
TO: Hearings Commissioners

FROM: Kirstyn Lindsay, Consultant Planner

DATE: 14 April 2022

SUBJECT: **RESOURCE CONSENT APPLICATION**
LUC -2020-405
700 & 750 BIG STONE ROAD, DUNEDIN AND ROAD RESERVE

APPLICANT **DUNEDIN CITY COUNCIL**

INTRODUCTION

- [1] This report has been prepared on the basis of information available on 14 April 2022. The purpose of the report is to provide a framework for the Commissioner's consideration of the application and the Commissioners are not bound by any comments made within the report. The Commissioners are required to make a thorough assessment of the application using the statutory framework of the Resource Management Act 1991 (the Act) before reaching a decision.

SUMMARY OF RECOMMENDATION

- [2] For the reasons set out in in this report, I consider that, subject to recommended conditions of consent, the proposal to widen and undertake safety improvements of Big Stone Road, McLaren Gully Road and State Highway 1 is considered to have acceptable adverse effects and is assessed as consistent with the relevant objective and policy framework. As a result, I have concluded that the proposal should be granted, subject to conditions.

BACKGROUND

- [3] The applicant (Dunedin City Council) collects residential waste and manages the disposal of both residential and the majority of commercial waste for the Dunedin City area and environs. The applicant has embarked on the Waste Futures Project to develop an improved comprehensive waste management and diverted material system for Dunedin, including future kerbside collection and waste disposal options. As part of the project, the applicant has confirmed the need to develop a new landfill to replace the applicant's current Green Island Landfill which is envisaged to reach full capacity in the next few years.
- [4] The applicant commenced siting studies for a new landfill location in the late 1980's and early 1990 and selected the Smooth Hill site. The site was subsequently designated in the 2006 Operative Dunedin District Plan, signalling and enabling its future use as a landfill site. This designation (D659) was carried down into the Proposed Dunedin City Council Second Generation Plan (2GP). As part of the Waste Future's Project, the applicant has reconfirmed the technical suitability of the Smooth Hill site for the disposal of waste, including its attributes that support the natural containment of waste and proceeded to develop a concept design for the landfill, and associated road upgrades.

- [5] Consents are sought from Otago Regional Council (ORC) and Council's consenting authority arm (DCC Regulatory) to enable the construction, operation, and aftercare of the landfill, and construction of the associated roading upgrades.
- [6] The application was originally made in August 2020. A further information request was issued and subsequently the application was revised in May 2021. It is the revised application which is assessed as part of this report.
- [7] The applicant advised on 7 April 2022 that additional revisions to the application were likely. These revisions are expected to include a minor realignment to the proposed road carriageway in order to avoid any direct impact on roadside wetlands located adjacent to McLaren Gully Road.
- [8] The applicant confirms that the proposed carriageway realignment will be entirely within the proposed design footprint for the road design. However, the applicant advises that the drawings depicting the realignment are currently being finalised and will be provided as soon as they are approved. The realignment is also to be assessed by the applicant's relevant technical experts in their statements of evidence. At the time of writing this report, the revised drawings and statements of evidence had not been provided.
- [9] The matters considered in this report are restricted to those which fall under the jurisdiction of the Dunedin City Council as consent authority, namely roading upgrades to McLaren Gully Road (including its intersection with State Highway 1), and Big Stone Road. As noted above, the landfill is designated under both the 2006 Operative District Plan and the Proposed 2GP. The applicant advises that the second stage of this project will involve an outline plan application pursuant to section 176A of the Resource Management Act 1991, but an outline plan is not submitted as part of this application.

