavy rainfall.

It is also noted that mitigation will occur at the end of the cleanfill’s life when the tributary stream is fully diverted to the open channel which will skirt the north-west side of the cleanfill area. By that time, the channel will have well-developed riparian vegetation and a well-stabilised bed, and discharges via this stretch of stream should equal or surpass present water quality.

5.4 Effects on Water Quantity

5.4.1 Background and Potential Effects

The quantity of water contributed to the catchment from the site area is reliant on surface catchment and some limited seepages of groundwater. Headwater streams also pass through the site area.
The proposal includes bypass methods for the headwater stream flows, and interception of parts of the site catchment water for treatment at different times in the area of the cleanfill (note that a maximum of 5.0ha of the site will be exposed ground at any time). This will not reduce the volume of water released from the site into the rest of the catchment: rather it may modify the rate of discharge by intercepting and temporarily storing (for treatment) discharges that would comprise peak flood flows.

Some water will be stored on-site for dust treatment. This involves slightly “oversizing” Sediment Retention Pond 3, and some tank storage pumped from that pond or collected from other surfaces. Such water will be used on-site for dust management. This will be more likely to evaporate than to discharge in surface flow from the site. It is, however, a small volume, and insignificant in terms of an effect on water quantity.

5.4.2 Mitigation

In terms of water quantity, it is considered that there is no need to mitigate, as potential effects are de minimis.

5.5 Effects on Aquatic Ecology and Ecosystems

5.5.1 Background

The main tributary affected by the proposal is modified. Its natural values are reduced by the presence of an obstruction in the form of a culvert with downstream overhang (limiting passage to some fish species) and the modified nature of the banks and bed through the area of pastoral use, including tracking. The other two smaller tributaries to the south have not been investigated, but appear to have less stock access and more riparian vegetation.

Despite this, some fish species and a good variety of invertebrate species have been found in the area affected by the proposal. Riparian and wetland vegetation in the area, affected by the proposal is absent, limited, and/or characterised by common or introduced species.

5.5.2 Potential Effects

The proposal involves progressively piping the permanent and ephemeral / intermittent streams within the cleanfill area. This represents an overall loss of habitat currently occupied by an aquatic ecosystem. While fish may be able to pass through the pipe into the headwater areas above the cleanfill site, and other species will be washed down from the headwaters, the lack of light, texture, substrate and resting places will inevitably result in impoverishment of the area which currently supports more complex systems.
5.5.3 Mitigation

There will be some partial replacement of habitat adjacent to the cleanfill over time as the bypass channel is extended and develops its own ecology. At the end of the cleanfill activity the bypass stream should function in the same way or better than the present tributary.

Mitigation, in ecological terms, is also provided for by improving the culverts under SH58 to enable more upstream fish passage.

The application includes provisions for offsetting the overall adverse effects on aquatic ecology by enhancing an equivalent aquatic area of similar values in a similar position in the same Pauatahanui catchment area. This area is across SH58, where it is proposed to progressively fence off an area containing 1,510m length of permanent and 440m length of ephemeral stream, as shown in Figure 3.5. The intention is to enhance riparian vegetation throughout this area by supplementary planting and animal pest and weed control as outlined in Appendix 10. This will be subject to a revegetation plan to a depth of 15m from the stream bed, to be developed in discussion with GWRC and PCC.

Fenced retired areas beyond this will naturally revegetate and are expected to secede to a close cover of native shrubs and trees within approximately a decade. This will progressively improve the quality of surface runoff into the stream headwaters. It is expected that this area will be secured by means of a covenant.

Overall, it is expected that in the very long-term there will be a moderate net benefit to aquatic ecology from the cleanfill and proposed offset. In the interim, while cleanfilling proceeds, the offset proposed will result in progressively improved values in a nearby part of the catchment while values are progressively reduced in the cleanfill area.

5.6 Effects on Terrestrial Ecology

5.6.1 Background and Potential Effects

Terrestrial ecology is not evaluated or protected through regional plans. The application site was modified by bringing it down lower in the valley than a previous proposal in this vicinity (see section 7.1.1 of this report, relating to alternatives considered).

The report included as Appendix 6 to this report has investigated the extent and quality of the vegetation affected by the proposed cleanfill.

While approximately 13ha of reasonably mature regenerating vegetation was to be lost with the original cleanfill proposed in this area, the redesign has reduced the areas of vegetation of the size (i.e. 3m or more on average) that is given some protection in the Porirua City District Plan to 0.7ha on the site itself6. Of this, approximately 0.2ha is manuka and broad leafed gully forest. The total area is scattered

6 However the relevant rule becomes effective only where 1ha or more of such vegetation is to be removed.
over various parts of the development. It forms a mosaic rather than a single continuous area. While this area contributes to the overall ecological values of the area including providing some bird habitat, the main values are associated with the large area of more mature bush which will not be touched by the proposal.

It is relevant to note that this on-site bush is found primarily along streams to be piped, on the flatter parts of the site and in limited lower gully forms at the very top of the proposed cleanfill footprint. The vegetation is not contributing in any significant way to soil stability or erosion control. The vegetation will be removed only when there is definite idea of when the area is expected to be needed.

Any effects from the removal of this vegetation are considered to be minor.

5.6.2 Mitigation

Parts of the total area of vegetation to be removed will be cleared from the Stage Two development onwards. The initial areas are relatively separate from the gully system, which will remain intact longest.

While the applicant considers that there is no requirement to offset the small clearing of bush proposed, distinct areas of land within the cleanfill footprint will be retired from farming and planted (see Assessment of Landscape and Visual Effects Appendix 9, Figure 16). As there is no requirement to offset the bush being lost, this retirement is proposed as environmental compensation.

This is considered to be environmental compensation, rather than mitigation.

5.7 Effects on Air Quality

5.7.1 Background

The suite of consents sought includes a discharge to air consent. This appears to be a requirement in terms of the wording of the rules in the Regional Air Quality Plan as set out in section 4.2.4. of this report. The consent is sought on a precautionary basis, as effects are expected to be largely contained on the site, and any emissions will not become offensive or noxious beyond the property boundary.

5.7.2 Potential Effects

The only potential discharges to air are dust from the construction and operation of the cleanfill activity and on-site vehicle emissions. As contaminated material will not be accepted at the cleanfill, any dust will be derived from uncontaminated fine surface material. Vehicle emissions will relate to the number of vehicles visiting the site.
A specialist report “Assessment of Potential Effects of Air Discharges from the Proposed Dry Creek Replacement (DCR) Cleanfill”, is included as Appendix 13 to this report, and addresses these aspects.

This report identifies the placement and compaction of fill material, vehicle movements and wind erosion from completed area which are under rehabilitation as the main potential sources of emissions to air on the site. Emissions from properly maintained vehicles are considered to be undetectable at nearby dwellings, and therefore any such effects are *de minimis*.

The wind directions and speeds for the site have been modelled in Appendix 13 to assist with assessing dust effects. This showed that north-west winds predominate and are strongest, while the second most frequent direction, with generally lower speeds, is from the south-east. The valley form has a strong influence on local winds.

The Appendix 13 report has taken into account the wind speed, direction and frequency; the areas and times of work on the site; assumptions about rainfall; the location of residences, and the topography. The FIDOL factors of frequency, intensity, duration, offensiveness and location have been applied. The potential for any air quality assessment criteria being exceeded at any nearby residence is considered to be unlikely, provided that intended mitigation is in place. Not noted in the report, but a further relevant factor, is that most of the nearby residences are surrounded by substantial trees which would further limit risk of dust exposure.

The report has also considered the presence of Transpower lines nearby. Due to their location and height, the risk of dust affecting the conductors is considered to be limited.

### 5.7.3 Mitigation

The proposed mitigation is detailed in the Erosion and Sediment Control Plan, Appendix 8, as well as Appendix 13. It includes limiting the exposed area of the site to 5.0ha at any time, stabilisation and treatment of completed surfaces (e.g. hydroseding) as soon as practical, management of on-site traffic to established roads with compacted stabilised surfaces, and judicious use of tracked equipment in consolidation of the fill.

In addition, water carts will be used in windy dry conditions which have the potential for dust generation. They will be used on roads, stockpiled material and dry materials during placement as necessary. A water cart will remain permanently on-site, available for use as needed. It is proposed to collect and store water on-site for water cart use. Sediment Retention Pond 3 is intended to be designed to be “oversized” to provide for this partial purpose. A number of large tanks will store water collected and pumped from this source (and possibly from other ponds at times). The water carts will be conveniently refilled from the tanks. The details of the facilities will be provided in the Cleanfill Management Plan and Annual Management Plans, and updated as required.