DESCRIPTION OF PROPOSAL

- [10] Resource consent is sought from Dunedin City Council as consent authority to undertake the proposed roading upgrades associated with the establishment and operation of the landfill.
- [11] The applicant proposes that vehicle access to the site will be from State highway 1 (SH1) via McLaren Gully Road and Big Stone Road. In the event that SH1 or McLaren Gully Road are inaccessible an alternative access is also available via Big Stone Road where it connects through Brighton and Dunedin. Traffic will access the site from Big Stone Road from a new access located approximately 350 m from the intersection of McLaren Gully Road and Big Stone Road.
- [12] Vehicle movements to and from the site will include those for worker transport, delivery of waste/clean fill, leachate and water tanker transport, commercial deliveries, service vehicles, and construction vehicles during initial site development and development of each landfill stage. The average number of truck movements is expected to reach approximately 25 per day. In addition, there is expected to be up to 25 light vehicle movements per day.
- [13] The site access will be used by all operational staff, construction traffic, and waste and leachate trucks. No public access will be allowed. The access is approximately 200m long and will be formed with an 8 m wide sealed carriageway, and have a lockable gate at the entrance. Stormwater from the access will be collected and discharged to the landfill perimeter drain and attenuation basin. For completeness, I note that the internal access arrangements within the landfill fall outside of the matters able to be considered under this report and will be considered when an Outline Plan is lodged.

[14] The applicant proposes to upgrade the SH1 / McLaren Gully Road intersection. Upgrades include the addition of a southbound left turn lane on the state highway, and lighting. McLaren Gully Road and Big Stone Road will also be upgraded, widened, and sealed as far as the new site access to ensure these can safely accommodate two-way traffic and increased traffic demands arising from the operation of the landfill. The applicant advises that the concept design has been based on the standards in the DCC Code of Subdivision and Development 2010, and provides for:

- Vertical gradients limited to 10%.
- Two 3.5 m sealed lanes, with widening to accommodate design vehicle swept paths.
- Shoulders of 0.25 m sealed plus 0.25 m unsealed.
- Swales with a 5H:1V road side slope, 1 m base and 4H:1V boundary side slope. Swales will discharge into watercourses and wetlands where they occur adjacent to the road.
- The legal road boundaries will be adjusted where the upgraded roads fall outside the existing road reserve.

[15] The updated design for the upgrade of McLaren Gully Road and Big Stone Road has taken into account the occurrence of wetlands along the road margins. To the extent practicable, wetlands have been avoided through the updated road design. This has included adjustment of the road centreline and grade.

[16] The applicant advises that the construction of the roading upgrades outside of the site are anticipated to require approximately 46,700 m³ of cut, and 18,470 m³ of fill, representing an excess of cut material in the order of 28,230 m³ which will be stored at the stockpile areas for reuse. The road upgrades will involve:

- Cut slopes generally up to 4 m in height, but with two sections being between 5 m and 7 m in height.
- Embankments up to 7.5 m in height, but with sections of retaining structures of between 0.5 m and 2.5 m, particularly where the road corridor is adjacent to roadside wetland areas.
- Cut face slopes will rise at a slope of 1V:0.2H, while fill embankments will slope at 1V:2H.

[17] Resource consent is also required for the clearance of approximately 16.5 m² (0.0017 ha) of indigenous wetland vegetation, roadside lizard habitat in exotic grasslands and riparian wetland along Otokia Creek Tributary between the designated site and McLaren Gully Road.

SITE DESCRIPTION

[18] The landfill site is located approximately 28 km southwest of Dunedin in the hills between the Taieri Basin and the South Island east coast. Access to the site is primarily from State Highway 1 (SH1), McLaren Gully Road and Big Stone Road to an existing vehicle entrance located on the south eastern boundary of the site. The majority of the site until recently was covered by a mature pine forest plantation. Following harvesting in 2017, the site now comprises of a mixture of scrub, bare earth, forestry waste, and newly planted pine seedlings. The landscape in this area forms rolling to steep hill country, within which the site is contained within folded gullies and ridges and largely concealed from view.

- [19] SH1 is the main road link between Dunedin and Southland, and within the project area is named as Allanton-Waihola Road. McLaren Gully Road and Big Stone Roads are low volume rural roads providing vehicle access to primarily to surrounding commercial plantation forests, and rural residential properties. Access to McLaren Gully Road from State Highway 1 is via a priority 'T' intersection. The roads are unsealed and the existing road corridor and formed carriageway do not fully align with the legal road boundaries in places, particularly at the bottom end of McLaren Gully Road closest to State Highway 1. There is no formal provision for walking or cycling on the existing roads.
- [20] The land use surrounding the landfill site and along McLaren Gully Road and Big Stone Road predominately consists of commercial plantation forestry on large landholdings. Much of this land has been harvested and replanted in the last 5 years resulting in a landscape comprising a mixture of scrub, bare earth, forestry waste, and recently planted pine seedlings. Some localised areas of pastoral farming exist, notably adjacent to the sites north eastern boundary, and land at the bottom end of McLaren Gully Road. Rural residential activity exists in isolated pockets and at low densities in the surrounding area. Two houses are located along McLaren Gully, approximately 1km from the SH1 intersection, and approximately 1.7km from the landfill site. Two further houses are located in the hills between Big Stone Road and the coast, approximately 380m and 605m southeast of the landfill site respectively. Other houses are located at distances beyond 1km along Big Stone Road in the direction of Brighton.
- [21] Until recently, the designation in the 2GP fell over two separate land parcels bisected by an unformed paper road that ran through the site between McLaren Gully Road and Big Stone Road. The road was formally declared as being stopped by the Minister for Land Information New Zealand on 21 July 2020. The applicant subsequently applied to alter the designation boundary under section 181(3) of the RMA to encompass the stopped road into the designation. DCC (Regulatory) issued a decision formally altering the designation on 26 March 2021. As such, the legal description of the subject land is set out below:
- [22] The landfill site is legally described as:
- Part Lot 1 DP 457417 and Section 1-2 SO 547235, held in Record of Title 971405 and comprising an area of 118.8517 hectares
 - Lot 2 DP 457417, held in Record of Title 598006 and comprising an area of 58.9603 hectares.
- [23] The legal description of the land within the road upgrade area includes:
- Part Section 71 Irregular Block East Taieri Survey District, Section 2 of 6, Section 8-9, Section 2 of 17, Section 26-27, Section 1 of 28, Section 2 of 28, Section 3 of 28, Section 1 of 29, Section 41, Part Section 10-11, Part Section 1 of 19, Part Section 2 of 29, Part Section 7 and Part Section 30 Block II Ōtokia Survey District and Deposited Plan 2677, held in Record of Title OT17C/503 and comprising 467.9659 hectares.
 - Lot 1 DP 19819 held in Record of Title OT11A/153 and comprising 12.02 hectares.
 - Lot 7 DP 21420 held in Record of Title OT19C/49 and comprising 20.4150 hectares.
 - Lots 3-5 DP 21420 held in Record of Title 244203 and comprising 42.86 hectares.
 - Lot 6 DP 21420 held in Record of Title 209912 and comprising 38.2199 hectares.
 - Lot 1 DP 21420 held in Record of Title 209914 and comprising 24.5 hectares.
 - Lot 2 DP 21420 held in Record of Title 209913 and comprising 185.5 hectares.

- Section 2 of 19 and Section 21 Block II Ōtokia SD held in Record of Title OT7A/953 and comprising 74.4622 hectares.
- Section 2 of 22, Section of 23, and Part 34 Block II Ōtokia Survey District held in Record of Title OT253/283 and comprising 26.1022 hectares.
- Part Section 3 of 23, 2 of 25 Block II and Part Section 1 of 22 Block III Ōtokia Survey District held in Record of Title OT13C/900 and comprising 69.8226 hectares.
- Section 1-2 Section 21 Block III Ōtokia Survey District held in Record of Title OT245/105 and comprising 23.6565 hectares.
- Lot 1 DP 21447 held in Record of Title 209915 and comprising 436.5960 hectares.
- Lot 8 DP 427870 held in Record of Title 510238 and comprising 26.9539 hectares.