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1 Most often used in odour assessment, but in this case considered appropriate for dust emissions.
Dust emissions will be checked regularly by on-site staff, who will implement dust suppression by means of the water cart, as needed.

5.8 Effects on Natural Character

5.8.1 Background

Effects on natural character of wetlands, streams and their margins are of importance in terms of RMA section 6(a), and are also a consideration in terms of the various regional plans. The Pauatahanui Stream and its catchment area are to be managed in terms of its natural state, under the Regional Freshwater Plan’s water quality policies.

The natural state of the steams in the area directly affected by the cleanfill is modified by pastoral farming, and a farm track crosses the streams.

In terms of the usually accepted scale of natural character, from pristine to urban, the rural context contributes to the natural character values of the site area being moderate, with higher natural character upstream in the gully above the proposed cleanfill where there is substantial regenerating bush.

5.8.2 Potential Effects

The proposed cleanfill will affect the existing natural character of the stream and its containing landform by substantial earthworks and stream modifications. As described earlier, the small streams which cross the access road at the south end of the total site are to be culverted within the access road and batter areas, and the existing main tributary and side streams are to be progressively piped within the cleanfill footprint. Although a replacement channel is progressively to be provided, this will take many years to establish and will not achieve full effectiveness until the full tributary flow is directed into it on completion of filling.

The finished form of the cleanfill will have a structural appearance, particularly due to benching on the front face.

5.8.3 Mitigation

Mitigation for effects on natural character includes several provisions. Some could be described as cosmetic, addressing appearance elements and their contributions to natural character, but others address natural character more holistically. Together these include:

- regrassing and amenity planting in the vicinity of the access road in Stage One to restore the appearance of a pastoral activity and commence screening of the access road from nearby dwellings
- planting of a line of trees to conceal the view of the main batter slope from the north on SH58 as it rises. This and the above mitigation are shown in Figure 16 in the Assessment of Landscape and Visual Effects in Appendix 9
- occasional planting on-site with the agreement of the landowner, particularly on steeper areas which will be less suitable for grazing
- enhancement and restoration of the upper part of the main stem of the Pauatahanui Stream in the offset proposal on the eastern side of SH58, including riparian planting and providing for natural regeneration
- ongoing development and planting of the bypass channel and eventual reinstatement as a stream that will have natural characteristics that are expected to be equivalent to or better than the existing stream.

Over time, and overall, it is considered that natural character will not be diminished in the vicinity, although the site will be substantially modified.

5.9 Effects on Amenity Values and Access to Watercourses

5.9.1 Background

As with natural character, amenity values are noted in the regional plans as a matter for consideration in terms of considering consent applications. Amenity values are “those natural or physical qualities and characteristics of an area that contribute to people’s appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes”. In the regional plans, amenity values are particularly ascribed to waterbodies, so that is the focus of this assessment (note that a more comprehensive assessment of amenity values is provided in relation to the land use consent sought from PCC).

There is public access to the vicinity of the application site via SH58 and the paper road, Felix Road. SH58 in this section is a relatively fast state highway and receives little pedestrian, equestrian, or cyclist use. It is difficult to stop or walk along the road in the vicinity of the Pauatahanui Stream in this area. The presence of the road reduces overall amenity values, and the fine network of streams forming the upper catchment of the Pauatahanui Stream is not noticeable as a contributor to amenity values in this area in any significant way.

The primary recreational values attributable to the catchment are in respect of the Belmont Regional Park, from which the site is rarely visible. The site itself is privately owned, and not generally available for active or passive recreation.

Felix Road is rarely, if ever, used for public access, and is distant from all but very minor tributaries in the area of the site.

While the stream does contribute generally to the area’s amenity values, being on private farmed land, these values are not widely appreciated in practice. There is no public access to the stream.
5.9.2 Potential Effects

The effects on amenity values will be modified in a similar way to the natural character values discussed in section 5.8 of this report.

5.9.3 Mitigation

Mitigation for effects on amenity values are effectively as described in relation to natural character in section 5.8.3 of this report.

Other contributors to amenity values such as noise and visual effects are discussed in more detail in relation to the PCC resource consent application. The noise report is, however, provided as Appendix 14 to this report.

The proposal will not change the present situation in terms of access to water bodies, either negatively or positively.

5.10 Effects on Natural Hazards

5.10.1 Background

The most likely natural hazards that could be associated with and/or affect the proposed cleanfill are earthquake, landslide and surface erosion.

The rules triggered in the Regional Soil Plan particularly relate to the latter two aspects.

Each of these is addressed below.

5.10.2 Potential Effects

The potential for earthquakes is ever-present in Wellington. This aspect is addressed in the geotechnical report in Appendix 3. The proposed cleanfill design has been developed under a 1:100 AEP earthquake, taking into account the complete cleanfill development under normal and elevated groundwater conditions. The design has also been tested under maximum credible earthquake conditions.

The cleanfill does not support any buildings or essential infrastructure. However, it sits reasonably close to SH58, which is an essential lifeline. The geotechnical analysis indicated that there would be some displacement under a design and maximum credible earthquake, but that this would be of the order of no more than 1m. The conclusion is that such earthquake movements will not pose a risk to SH58.
Other areas of fill (such as the access road filled areas) are considered to be acceptable if designed to NZS4431 (Code of Practice for Earth Fill for Residual Development (and amendments)) subject to appropriate site preparation in relation to the streams.

Landslides are highly unlikely, either from above the proposed cleanfill, or within the cleanfill itself. The geotechnical report found no evidence of deep-seated instability in the vicinity of the site. The upper gully area and slopes above the access road are well-vegetated.

The risk of landslide on the access road is managed through the design of cuts and fills. At one place the cut face will be 11m in height. The geotechnical report states that a cut slope of IV:2H as proposed is expected to be achievable in terms of the materials encountered, and therefore risk of slope failure is low. However, further investigation and review is needed prior to final design.

The engineering design of the shear key and toe batter, meeting earthquake standards, will also be designed against landslide.

Surface erosion is not so much a natural hazard as an issue which could contribute to unsatisfactory water discharges from the site. This aspect has been addressed earlier in this report as a water quantity and dust issue.

5.10.3 Mitigation

Mitigation of the risks of earthquake and landslide are addressed through engineering design. The erosion and sedimentation issue is the subject of a specific sediment and erosion management plan, which is outlined in Appendix 8.

5.11 Site Contamination Effects

5.11.1 Background

This potential effect has been identified as the proposal cleanfill seeks to apply the Ministry for the Environment definition of cleanfill, which is slightly wider than that in the Regional Discharges to Land Plan, and also to dispose of concrete slurry and minor amounts of untreated vegetative material, such as vegetation attached to soil (the current Dry Creek Cleanfill has been undertaken on the basis of that range of materials).

However, with any cleanfill there is a potential for contaminated material to be brought to the site.

5.11.2 Potential Adverse Effects and Mitigation

The range of materials to be accepted is listed in Table 4.1 of the MfE Guidelines “A Guide to the Management of Cleanfills”, 2002. This lists waste material which is acceptable (in some cases
conditionally acceptable – for example, reinforced concrete must have the steel cut off at the concrete). Concrete is an accepted material, but Winstones has also accepted small amounts of wet concrete slurry from mobile mixers (which require regular cleansing) for many years and disposed of it within the body of the cleanfill. In addition, small amounts of vegetative material arrive with some loads. While large stumps are rejected for reasons of long-term cleanfill stability, other material is accepted.

The draft conditions in the next section of this report set out the proposed acceptable materials.

The methods by which cleanfill arriving at the site is documented, checked and overall monitored is set out in section 3.6.2 of this report. These processes will be documented and become part of the Cleanfill Management Plan.

On this basis, any site contamination will be minor or less than minor. It would be localised in a random way within the cleanfill and contained by the bulk of inert material.

5.12 Effects on Land Productivity and the Soil Resource

5.12.1 Background

This potential effect relates to the purposes of the Regional Soil Plan, which includes objectives and policies relating to productive and versatile land.

The site occupies part of a large and long-established productive rural property.

5.12.2 Potential Effects and Mitigation

The cleanfill occupies some 14ha of the total farming property, which is approximately 336ha in extent. The intent is, however, to use only the land that is needed at the time and to remediate the surface and return completed parts of the cleanfill area to productive farming use.

There will be a small loss of productive land in the areas that are retained in long-term planting, and in the access road (which is expected to be closed on completion of the cleanfill). This is an insignificant adverse effect.