[24] The applicant advises that they are in negotiations with the relevant landowners to purchase the necessary land needed for the upgrade works. The final footprint of the planned roading upgrades may result in some of the sites identified above not being affected by road widening.

[25] A copy of the application, including plans of the proposal is contained in Appendix 1 of this report.

ACTIVITY STATUS

[26] Dunedin currently has two district plans, the 2006 Dunedin City District Plan (2006 District Plan) and the Proposed 2GP. The decisions on the 2GP were released on 7 November 2018 and the rules of the 2GP have legal effect. The appeal period of the 2GP closed on 19 December 2018 and rules that have not been appealed are deemed operative. An appeals version of the plan was released on 13 February 2019.

[27] Section 86F of Act states that:

A rule in a proposed plan must be treated as operative (and any previous rule as inoperative) if the time for making submissions or lodging appeals on the rule has expired and, in relation to the rule,—

- (a) no submissions in opposition have been made or appeals have been lodged; or*
- (b) all submissions in opposition and appeals have been determined; or*
- (c) all submissions in opposition have been withdrawn and all appeals withdrawn or dismissed.*

[28] The site is zoned Rural Coastal under the 2GP. The following annotations are relevant for the proposal:

- The landfill site is designated for use for 'proposed landfilling and associated refuse processing operations and activities' (D659).
- The landfill site and surrounding area is also covered by a Dunedin International Airport Ltd designation for the airports obstacle limitation surfaces to prevent the encroachment of obstructions into airspace that may affect aircraft operations (D274).
- SH1 is designated by the New Zealand Transport Agency for 'state highway purposes' (D463).
- Sections of the upgrade areas for McLaren Gully Road fall within an Archaeological Alert Layer.
- Sections of the upgrade areas for McLaren Gully Road are adjacent to an Area of Significant Biodiversity Value (ASBV) covering the McLaren's Gully Covenant,

described as an 'area of native bush gullies, podocarps including totara and kahikatea' (C075)

- [29] The majority of the rules of the 2GP relevant to this proposal are beyond challenge, and therefore treated as operative under section 86F of the RMA. I note that the application identifies rules relating to indigenous vegetation clearance, as being subject to various appeals. As such, all 2GP rules relevant to this application are deemed to be operative and the equivalent rules in the Operative Dunedin City District Plan inoperative, except for 2GP Rules 10.3.2.2.a and 10.3.2.3.c.
- [30] For completeness, I note that Variation 1 to the Plan was notified on the 20th of November 2019, and decisions were issued by the Council on the 18th of July 2020 and those changes now form part of the 2GP. Variation 2 was notified on 3 February 2021 and include a suite of changes to enable additional housing capacity. The provisions of Variation 2 are not relevant to the proposal.

Operative Dunedin City District Plan 2006

- [31] The equivalent rule for Rule 10.3.2.2.a and 10.3.2.3.c. is Rule 16.6.2 as follows:

Rule 16.6.2 Discretionary Activities (Unrestricted) In the Rural and Rural Residential zones, excluding any Urban Landscape Conservation Area, the following are discretionary activities (unrestricted):

- (i) Clearance or modification of indigenous vegetation.*
- (ii) Earthworks over 1m³ in volume or 25m² in area (including deposit of fill in wetlands).[Amended by Plan Change 11, 11/10/10] in respect of:*
 - (a) Coastal habitat.*
 - (b) Wetland.*
 - (c) Skink habitat as identified in Map 79.*
 - (d) Indigenous vegetation.*

Except that this rule does not apply to:

- 1. Indigenous vegetation which is not in a coastal habitat, a wetland or a skink habitat, so long as all of the following conditions are satisfied:*
 - (a) The indigenous vegetation is totally separated from other indigenous vegetation; and*
 - (b) The area containing indigenous vegetation is less than the minimum area shown in map 79; and*
 - (c) The indigenous vegetation does not include either a threatened species listed in Appendix 16A or mature tree(s) of a species listed in Appendix 16B.*

- [32] While the proposal proposes less than 0.5ha clearance as per Map 79, and appears to be separated from other vegetation by pasture land, it does contain species listed in Appendix 16A.

- [33] The proposal is assessed as a discretionary activity.
- [34] In assessing any application, in addition to the matters contained in the Fourth Schedule of the Act, the Council will have regard to, but not be restricted by the following matters:
- *16.7.1 Cumulative Effects: The cumulative effect of the incremental loss or modification of areas of indigenous vegetation and habitats of indigenous fauna.*
 - *16.7.2 Conservation Values: The necessity of the proposed activity for the purpose of maintaining or enhancing the conservation values of the area.*
 - *16.7.3 Sensitivity: The sensitivity of the area of significant conservation value to the actual and potential adverse effects of the proposed activity in terms of the likelihood of, and projected time frame for, complete recovery from any such effects.*
 - *16.7.4 Guidelines and Accords: Any guidelines, accords or codes of practice which address conservation values such as the Otago Regional Council's Code of Practice for the management of Vegetation Burning in the Otago High Country and the Forestry Stewardship Council's Forest Certification process.*

Proposed 2GP

- [35] The following 2GP rules are triggered by the proposal:

City Wide Activity

- [36] Rule 6.3.2.2 provides for new roads or additions or alterations to existing roads as a discretionary activity. Discretionary activities are assessed under Rule 6.12.3.2.
- [37] Rule 8A.3.2 provides for Earthworks – Large Scale as a restricted discretionary activity. The earthworks associated with the upgrade of McLaren Gully Road, Big Stone Road, and the State Highway 1 intersection will not comply with the following earthworks- small scale standards:
- a) Earthworks will exceed the maximum 2 m change in finished ground level for the rural zone, and maximum 0.5 m within 20 m of a water body as specified in Rule 8A.5.1.3.
 - b) Earthworks will exceed the maximum 25 m² area within 20 m of a waterbody as specified in Rule 8A.5.1.4.
 - c) Earthworks will exceed the maximum volume of combined cut and fill in the rural zone, and within 20 m of a water body, as specified in Rule 8A.5.1.5.
 - d) Earthworks will not be setback from property boundaries as specified in Rule 8A.5.4.
 - e) Earthworks will not be setback 5 m from any water body as specified in Rule 10.3.3.
- [38] Earthworks – Large Scale are assessed as a restricted discretionary activity and assessed under Rule 8A.7.

Land Use Activity

- [39] There are no relevant land use rules for this proposal.

Development Activity

- [40] Rule 16.3.4.24.a provides for Indigenous vegetation clearance – large scale as a restricted discretionary activity, subject to the vegetation clearance standards set out in Rule 16.6.11. Activities which trigger this rule are assessed under Rule 16.10.3.3.
- [41] In respect of Rule 16.6.11, the areas of removal are not within an Urban Biodiversity Mapped Area or a hazard overlay zone. Rule 16.6.1.1 directs the plan user to the standards set out in Rule 10.3.2.
- [42] The clearance will not exceed 500m² in three years as specified in Rule 10.3.2.c.i but will result in vegetation clearance as follows:
- within 5 m of a waterbody as specified in Rule 10.3.2.2.a.i (Under Appeal)
 - within a wetland in a rural zone as restricted by Rule 10.3.2.2.b.ii. For completeness, the wetland(s) are not listed in Appendix A1.2 as an Area of Significant Biodiversity Values.
 - in areas where threatened fauna species listed in Appendix 10A.2 may be present, specifically the southern grass skink as specified by Rule 10.3.2.3 (Breach of rules activity status under appeal 10.3.2.3.c).

Breaches of Rule 10.3.2 are restricted discretionary activities assessed under Rule 10.5.3.