5.13 Beneficial Effects

The existing Dry Creek Cleanfill has operated since the early 1990s, taking cleanfill primarily from the Hutt Valley, but some from Porirua and further north. Urban and rural development, and infrastructure, generates cleanfill waste on an ongoing basis, and it is very desirable that there is a competently-managed replacement site in this part of the urban region (alternatives considered are discussed in section 7 of this report). This helps avoid illegal dumping of cleanfill material.
Cleanfill is waste that cannot be used for another purpose. Cleanfill sites have the benefit of providing an appropriate facility for the permanent disposal of this material. Cleanfills dispose of material that would otherwise be taken to local landfills. Thus cleanfills help prolong the life of landfills, which usually are provided at significant community cost as they have very specific site requirements, must be lined and where leachate management is a significant issue.

This particular site is advantageous for a wide part of the development community because of its location, and it is expected to have a very long life (approximately 60 years), avoiding the need to find an alternative site in the near future. Thus it could be considered to be part of the region's long-term urban infrastructure.

### 5.14 Summary of Effects

The adverse effects associated with the application are considered to be manageable and none are significantly adverse.

As the proposed cleanfill will occupy the part of a valley in the rural Pauatahanui Stream catchment, it will have inevitable adverse effects on the natural character of a tributary stream and on the aquatic ecosystem in the area directly affected by the footprint.

A range of other potential adverse effects have been identified. All are considered to be minor or less across the life of the cleanfill.

The applicant has proposed substantial mitigation, which has been built into the project design. These provisions are incorporated in the draft conditions set out in the next section of this report.

For the natural character and aquatic ecosystem values, where adverse effects will be largely or completely mitigated only in the very long-term, the applicant is proposing an offset, through the fencing of an equivalent stream component nearby in the same catchment. In addition, an area of currently productive land will be retired from farming and planted. This is considered to be environmental compensation, rather than a mitigation or offset proposal, as the vegetation to be removed is not protected.
6 SUGGESTED DRAFT CONDITIONS

The conditions set out below are regarded as a starting-point and subject to further development through the consent process. For completeness, both suggested draft GWRC and PCC conditions are included.

6.1 GWRC DISCHARGE TO WATER AND DIVERSION CONSENT

General

1. The location, design, implementation and operation of the cleanfill shall be in general accordance with the consent application and its associated plans and documents lodged with Greater Wellington Regional Council on 29 November 2012.

For the avoidance of doubt, where information contained in the application is inconsistent with conditions of this consent, the conditions shall prevail.

Note: Any change from the location, design concepts and parameters, implementation and/or operation may require new resource consent or a change of consent conditions pursuant to section 127 of the Resource Management Act 1991.

2. Greater Wellington Regional Council shall be given a minimum of two working days (48 hours) notice prior to commencement of the works authorised by this consent.

3. The consent holder shall provide a copy of this consent and any documents referred to in this consent to each operator responsible for undertaking works authorised by this consent, before that operator starts any works. The consent holder shall, prior to the commencement of any works authorised by this consent, inform the operator of the conditions of the consent.

4. The consent holder shall ensure that a copy of this consent, and all documents referred to in this consent, is kept on site at all times and is presented to any Greater Wellington Regional Council officer on request.

Hazardous Substances

5. No contaminants (including but not limited to oil, petrol, diesel, hydraulic fluid) shall be released to water from equipment being used for the activity, and any refuelling of equipment or vehicles shall take place on any area of the site that is contained by a bund or similar protection preventing runoff to a watercourse.

In the event of a spill of fuel, hydraulic fluid or other potential liquid contaminant, the consent holder shall take immediate steps to remove or contain the spilled liquid. The consent holder shall, as soon as practicable, notify the Manager, Environmental Regulation (Greater Wellington Regional Council) of the spill.
Environmental Incidents

6. The permit holder shall keep a permanent record of any incident(s) related to this consent that result(s), or could result, in an adverse effect on the environment including any incident with potential effects beyond the boundary of the consent holder’s site. The consent holder shall make the incident register available to officers of Greater Wellington Regional Council on request.

7. The consent holder shall notify the Manager, Environmental Regulation (Greater Wellington Regional Council) of any such incident within 24 hours of the incident being brought to the attention of the consent holder or the next working day.

8. The consent holder shall forward an incident report to the Manager, Environmental Regulation (Greater Wellington Regional Council) within seven (7) working days of the incident occurring, unless otherwise agreed with the Manager, Environmental Regulation (Greater Wellington Regional Council). The report shall describe the incident, the reasons for the incident, measures taken to mitigate the incident and measures to prevent recurrence of the incident.

Complaints

9. The consent holder shall maintain a permanent record of any complaints received alleging adverse effects from or related to the exercise of this consent. This record shall, where practicable, include the following;

   a. the nature of the complaint received;
   b. the name and address of the complainant, if supplied;
   c. the date, time and details of the occurrence of the alleged event;
   d. the weather conditions at the time of the alleged event;
   e. details of the investigations undertaken by the consent holder in regards to the complaint and any measures adopted to remedy the effects of the incident or complaint; and
   f. measures put in place to prevent the occurrence of a similar incident if necessary.

   The complaints record shall be made available to Greater Wellington Regional Council on request. The consent holder shall notify the Manager, Environmental Regulation (Greater Wellington Regional Council) of any complaints received, which relate to the exercise of this consent, within 24 hours of the complaint(s) being received or the next working day.

Accidental Discovery

10. If any urupa, traditional sites, taonga (significant artefacts), koiwi (human remains) or other artefact material is discovered during excavation, the consent holder shall adopt the following procedure;

   a. Work in the immediate vicinity of the sites that has been exposed shall cease;
   b. The site supervisor shall immediately secure the site in a way that ensures that any remains or artefacts are untouched
   c. The site supervisor shall notify representatives of Ngati Toa, the New Zealand Historic Places Trust and Greater Wellington Regional Council.
The notification in (c) above shall allow the notified persons a reasonable time to record and, if necessary, recover archaeological or cultural features discovered before excavation work may recommence at the exposed site.

11. The consent holder shall ensure that site managers, operators and contractors receive a briefing on the forms of evidence for the material referred to in condition [10] in advance of undertaking any work on the site.

Cleanfill Definition

12. Only the following material shall be accepted for final disposal in the cleanfill:
   a. Material that complies with the definition of “cleanfill” as per the Ministry for Environment “A Guide to the Management of Cleanfills” 2002, and specifically Table 4.1 of Section 4.2.1; and
   b. Concrete slurry i.e. material contained within a mobile mixing system, which can be pumped out at a nominated point on the cleanfill site, reinforced concrete and limited amounts of vegetation or untreated timber material (see condition [13]).

13. The consent holder shall not place machined / manufactured wood products (including debarking and sawdust) in the cleanfill. Bulky wood wastes such as large logs and stumps shall be removed. The definition of wood wastes for the purpose of this consent shall not include small quantities of natural timber such as roots and broken branches as can reasonably be expected to be present in slip debris or excavated earth.

Cleanfill Records

14. All incoming materials shall be inspected from an entry platform into the site and the volumes, material type and source site of each load shall be recorded.

   The matters to be recorded should include, but not be limited to:
   a. the date of fill acceptance;
   b. the contractor’s name and signature;
   c. a description of the fill type;
   d. the source of the fill;
   e. the quantity of fill; and
   f. any noticeable characteristics of the fill.

   The cleanfill records shall be made available to Greater Wellington Regional Council on request.

Erosion and Sediment Controls

15. The consent holder shall limit the area of disturbed ground to a maximum of 5 hectares unstabilised at any one time. This shall include the active cleanfill area, any unvegetated batter slopes, temporary stockpiles and any temporary on site access roads.
16. The consent holder shall ensure that all erosion and sediment control measures installed are implemented in accordance with the Greater Wellington Regional Council (September 2002). Erosion and Sediment Control Guidelines for the Wellington Region.

17. All practicable steps shall be taken to prevent the release of suspended sediments or other contaminants to water.

18. The consent holder shall ensure that all sediment laden runoff from the cleanfill site is treated by sediment retention ponds or alternative treatments in accordance with the Cleanfill Management Plan and Annual Management Plan as per conditions [33] and [34] of this consent prior to its discharge from the site.

19. No excavation shall commence in any Stage until the permit holder submits to the Manager, Environmental Regulation (Greater Wellington Regional Council) a certificate signed by an appropriately qualified and experienced engineer that the erosion and sediment control measures on site have been constructed in accordance with the requirements of the documents specified. Should the Stages include progressive development of such measures over time, this requirement shall apply to each sub-stage.

This certification shall include confirmation of:

a. Contributing catchment areas;
b. Volume, levels and capacity of erosion and sediment control measures;
c. Confirmation of compliance with the Greater Wellington Erosion and Sediment Control Guidelines and the Conditions of this Consent; and
d. Stabilisation of the structure as required.