- [43] No other development activity performance standards are considered relevant to this proposal.

National Environmental Standards

- [44] The Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 (NЕСS) came into effect on 1 January 2012. The NESCS applies to any piece of land on which an activity or industry described in the current edition of the Hazardous Activities and Industries List (HAIL) is being undertaken, has been undertaken or is more likely than not to have been undertaken. Activities on HAIL sites may need to comply with permitted activity conditions specified in the soil contamination NESCS and/or might require resource consent.
- [45] The applicant has undertaken a Preliminary Site Investigation of the historical presence of HAIL activities. The investigation did not find any HAIL activities on the land associated with the proposed road upgrades. The landfill site, and land underlying the road upgrades have historically been used for farming, forestry, and road transport activities.
- [46] As no HAIL activities have been identified, the NESCS does not apply to the project and resource consent is not required under the NESCS. While a landfill is a HAIL activity the NESCS is concerned with the consequences of existing or historic land usage rather than an activity that is yet to be established. Furthermore, this application is restricted to consideration of the effects of the road realignment and not the landfill activity.
- [47] There are no other National Environmental Standards relevant to this application. Specifically, I note the National Environmental Standard for Freshwater (NESFW) falls under the jurisdiction of ORC and cannot be considered here.

Overall Status

- [48] Where an activity requires resource consent under more than one rule, and the effects of the activity are inextricably linked, the general principle from case law is that the different components should be bundled and the most restrictive activity classification applied to the whole proposal.
- [49] In this case, there is more than one rule involved, and the effects are linked. As a result, having regard to the most restrictive activity classification, the proposal is considered to be a discretionary activity overall.

OTHER APPROVALS REQUIRED

- [50] The applicant identifies the additional approvals required for this proposal:
- Any obstruction (landform, buildings) within the designated airport obstacle limitation surfaces, requires approval from Dunedin Airport Ltd under section 176(1)(b) of the Resource Management Act 1991. In addition, the Director of the Civil Aviation Authority must be notified under CAA rule Part 77 for a determination as to whether the obstruction constitutes an aeronautical hazard.
 - Works required to upgrade the SH1 / McLaren Gully Road intersection requires approval from Waka Kotahi under section 176(1)(b) of the Resource Management Act 1991, and sections 51 and 52 of the Government Roading Powers Act 1989.
 - Works resulting in the destruction or modification of any archaeological site, requires an authority from Heritage New Zealand under the Heritage New Zealand Pouhere Taonga Act 2014.
 - Works disturbing or requiring the catching and release of protected wildlife, requires an authority from the Department of Conservation (DOC) under the Wildlife Act 1953.
 - With regard to the realignment of McLaren Gully Road and Big Stone Road, the road realignment required for the upgrade of McLaren Gully Road and Big Stone Road involves the acquisition of private land for road, right of support easements, and stopping of road. This process is to be progressed pursuant to Section 17 of the Public Works Act 1981 (PWA).

NOTIFICATION AND SUBMISSIONS

- [51] No written approvals were submitted with the application.
- [52] A decision to publicly notify the application was made in September 2021. The decision was made on the basis that special circumstances applied due to the joint application with the Otago Regional Council. I note that the determination, as to whether an application should be notified or not, is separate from the issues to be considered in making a decision on the application itself.
- [53] Copies of the application were sent to those parties the Council considered could be directly affected by the proposal. The submissions are attached at Appendix 3. The submission period closed on 15 November 2021.

- [54] Twelve submissions were received by Dunedin City Council (Regulatory) at the close of the submission period.
- [55] The submissions are summarised in the table below, and a full copy of the submissions is attached in Appendix 2.

Table1: Summary of Submissions

Submitter	Submission points/ Relief sought	Oppose/ support	Wishes to be heard.
George & Eunice McLeod	<p>Concerned that no agreement has been reached with DCC in regard to the proposed encroachment for road realignment. Considers that there has been insufficient consultation with us on the proposed widening where we are a directly affected party</p> <p>Considers that there is a lack of detail in regard to the designs submitted with the application.</p> <p>The title to the land (OT245/105) is “Limited as to Parcels”, and therefore a formal survey is required to better understand the location of the boundary lines.</p> <p>Considers further work is required in order to better understand the proposed road design.</p> <p>Concerned regarding an increase in traffic on the local roads. This is likely to have negative effects on stock due to frequent disturbance, and will also create greater hazard when using the roads to move stock from this block to our other property.</p> <p>Seeks that:</p> <ul style="list-style-type: none"> • Further investigation is undertaken to determine the boundary of the property, and a more accurate design of the proposed road widening. 	Oppose	Yes
David Cormack on behalf of Wenita Forest Products	<p>Submission relates to realignment and widening of McLaren Gully Road</p> <p>Concerned about the possibility of losing a significant area of trees if required to set back 10m from the new road formation and alignment (due to the road formation moving and/or becoming wider). This could potentially be very expensive for Wenita, in terms of tree</p>	Neutral	No

	<p>crop lost and deforestation (carbon credit) liabilities.</p> <p>Seeks that:</p> <ul style="list-style-type: none"> the 10m setback for new trees to the road formation be waived (or the Dunedin City Council was prepared to pay compensation). 		
Adrian Green on behalf of Saffhill Forest Estates Ltd	<p>Submission relates to realignment and widening of McLaren Gully Road</p> <p>Concerned about the possibility of losing a significant area of trees if required to set back 10m from the new road formation and alignment (due to the road formation moving and/or becoming wider).</p> <p>Seeks that:</p> <ul style="list-style-type: none"> The 10m setback for new trees to the road formation be waived (or the Dunedin City Council was prepared to pay compensation). Notes that land from Saffhill Forest Estate will be required for road widening purposes. 	Neutral	Yes
Richard Shaw on behalf of Waka Kotahi NZ Transport Agency	<p>Recommends that the conditions and advice notes as set out in the submission imposed on the consent should it be granted:</p>	Neutral	Yes
Elizabeth Wallace on behalf of the Department of Conservation	<p>Submission relates to road widening and upgrades, and clearance of indigenous wetland vegetation, lizard habitat, exotic grasslands and riparian wetland.</p> <p>Considers that if consents are granted then conditions are required to protect conservation values.</p>	Neutral	No
Rick Zwaan on behalf of Royal Forest and Bird Protection Society (Forest & Bird)	<p>Seeks that no earthworks for the landfill or road upgrades to occur within, or within 100m of natural wetlands where those earthworks may result in the partial drainage of the wetland.</p> <p>Concerned at the loss of indigenous vegetation, especially associated with the upgrade of McLaren Gully Road, and seeks that this be avoided.</p>	Oppose	Yes

	<p>Seeks that:</p> <ul style="list-style-type: none"> The application is declined in its entirety. 		
Yvonne Takau on behalf of Te Rūnanga o Ōtākou	<p>Refers to the cultural impact assessment (CIA) prepared by Aukaha in collaboration with Te Rūnanga o Ōtākou and lodged as part of the application.</p> <p>Te Rūnanga o Ōtākou support the application, subject to the adoption of the mitigation measures proposed in the amended cultural impact assessment lodged as part of the application.</p>	Support	Yes
Heather Brooks	<p>Concerned that the current proposal indicates between 10 and 25 trucks of rubbish plus other light vehicles will travel from Green Island through Ocean View and Brighton, across a one-way bridge, past a primary school and past an area of lifestyle blocks.</p> <p>Considers that it will affect property values, especially in the Big Stone Road area.</p> <p>Seeks that:</p> <ul style="list-style-type: none"> The proposal avoids rubbish trucks travelling past primary schools. 	Oppose	No
Lisa Russell	<p>Concerned with the increased level of traffic that at landfill will bring through her township and the risks to children and families who frequent these roads; including travelling past the primary school and over a single lane bridge that crosses the Otakia stream.</p> <p>Concerns with pollution from unsecured loads travelling to and from the tip.</p> <p>Seeks that consent be declined.</p>	Oppose	No
Mandie & Brian Lungley	<p>Submission is on ORC Form 16 and references RC20.280 only.</p> <p>Submission points fall outside of DCC (Regulatory) jurisdiction.</p>	Oppose	
Russell Walker	<p>Submission points fall outside of DCC (Regulatory) jurisdiction.</p>	Neutral	No