20. The consent holder shall ensure that the operation of the cleanfill is audited by an appropriately qualified and experienced person in April of each year to ensure that the erosion and sediment control measures are being maintained in accordance with the Cleanfill Management Plan and Annual Management Plan as per conditions [33] and [34] of this consent. The audits shall include the following information:

a. The date of the audit;
b. Name of the auditor;
c. Site conditions;
d. Erosion and sediment management including identification of areas of potential sediment generation and results of a review of sediment detention measures;
e. Run off control including the results of checking diversion channels and any decanting earth bunds;
f. Any maintenance required; and
g. General comments on the efficacy of the erosion and sediment control measures being employed.
21. The results of the audits shall be forwarded to the Manager, Environmental Regulation (Greater Wellington Regional Council) no later than five working days after the last day of the calendar month in which an audit is undertaken.

Where the audit identifies that maintenance or other measures are required, the consent holder shall forward to the Manager, Environmental Regulation (Greater Wellington Regional Council) no later than two months after the audit undertaken pursuant to condition [20] of this consent, a summary of the maintenance and other measures that have been undertaken and demonstrate that all audit recommendations have been satisfactorily addressed.

22. No erosion and sediment control measures may be removed until the Manager, Environmental Regulation (Greater Wellington Regional Council) has endorsed the removal of such a measure.

Water Quality Standards

23. At the sampling locations as outlined in condition [30] any water discharges from the site that enters receiving water courses shall not result in any of the following effects after reasonable mixing:

a. An increase in the median turbidity measured over any 3 month period of greater than 33% compared to the turbidity upstream of the discharge points as measured in nephelometric turbidity units (NTU)

b. An increase in the median suspended solids measured over any 3 month period of greater than 33% compared to the suspended solids upstream of the discharge points as measured in g/m³

c. A pH outside of the range 6.0 to 9.0;

d. The production of conspicuous oils of grease films, scums or foams or floatable or suspended materials;

e. Any conspicuous change in colour or visual clarity;

f. Any emission of objectionable odour;

g. The rendering of freshwater unsuitable for consumption by farm animals; and

h. Any significant adverse effects on aquatic life.

For the purposes of this condition, reasonable mixing shall mean as measured at a point 20 metres downstream of the point of discharge from the sediment retention ponds, or other specific location as agreed in writing by Greater Wellington Regional Council.

24. In the event that a discharge of sediment laden water occurs that creates the effects described in condition [23] above, cleanfilling shall cease in that specific sub catchment of the site and shall not recommence until Greater Wellington Regional Council confirms that the sediment management system is able to continue to operate in compliance with the conditions.

The consent holder shall investigate, and report to Greater Wellington Regional Council, the cause of the effect and, if appropriate, the intention to implement improvements to the erosion and sediment control measures. This shall include the consideration of implementation of chemical-treatment in sediment retention ponds and/or further progressive stabilisation on the site. Advice Note: If sediment retention ponds are to be chemically treated a chemical treatment management plan will be required to be developed to support the use of such chemical and the design of any dosing system utilised. This plan shall be endorsed by the Greater Wellington Regional
Council prior to implementation, and shall be included in the next revision of the Cleanfill Management Plan.

25. During the exercise of this consent, the consent holder shall take all practicable steps to avoid any untreated discharge of sediment laden water from the site to water or to land where it may enter water or watercourses draining to the Pauatahanui Stream.

26. An ecological survey shall be undertaken to determine the relative effect of the cleanfill on the Pauatahanui Stream downstream of the cleanfill discharge points. This survey shall be carried out annually for the first 3 years following the commencement of the consent and thereafter to be carried out once every two years, or other frequency as agreed in writing by Greater Wellington Regional Council. Prior to the first ecological survey being carried out the methodology shall be approved in writing by the Manager, Environmental Regulation (Greater Wellington Regional Council).

Baseline Water Quality Monitoring

27. The consent holder shall undertake baseline monitoring which will be detailed within the Cleanfill Management Plan to be submitted in accordance with condition [33] below. The baseline monitoring will include undertaking water quality samples for total suspended solids, turbidity and pH within the unnamed tributary of the Pauatahanui Stream and the Pauatahanui Stream itself over a period of 6 months prior to any clean filling operation. Sampling will be based on manual grab samples and will be monthly in addition to within 24 hours after a storm event (defined as 15mm of rainfall within a 24 hour period).

28. All samples shall be analysed within two days of collection in accordance with the latest edition of ‘The Standard Methods for the Examination of Water and Wastewater’ APHA, AWWA, WPCE or other standards as may be approved by the Manager, Environmental Regulation (Greater Wellington Regional Council). The test results shall be forwarded to the Manager, Environmental Regulation (Greater Wellington Regional Council) within one week of the test results being received by the consent holder.

29. The results of the Baseline Water Quality Monitoring shall be analysed within a report, as detailed within the Annual Management Plan as per condition [34] of this consent, and shall be submitted to Greater Wellington Regional Council within 2 months of completion of the Baseline Water Quality Monitoring sampling programme. This report shall include interpretative water quality and rainfall intensity information as part of the analysis of the sample results.

Stage 1 Construction Discharge Water Quality Monitoring

30. The consent holder shall undertake Construction Discharge Water Quality Monitoring during Stage One which will be detailed within the Cleanfill Management Plan to be submitted in accordance with condition [33] of this consent. This Construction Discharge Water Quality Monitoring will include undertaking water quality sampling for total suspended solids, turbidity and pH a minimum
of once every two months during periods when water discharges from sediment retention ponds and within 24 hours after a storm event (defined as 15mm of rainfall within a 24 hour period).

The location of these monitoring points will be defined within the Cleanfill Management Plan however will be based upon outflow discharge locations of the sediment retention ponds, a point 20 metres downstream from the points of discharge (subject to access) and also a point a minimum of 5 metres upstream from the point of discharge if such a location exists (subject to access). Sampling within the Pauatahanui Stream, both upstream and downstream from the site discharge points, shall also occur.

The location and frequency of monitoring may be varied with the written agreement of the Greater Wellington Regional Council.

31. All samples shall be analysed within two days of collection in accordance with the latest edition of ‘The Standard Methods for the Examination of Water and Wastewater’ APHA, AWWA, WPCE or other standards as may be approved by the Manager, Environmental Regulation (Wellington Regional Council). The test results shall be forwarded to the Manager, Environmental Regulation (Greater Wellington Regional Council) within one week of the test results being received by the consent holder.

32. The results of the Construction Discharge Water Quality Monitoring shall be submitted to Greater Wellington Regional Council on a quarterly basis or within 10 working days of the rain event as defined in condition [30] above.

The report shall include interpretative water quality and rainfall intensity information as part of the analysis of the sample results and shall also include identification of any issues and improvements that may be required to the erosion and sediment control measures.

Management Plans

33. At least three months prior to the commencement of each Stage of the Cleanfill Operation (as described in the application for resource consents), except that Stages One and Two shall be considered as one stage, the consent holder shall submit to the Greater Wellington Regional Council for its endorsement, a Cleanfill Management Plan (CMP) which shall include the information set out below. The indicative information in the CMP will be refined as appropriate by each Annual Management Plan (see condition [34] below).

a. Scope, order and expected timing of the works within the Stage;

b. An Erosion and Sediment Control Plan which includes, but is not limited to;
   i. Indicative methods planned to stabilise topsoil and prevent their erosion and scour;
   ii. Indicative plans showing the location and extent of the excavations intended for each stage of excavation, main access roads and the expected location(s) of stockpiles.
   iii. Indicative plans showing the location and design of erosion and sediment control measures for each stage including sediment retention pond location and design, discharge point(s) and the location and construction of any groundwater diversion drains;
iv. Details of the intended monitoring and maintenance of all sediment control structures;

v. The intended programme for minimising and managing all areas of exposed ground including progressive re-vegetation and stabilisation;

vi. The intended programme for rehabilitation of each area including finished land contour, finished surface preparation, topsoil placement and thickness and grassing or other vegetation of the completed areas;

vii. The intended water quality monitoring programme;

viii. A template for monthly monitoring and maintenance schedules for all erosion and sediment controls including visual inspection of turbidity of water leaving the site;

c. Protocols for dealing with spills of hazardous substances;

d. A Dust Management Plan setting out the methods intended to limit dust which may include the application of water by a water cart and/or ceasing dust generating activities during windy conditions;

e. A Noise Management Plan setting out the methods intended to limit any adverse noise effects from the cleanfill operation;

f. A Rehabilitation Management Plan setting out the methods intended to progressively rehabilitate the cleanfill site;

g. Indicative methods for managing peak hour truck restrictions;

h. Cleanfill acceptance criteria, controls and procedures, and

i. The name of the person who will be responsible for day to day operations and cleanfill management and at least one back up person together with phone numbers.

The consent holder shall operate the cleanfill in accordance with the CMP.

34. The consent holder shall submit to Greater Wellington Regional Council an Annual Management Plan (AMP) for the site containing the following information:

a. Details of the previous 12 months operation of the cleanfill.

b. Plans for fill and associated earthworks over the next 12 months.

c. A comprehensive evaluation of the monitoring results over the previous monitoring period, together with a full assessment of the effectiveness of erosion and sediment control measures, and of any sediment related effects on the receiving environment.

d. The proposed erosion and sediment control measures for the next 12 months. This shall include design details, including calculations, for interim sediment retention facilities, and runoff diversion measures.

e. The AMP shall cover the previous 12 months to 1 April and be submitted by 30 April each year following the commencement of consent. Any changes for the upcoming period will be subject to endorsement under condition [33].

The consent holder shall operate the cleanfill in accordance with the AMP.

34. The consent holder shall update the CMP and AMP to accommodate any changes to onsite operations on an as required basis. Any updates shall be submitted to Greater Wellington
Regional Council at least 10 working days prior to their implementation. No changes shall be implemented until Greater Wellington Regional Council endorses these changes.

35. Prior to commencing any work on the site, the consent holder shall provide detailed plans (including a schedule) and provisions for the Biodiversity Offset area, which are based on the information provided in the resource consent, including the intended means of achieving permanent protection of the identified area. Such plans and provisions shall be accompanied by any commentary and/or endorsement from the landowner and Te Runanga o Toa Rangatira prior to their provision to Greater Wellington Regional Council.

36. Following endorsement by the Greater Wellington Regional Council, the Biodiversity Offset proposal as set out in condition [35] shall be implemented.

6.2 GWRC AIR DISCHARGE CONSENT

General

1. The location, design, implementation and operation of the cleanfill shall be in general accordance with the consent application and its associated plans and documents lodged with Greater Wellington Regional Council on 29 November 2012.

   For the avoidance of doubt, where information contained in the application is inconsistent with conditions of this consent, the conditions shall prevail.

   Note: Any change from the location, design concepts and parameters, implementation and/or operation may require new resource consent or a change of consent conditions pursuant to section 127 of the Resource Management Act 1991.

2. Greater Wellington Regional Council shall be given a minimum of two working days (48 hours) notice prior to commencement of the works authorised by this consent.

3. The consent holder shall provide a copy of this consent and any documents referred to in this consent to each operator responsible for undertaking works authorised by this consent, before that operator starts any works. The consent holder shall, prior to the commencement of any works authorised by this consent, inform the operator of the conditions of the consent.

4. The consent holder shall ensure that a copy of this consent, and all documents referred to in this consent, is kept on site at all times and is presented to any Greater Wellington Regional Council officer on request.

Dust Management Plan

5. The permit holder shall submit a Dust Management Plan (DMP) for the cleanfill area to the Manager, Environmental Regulation (Greater Wellington Regional Council) at least 20 working days before cleanfill construction commences on the site. The permit holder shall engage a suitably qualified and experienced professional to prepare the Dust Management Plan.
The Dust Management Plan shall include, but not be limited to:

a. What measures will be used to manage and mitigate the effects of dust during the construction and operation of the cleanfill;
b. Criteria used to determine when the measures will be used;
c. Details of the design and operational factors used to ensure that open areas are minimised;
d. Procedures for maintaining the even surfaces of access roads, and for removing and/or smoothing potholes and bumps as soon as is reasonably practicable;
e. Provisions the permit holder intends to use for temporary cover of stockpiles, as appropriate; and
f. A list of the key responsibilities (such as the use of the water truck) and who will be responsible for implementing these and making day-to-day decisions.

6. No work shall commence on the site until the Manager, Environmental Regulation (Greater Wellington Regional Council) has endorsed the Dust Management Plan.

7. The permit holder shall operate the cleanfill in accordance with the Dust Management Plan.

Operating Conditions

8. The consent holder shall ensure that beyond the boundary of the site, there shall be no dust discharges from the site which, in the opinion of an enforcement officer, is noxious, offensive or objectionable

9. All work areas associated with the operation of the cleanfill area shall be managed in such a way as to keep fugitive dust emissions to a minimum.

Environmental Incidents

10. The permit holder shall keep a permanent record of any incident(s) related to this consent that result(s), or could result, in an adverse effect on the environment and particularly any incident with potential effects beyond the boundary of the cleanfill site. The consent holder shall make the incident register available to officers of Greater Wellington Regional Council on request.

11. The consent holder shall notify the Manager, Environmental Regulation (Greater Wellington Regional Council) of any such incident within 24 hours of the incident being brought to the attention of the consent holder or the next working day.

12. The consent holder shall forward an incident report to the Manager, Environmental Regulation (Greater Wellington Regional Council) within seven (7) working days of the incident occurring, unless otherwise agreed with the Manager, Environmental Regulation (Greater Wellington Regional Council). The report shall describe the incident, the reasons for the incident, measures taken to mitigate the incident and measures to prevent recurrence of the incident.
Complaints

13. The consent holder shall maintain a permanent record of any complaints received alleging adverse effects from or related to the exercise of this consent. This record shall, where practicable, include the following:

a. the nature of the complaint received;
b. the name and address of the complainant, if supplied;
c. the date, time and details of the occurrence of the alleged event;
d. the weather conditions at the time of the alleged event;
e. details of the investigations undertaken by the consent holder in regards to the complaint and any measures adopted to remedy the effects of the incident or complaint; and
f. measures put in place to prevent the occurrence of a similar incident if necessary.

The complaints record shall be made available to Greater Wellington Regional Council on request. The consent holder shall notify the Manager, Environmental Regulation (Greater Wellington Regional Council) of any complaints received, which relate to the exercise of this consent, within 24 hours of the complaint(s) being received or the next working day.

6.3 GWRC SOIL DISTURBANCE CONSENT

General

1. The location, design, implementation and operation of the cleanfill shall be in general accordance with the consent application and its associated plans and documents lodged with Greater Wellington Regional Council on 29 November 2012.

For the avoidance of doubt, where information contained in the application is inconsistent with conditions of this consent, the conditions shall prevail.

Note: Any change from the location, design concepts and parameters, implementation and/or operation may require new resource consent or a change of consent conditions pursuant to section 127 of the Resource Management Act 1991.

2. Greater Wellington Regional Council shall be given a minimum of two working days (48 hours) notice prior to commencement of the works authorised by this consent.

3. The consent holder shall provide a copy of this consent and any documents referred to in this consent to each operator responsible for undertaking works authorised by this consent, before that operator starts any works. The consent holder shall, prior to the commencement of any works authorised by this consent, inform the operator of the conditions of the consent.

4. The consent holder shall ensure that a copy of this consent, and all documents referred to in this consent, is kept on site at all times and is presented to any Greater Wellington Regional Council officer on request.
Erosion and Sediment Controls

5. The consent holder shall limit the area of disturbed ground to a maximum of 5.0 hectares unstabilised at any one time. This shall include the active cleanfill area, any unvegetated batter slopes, temporary stockpiles and any temporary on-site access roads.

6. The consent holder shall ensure that all erosion and sediment control measures installed are implemented in accordance with the Greater Wellington Regional Council (September 2002) Erosion and Sediment Control Guidelines for the Wellington Region.

7. All practicable steps shall be taken to prevent the release of suspended sediments or other contaminants to water.

8. The consent holder shall ensure that all sediment laden runoff from the cleanfill site is treated by sediment retention ponds or alternative treatments in accordance with the Cleanfill Management Plan and Annual Management Plan as per conditions [17] and [18] of this consent prior to its discharge from the site.

9. No excavation shall commence in any Stage until the permit holder submits to the Manager, Environmental Regulation (Greater Wellington Regional Council) a certificate signed by an appropriately qualified and experienced engineer that the erosion and sediment control measures on site have been constructed in accordance with the requirements of the documents specified. Should the Stages include progressive development of such measures over time, this requirement shall apply to each sub-stage.

This certification shall include confirmation of:

a. Contributing catchment areas;
b. Volume, levels and capacity of erosion and sediment control measures;
c. Confirmation of compliance with the Greater Wellington Erosion and sediment Control Guidelines and the Conditions of this Consent; and
d. Stabilisation of the structure as required.

10. The consent holder shall ensure that the operation of the cleanfill is audited by an appropriately qualified and experienced person in April of each year to ensure that the erosion and sediment control measures are being maintained in accordance with the Cleanfill Management Plan and Annual Management Plan as per conditions [17] and [18] of this consent. The audits shall include the following information:

a. The date of the audit;
b. Name of the auditor;
c. Site conditions;
d. Erosion and sediment management including identification of areas of potential sediment generation and results of a review of sediment detention measures;
e. Run off control including the results of checking diversion channels and any decanting earth bunds;
f. Any maintenance required; and
g. General comments on the efficacy of the erosion and sediment control measures being employed.

11. The results of the audits shall be forwarded to the Manager, Environmental Regulation (Greater Wellington Regional Council) no later than five working days after the last day of the calendar month in which an audit is undertaken.

Where the audit identifies that maintenance or other measures are required, the consent holder shall forward to the Manager, Environmental Regulation (Greater Wellington Regional Council) no later than two months after the audit undertaken pursuant to condition [10] of this consent, a summary of the maintenance and other measures that have been undertaken and a written confirmation that all audit recommendations have been satisfactory addressed.

12. No erosion and sediment control measures may be removed until the Manager, Environmental Regulation (Greater Wellington Regional Council) has endorsed the removal of such a measure.

Environmental Incidents

13. The permit holder shall keep a permanent record of any incident(s) related to this consent that result(s), or could result, in an adverse effect on the environment including any incident with potential effects beyond the boundary of the consent holder’s site. The consent holder shall make the incident register available to officers of Greater Wellington Regional Council on request.

14. The consent holder shall notify the Manager, Environmental Regulation (Greater Wellington Regional Council) of any such incident within 24 hours of the incident being brought to the attention of the consent holder or the next working day.

15. The consent holder shall forward an incident report to the Manager, Environmental Regulation (Greater Wellington Regional Council) within seven (7) working days of the incident occurring, unless otherwise agreed with the Manager, Environmental Regulation (Greater Wellington Regional Council). The report shall describe the incident, the reasons for the incident, measures taken to mitigate the incident and measures to prevent recurrence of the incident.

Complaints

16. The consent holder shall maintain a permanent record of any complaints received alleging adverse effects from or related to the exercise of this consent. This record shall, where practicable, include the following:

   a. the nature of the complaint received;
   b. the name and address of the complainant, if supplied;
   c. the date, time and details of the occurrence of the alleged event;
   d. the weather conditions at the time of the alleged event;
e. details of the investigations undertaken by the consent holder in regards to the complaint and any measures adopted to remedy the effects of the incident or complaint; and
f. measures put in place to prevent the occurrence of a similar incident if necessary.

The complaints record shall be made available to Greater Wellington Regional Council on request. The consent holder shall notify the Manager, Environmental Regulation (Greater Wellington Regional Council) of any complaints received, which relate to the exercise of this consent, within 24 hours of the complaint(s) being received or the next working day.

Management Plans

17. At least three months prior to the commencement of each Stage of the Cleanfill Operation (as described in the application for resource consents), except that Stages One and Two shall be considered as one stage, the consent holder shall submit to the Greater Wellington Regional Council for its endorsement, a Cleanfill Management Plan (CMP) which shall include the information set out below. The indicative information in the CMP will be refined as appropriate by each Annual Management Plan (see condition [18] below).

a. Scope, order and expected timing of the works within the Stage;
b. An Erosion and Sediment Control Plan which includes, but is not limited to:
   i. Indicative methods planned to stabilise topsoil and prevent their erosion and scour;
   ii. Indicative plans showing the location and extent of the excavations intended for each stage of excavation, main access roads and the expected location(s) of stockpiles.
   iii. Indicative plans showing the location and design of erosion and sediment control measures for each stage including sediment retention pond location and design, discharge point(s) and the location and construction of any groundwater diversion drains;
   iv. Details of the intended monitoring and maintenance of all sediment control structures;
   v. The intended programme for minimising and managing all areas of exposed ground including progressive re-vegetation and stabilisation;
   vi. The intended programme for rehabilitation of each area including finished land contour, finished surface preparation, topsoil placement and thickness and grassing or other vegetation of the completed area;
   vii. The intended water quality monitoring programme;
   viii. A template for monthly monitoring and maintenance schedules for all erosion and sediment controls including visual inspection of turbidity of water leaving the site;
c. Protocols for dealing with spills of hazardous substances;
d. A Dust Management Plan setting out the methods intended to limit dust which may include the application of water by a water cart and/or ceasing dust generating activities during windy conditions;
e. A Noise Management Plan setting out the methods intended to limit any adverse noise effects from the cleanfill operation;
f. A Rehabilitation Management Plan setting out the methods intended to progressively rehabilitate the cleanfill site;
g. Indicative methods for managing peak hour truck restrictions;
h. Cleanfill acceptance criteria, controls and procedures, and
i. The name of the person who will be responsible for day to day operations and cleanfill management and at least one backup person together with phone numbers.

The consent holder shall operate the cleanfill in accordance with the CMP.

18. The consent holder shall submit to Greater Wellington Regional Council an Annual Management Plan (AMP) for the site containing the following information:

a. Details of the previous 12 months operation of the cleanfill.
b. Plans for fill and associated earthworks over the next 12 months.
c. A comprehensive evaluation of the monitoring results over the previous monitoring period, together with a full assessment of the effectiveness of erosion and sediment control measures, and of any sediment related effects on the receiving environment.
d. The proposed erosion and sediment control measures for the next 12 months. This shall include design details, including calculations, for interim sediment retention facilities, and runoff diversion measures.
e. The AMP shall cover the previous 12 months to 1 April and be submitted by 30 April each year following the commencement of consent. Any changes for the upcoming period will be subject to endorsement under condition [19].

The consent holder shall operate the cleanfill in accordance with the AMP.

19. The consent holder shall update the CMP and AMP to accommodate any changes to onsite operations on an as required basis. Any updates shall be submitted to Greater Wellington Regional Council at least 10 working days prior to their implementation. No changes shall be implemented until Greater Wellington Regional Council endorses these changes.

### 6.4 PORIRUA CITY COUNCIL LAND USE CONSENT

#### General

1. The location, design, implementation and operation of the cleanfill shall be in general accordance with the consent application and its associated plans and documents lodged with Porirua City Council on 29 November 2012.

For the avoidance of doubt, where information contained in the application is inconsistent with conditions of this consent, the conditions shall prevail.

Note: Any change from the location, design concepts and parameters, implementation and/or operation may require new resource consent or a change of consent conditions pursuant to section 127 of the Resource Management Act 1991.
2. Porirua City Council shall be given a minimum of two working days (48 hours) notice prior to commencement of the works authorised by this consent.

3. The consent holder shall provide a copy of this consent and any documents referred to in this consent to each operator responsible for undertaking works authorised by this consent, before that operator starts any works. The consent holder shall, prior to the commencement of any works authorised by this consent, inform the operator of the conditions of the consent.

4. The consent holder shall ensure that a copy of this consent, and all documents referred to in this consent, is kept on site at all times and is presented to any Porirua City Council officer on request.

Complaints

5. The consent holder shall maintain a permanent record of any complaints received alleging adverse effects from or related to the exercise of this consent. This record shall, where practicable, include the following:
   a. the nature of the complaint received;
   b. the name and address of the complainant, if supplied;
   c. the date, time and details of the occurrence of the alleged event;
   d. the weather conditions at the time of the alleged event;
   e. details of the investigations undertaken by the consent holder in regards to the complaint and any measures adopted to remedy the effects of the incident or complaint; and
   f. measures put in place to prevent the occurrence of a similar incident if necessary.

The complaints record shall be made available to Porirua City Council on request.

Accidental Discovery

6. If any urupa, traditional sites, taonga (significant artifacts), koiwi (human remains) or other artefact material is discovered during excavation, the consent holder shall adopt the following procedure;
   a. Work in the immediate vicinity of the sites that has been exposed shall cease;
   b. The site supervisor shall immediately secure the site in a way that ensures that any remains or artefacts are untouched
   c. The site supervisor shall notify representatives of Ngati Toa, the New Zealand Historic Places Trust and Porirua City Council.

The notification in (c) above shall allow the notified persons a reasonable time to record and, if necessary, recover archaeological or cultural features discovered before excavation work may recommence at the exposed site.

7. The consent holder shall ensure that site managers, operators and contractors receive a briefing on the forms of evidence for the material referred to in condition [6] in advance of undertaking any work on the site.
Dust

8. The consent holder shall ensure that the activity is managed in accordance with the Dust Management Plan required under condition [21] below thereby limiting dust emissions as far as reasonably practical so that no dust nuisance is caused beyond the boundary of the site by activities on the site.

9. The consent holder shall limit the area of disturbed ground to a maximum of 5 hectares unstabilised at any one time. This shall include the active cleanfill area, any unvegetated batter slopes, temporary stockpiles and any temporary on-site access roads.

Hours of Operation

10. The hours of the cleanfill operation are 6am - 5pm weekdays and Saturday mornings from 6am to 12noon. No filling activities shall be permitted to occur on the site outside of these hours except for:

a. Emergency works (as defined by the Resource Management Act 1991), civil emergencies, maintenance of machinery, dust suppression, the management and maintenance of on-site sediment control structures, and security requirements.

b. For a maximum of 4 times per year (for a maximum duration of 4 days each) special circumstances may apply and filling outside these hours may occur within the same envelope of effects, due to contractual obligations. This condition applies only if all neighbours within a 300m radius have been notified at least 3 days in advance by notice posted in their letterbox or by email. The actual intended hours of work shall be specified in the notice.

Traffic

11. During the following hours there shall be a maximum of 40 truck movements (per hour) to the site and 40 truck movements (per hour) from the site:

a. 7-8am weekdays

b. 4-6pm weekdays

12. Prior to commencement of construction the consent holder shall submit to, and have endorsed by, Council plans showing the detailed design for the access arrangements. The plans will:

a. Be in general compliance with:

   i. The Manual of Traffic Signs and Road Markings: Part 2 Markings (or subsequent updates via the Traffic Control Devices Manual)

   ii. The Austroads Guide to Road Design Part 4 (Intersections and Crossings General) and

   iii. The Austroads Guide to Road Design Part 4A (Unsignalised and signalised intersections)
b. Detail any pavement strengthening required to ensure that the State highway is not damaged by turning trucks

c. Detail a full reseal rather than painting over of existing road markings. The reseal shall extend no further than necessary to match the new road markings in with the existing road markings to the satisfaction of Council’s roading engineer. In particular this may require some amendments to the uphill merge lane as shown on the resource consent application.

*Note: Council shall liaise with the NZ Transport Agency in relation to fulfilment of this condition.*

13. The consent holder shall construct the access in accordance with the plans endorsed in condition [12] above to the satisfaction of Council’s roading engineer.

*Note: Council shall liaise with the NZ Transport Agency in relation to fulfilment of this condition.*

14. The consent holder shall remove the access at the end of the consent duration and reinstate SH58 to an appropriate standard. The reinstatement design shall be endorsed by Council, and any associated and necessary permits, consents, licences or other regulatory approvals obtained by the consent holder prior to any works taking place.

15. All costs of providing the access, including resealing, pavement strengthening, road markings, and eventual removal and reinstatement works shall be met by the consent holder.

**Noise**

16. Noise associated with the operations on the site shall not exceed the following limits measured at the notional boundary of any dwelling existing at the date of commencement of the consent:

- 7am – 7pm 55 dBA L10
- 7pm – 7am 45 dBA L10
- 9pm – 7am 75 dBA Lmax

17. All sound levels shall be measures in accordance with NZS 6801: 1999 ‘Acoustics Measurement of Environmental Sound’ and be assessed in accordance with NZS 6802: 1991 ‘Assessment of Environmental Sound’.

**Hazardous Substances**

18. All machinery shall be operated in a manner that will avoid any spillages of fuel, oil and similar contaminants and the consent holder shall ensure that any accidental spills of hazardous substances are prevented from entering the stormwater and sediment management system. No hazardous substances, other than those which are required for day to day operations, shall be stored on the site.
Finished Contour

19. The finished slope of all filled surfaces shall not exceed 1 vertical to 2 horizontal as shown on plans supporting the application.

20. The consent holder shall ensure that topsoil stripped in the course of the cleanfill operation is retained within the site for use within the site.

Management Plans

21. At least three months prior to the commencement of each Stage of the cleanfill operation (as described in the application for resource consent), except that Stages One and Two shall be considered as one stage, the consent holder shall submit to Porirua City Council a Cleanfill Management Plan (CMP) which shall include the information set out below. The indicative information in the CMP will be refined as appropriate by each Annual Management Plan (see Condition [22] below).

   a. Scope, order and expected timing of the works within the Stage;
   b. An Erosion and Sediment Control Plan which includes, but is not limited to;
      i. Indicative methods planned to stabilise topsoil and prevent their erosion and scour;
      ii. Indicative plans showing the location and extent of the excavations intended for each stage of excavation, main access roads and the expected location(s) of stockpiles.
      iii. Indicative plans showing the location and design of erosion and sediment control measures for each stage including sediment retention pond location and design, discharge point(s) and the location and construction of any groundwater diversion drains;
      iv. Details of the intended monitoring and maintenance of all sediment control structures;
      v. The intended programme for minimising and managing all areas of exposed ground including progressive re-vegetation and stabilisation;
      vi. The intended programme for rehabilitation of each area including finished land contour, finished surface preparation, topsoil placement and thickness and grassing or other vegetation of the completed area;
      vii. The intended water quality monitoring programme;
      viii. A template for monthly monitoring and maintenance schedules for all erosion and sediment controls including visual inspection of turbidity of water leaving the site;
   c. Protocols for dealing with spills of hazardous substances;
   d. A Dust Management Plan setting out the methods intended to limit dust which may include the application of water by a water cart and/or ceasing dust generating activities during windy conditions;
e. A Noise Management Plan setting out the methods intended to limit any adverse noise effects emanating from the cleanfill operation;
f. A Rehabilitation Management Plan setting out the methods intended to progressively rehabilitate the cleanfill site;
g. Indicative methods for managing peak hour truck restrictions;
h. Cleanfill acceptance criteria, controls and procedures, and
i. The name of the person who will be responsible for day to day operations and cleanfill management and at least one back up person together with phone numbers.

The consent holder shall operate the cleanfill in accordance with the CMP.

22. The consent holder shall submit to Porirua City Council an Annual Management Plan (AMP) for the site containing the following information:

a. Details of the previous 12 months operation of the cleanfill.
b. Plans for fill and associated earthworks over the next 12 months.
c. A comprehensive evaluation of the monitoring results over the previous monitoring period, together with a full assessment of the effectiveness of erosion and sediment control measures, and of any sediment related effects on the receiving environment.
d. The proposed erosion and sediment control measures for the next 12 months. This shall include design details, including calculations, for interim sediment retention facilities, and runoff diversion measures.
e. The AMP shall cover the previous 12 months to 1 April and be submitted by 30 April each year following the commencement of consent. Any changes for the upcoming period will be subject to endorsement under condition [23] below.

The consent holder shall operate the cleanfill in accordance with the AMP.

23. The consent holder shall update the CMP and AMP to accommodate any changes to onsite operations on an as required basis. Any updates shall be submitted to Porirua City Council at least 10 working days prior to their implementation. No changes shall be implemented until Porirua City Council endorses these changes.

Cleanfill Definition

24. Only the following material shall be accepted for final disposal in the cleanfill:

a. Material that complies with the definition of “cleanfill” as per the Ministry for Environment “A Guide to the Management of Cleanfills” 2002, and specifically Table 4.1 of Section 4.2.1; and
b. Concrete slurry i.e. material contained within a mobile mixing system, which can be pumped out at a nominated point on the cleanfill site, reinforced concrete and limited amounts of vegetation or untreated timber material (see condition [25]).

25. The consent holder shall not place machined / manufactured wood products (including debarking and sawdust) in the cleanfill. Bulky wood wastes such as large logs and stumps shall be removed.
The definition of wood wastes for the purpose of this consent shall not include small quantities of natural timber such as roots and broken branches as can reasonably be expected to be present in slip debris or excavated earth.

**Cleanfill Records**

26. All incoming materials shall be inspected from an entry platform into the site and the volumes, material type and source site of each load shall be recorded.

The matters to be recorded should include, but not be limited to:

a. the date of fill acceptance;

b. the contractor’s name and signature;

c. a description of the fill type;

d. the source of the fill;

e. the quantity of fill; and

f. any noticeable characteristics of the fill.

The cleanfill records shall be made available to Porirua City Council on request.

**Intersection and Access**

27. Prior to acceptance of any cleanfill on the site the intersection with State Highway 58 must be completed to the satisfaction of Porirua City Council, in accordance with the application documentation, and the works involved in the access road and reception area as shown in the Stage One plan must be completed.
7 ADDITIONAL INFORMATION

7.1 Introduction

It is a requirement of Schedule 4 to the RMA that where effects are likely to be significant, the AEE must describe alternatives that have been considered. In this case, it is considered that none of the effects associated with the proposed cleanfill will be more than minor. However, the applicant has considered other sites, as outlined below.

Similarly, some of the consents sought, including discharge consents, require the consideration of alternatives under Schedule 4, under RMA section 105, and under some policies in the regional plans.

A brief discussion of alternatives is provided in this section.

Schedule 4 also requires an identification of affected people, a description of any consultation undertaken, and any response to the views of any person consulted.

This is also provided below.

7.2 Alternatives Considered

7.2.1 Alternative Sites

Winstones has been investigating possible sites for a replacement for the Dry Creek Cleanfill for approximately three years.

There are specific requirements for such a site which, while not as demanding as for a quarry (where the quality of the rock resource is paramount) or a landfill, are nevertheless quite difficult to achieve close to a growing urban area. These considerations include:

- reasonable proximity to areas of demand (in this case, northern urban Wellington)
- adequate access, ideally from a main road
- reasonable separation distance from residential (or other sensitive) neighbours
- adequacy of site/fill area
- geotechnical suitability
- landowner agreement or ability to purchase
- anticipated ability to manage adverse effects on natural and physical resources and people
- cultural significance, or other protected items on or near the site.

In the present case, a location in reasonably close proximity to the Dry Creek site was considered to be desirable, for ease of transition and to retain the patterns of established users of the cleanfill.
Winstones identified and investigated a number of sites in the vicinity of the site finally chosen. Prior to that, sites to the north off SH2 were considered, but most were either protected reserve land, or in areas unable to be accessed (both apply in the area to the west of SH2 between SH58 and Riverstone Terraces).

In addition, proximity to residential neighbours, along with the two other factors, limited possibilities along the full length of the Hutt Valley to the south.

Further to the north on SH58 (it beyond Moonshine Road), there were constraints in terms of access, site suitability (e.g. size or presence of low-lying land) and residential neighbours.

Winstones undertook preliminary investigation of three general locations in the vicinity of the site finally selected. These were: a notional site off Mt Cecil Road; a site off Harris Road (behind Brittans); and the vicinity of the current site.

The possibility of a Cecil Road site was soon dropped because of the presence of life-style blocks on the lower parts of the road.

The Harris Road site was investigated further, but was not progressed due to NZTA concerns about turning traffic and sight lines. In addition, there were potential issues with the former use of the part of the area as a landfill, and the stream in the valley was lower in the catchment and with higher ecological values.

The initial site identified in the area which could be accessed in the vicinity of Felix Road involved the upper part of the gully. This was an area of some 15 to 16ha, and was more concealed in terms of landscape and more distant from residential properties. However, it included the maturing bush area with habitat and ecological values. There were also some difficulties in accessing the upper levels of the possible cleanfill area.

Further investigations led to the identification of the present site, lower on the valley slopes.

The proposed site obviously has some issues, but quickly became the preferred site (or the only feasible site). Subsequent investigations demonstrated site suitability. Subsequently, more detailed environmental investigations have been undertaken and advice sought on mitigation, to confirm site suitability and to develop a practical project.

7.2.2 Alternatives to Discharges

In terms of alternative discharges, the cleanfill itself is a discharge, and there is no other alternative than a discharge in another location, as noted above.
Discharge to air are modest, and can be effectively mitigated. Some level of discharge is unavoidable. In the location chosen, there is very little risk of adverse effects from dust discharges.

Discharges to water are also unavoidable. However, extensive treatment systems are proposed and on-site management will be applied to minimise any reduction in the quality of water leaving the site.

7.3 Affected Persons and Consultation

7.3.1 Introduction

The people most likely to be affected by the proposal are the residents of Cecil Road, and the landowners, Mr and Mrs Judd, themselves.

In addition, Winstones was advised of a number of community organisations recommended to consult with by PCC.

7.3.2 Community Consultation

Winstone contacted the Pauatahanui Residents Association (PRA) in July 2012 and provided a broad outline of the proposal. The PRA indicated that they would assess the proposal at the application stage.

A small number of people live south east of the proposed site on lifestyle blocks located on Mt Cecil Rd. Winstone contacted the following Mt Cecil Rd residents in July 2012 with regard to the proposal:

- Sinke – 2 Mt Cecil Road
- Wright – 3 Mt Cecil Road
- Morgan – 8 Mt Cecil Road
- Schofield – 9 Mt Cecil Road
- Nash/More – 25A Mt Cecil Road
- McCready – Mt Cecil Road (property number not known)

Meetings were held with Mr and Mrs Schofield, Mr Sinke, Mr McCready and Ms Morgan on 1st August 2012. A meeting could not be set up with the Wright family but Winstone discussed the project in a phone call with Mr Wright on 13th August 2012. Contact was made with the Nash/More residence but no response was received. All residents contacted were provided with copies of all draft reports (as they became available) prior to this application being lodged. Once Winstones was advised of the formation of the Highway 58 Residents Action Group in late August 2012 all draft reports (as they became available) have been copied to that group also. The main concerns of the group appears to be traffic safety, noise and general modification of the rural area.

Two additional properties on Mt Cecil Rd were vacant during this initial consultation period (the properties being owned by Ms Blair and Ms Burton). Attempts were made to contact these owners but
no response was received. Copies of the reports have subsequently been sent to Ms Blair at her home address in Palmerston North.

Winstone will seek to continue consultation and dialogue with local residents throughout the cleanfill consenting process and beyond.

7.3.3 Tāngata Whenua Consultation

Winstone has established relationships with several Wellington iwi as a consequence of consultation over other proposals. Two groups in the Porirua/Hutt Valley area were contacted in July 2012 in respect of the proposal. These were Te Runanga o Toa Rangatira (who hold mana whenua over the proposed site), the Port Nicholson Block Settlement Trust and the Wellington Tenths Trust. The proposal was broadly outlined by letter and the organisations were invited to participate in further consultation. Both indicated their wish to continue consultation including review of draft reports and the final application documents. Representatives of the Port Nicholson Block Settlement Trust and the Wellington Tenths Trust attended a site visit on 1 August 2012. Winstone also commissioned the groups to each prepare a cultural impact assessment (outcomes in section 5.2).

Winstone will continue consultation and dialogue with tāngata whenua through the cleanfill consenting process and beyond, particularly as a result of Te Runanga o Toa Rangatira’s request for an ongoing relationship.

7.3.4 Consultation on Conservation Matters

The proposed site is close to the headwaters of the Pauatahanui Stream which flows into the Pauatahanui Inlet. Three inlet protection groups were contacted in July 2012 and information provided, with an offer to meet in respect of the proposal. The groups were Porirua Harbour and Catchment Community Trust (PHACCT), the Pauatahanui Inlet Community Trust (PICT) and the Guardians of Pauatahanui Inlet (GOPI). All three groups indicated that they were comfortable with the approach Winstone was taking in regard to protection of the Pauatahanui Stream and would review their position at the time of the resource consent applications.

Winstone met with the Department of Conservation (DoC) in July 2012 to discuss the proposal and invited DoC to participate further in the consultation process. DoC have also been provided with copies of all relevant draft reports prior to submission of the resource consent applications.

7.3.5 Consultation on Access and Traffic

Winstone first met with NZTA in June 2011 to discuss earlier alternatives to the current proposal. Ongoing dialogue with NZTA including addition meetings has taken place to date and Winstone has since met all of the concerns raised by NZTA. As a result, NZTA have provided their
written affected party approval to the proposed activity. This is attached, with the Transport Assessment Report at Appendix 7.
8 SUMMARY AND CONCLUSION

This application, description and assessment of effects on the environment relates to a proposal to establish and operate a cleanfill off SH58 near Judgeford, Porirua.

This information relates to the consents needed for the activity from GWRC. Similar documentation is provided in relation to a separate land use consent needed from PCC\(^8\). It is anticipated that the applications will be publicly notified and heard together.

The proposed cleanfill is considered to be a suitable site for the purpose. If consented, it has an anticipated life of 55 to 60 years. It will therefore contribute to the long-term infrastructure for the region.

The development of the cleanfill is proposed to be staged, and progressive development will take place within the stages. Preliminary geotechnical, stormwater and erosion and sediment control design has been undertaken for the site.

The proposed activity triggers the need for consents under the RMA and in terms of several regional plans.

There are a number of actual and potential adverse effects associated with the proposed cleanfill. Chief amongst these are effects on the natural character of the watercourses that cross the site, which are in the headwaters of the highly valued Pauatahanui Stream, and associated adverse effects on aquatic ecosystems. These areas are not pristine: however, they will be further adversely affected by the proposal. A range of other effects has been identified and assessed. Many of these assessments are supported by specialist technical reports, included as Appendices to this AEE.

Extensive mitigation through design, management and on-site works is proposed. Where mitigation cannot be achieved, offsetting of unavoidable environmental effects is proposed. This includes the protection and riparian planting of a comparable length of stream to that directly affected. Retirement of associated land for regeneration is proposed as environmental compensation for the limited vegetation removal involved.

Once the mitigation and other proposals are taken into account, it is considered that all effects have been addressed and avoided or mitigated, and residual effects are, at most, minor.

Consultation has been undertaken with affected parties and others, as documented earlier, and will be continued as appropriate throughout the statutory processes.

\(^8\) A further minor land use consent is needed from HCC, and is being sought separately as earlier noted.