John Finlayson	Submission is on ORC Form 16 and references RC20.280 only. Submission points fall outside of DCC (Regulatory) jurisdiction.	Oppose	Yes
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ENVIRONMENTAL EFFECTS OF ALLOWING THE ACTIVITY

[56] Section 104(1)(a) of the Act requires that the Council have regard to any actual and potential effects on the environment of allowing the activity. 'Effect' is defined in Section 3 of the Act as including-

- a) *Any positive or adverse effect; and*
- b) *Any temporary or permanent effect; and*
- c) *Any past, present, or future effect; and*
- d) *Any cumulative effect which arises over time or in combination with other effects—*
regardless of the scale, intensity, duration or frequency of the effect, and also includes –
- e) *Any potential effect of high probability; and*
- f) *Any potential effect of low probability which has a high potential impact.*

Permitted Baseline

[57] Pursuant to 104(2) of the Resource Management Act 1991, the Council may disregard an adverse effect of the activity on the environment if the district plan or a national environmental standard permits an activity with that effect. In this situation, the road upgrades which fall within the existing formed road corridor or legal road are a permitted activity. Furthermore, all public vehicle movements, including the heavy vehicle movements associated with permitted farming and forestry activity, within the existing road network are also permitted.

[58] Earthworks are also permitted where these do not exceed a change in ground level or 2.0m reducing to 0.5 m within 20 m of a water body, do not exceed 25m² within 20 m of a water body, are appropriately setback from property boundaries and 5.0m from any waterbody. It is difficult to calculate a permitted volume threshold limit given the range of properties and road reserve that the earthworks will occur over.

[59] It is the effects of the proposal beyond the permitted baseline which is critical in making this assessment.

Receiving Environment

[60] The existing and reasonably foreseeable receiving environment is described in paragraphs 18-23 and is not repeated here.

Effects of the roading upgrade

[61] The primary activity for consideration of DCC (Regulatory) relates to the roading upgrade.

[62] Three submissions relate to the road upgrade and the effect this will have on their existing farming and forestry activities, namely:

- George and Eunice McLeod – concerned with impacts on stock movements across the road from one block to another.
- David Cormack on behalf of Wenita Forest Products – impacts of the road realignment on Wenita’s ability to meet the 2GP setback to roads required for forestry activities.
- Adrian Green on behalf of Saffhill Forest Estates Ltd – raises the same concerns as Wenita Forest Products in respect of setbacks to the realigned road.

[63] The three submitters above (along with a number of other parties) are also affected by the land acquisition process for the road widening. I note that the effects of land acquisition cannot be considered under the resource consent process.

[64] The applicant confirms that at the time of the writing this report, it is in negotiations with the three submitters identified above and has made good progress to date. I am cautious about pre-empting any outcomes of these negotiations and request leave to revisit the effects on these parties (specifically those matters identified in Policy 6.2.1.3 as integration with surrounding land uses, severance effects, changes to drainage patterns, and vibration, noise, glare and fumes from vehicle movements) during the hearing process.

[65] The submission from Waka Kotahi is discussed in detail below.

[66] The submissions of Lisa Russell and Heather Burke relate to heavy traffic serving the Landfill travelling through Brighton Township. The primary route to serve the landfill is via McLaren Road. The applicant confirms that all heavy vehicles associated with the landfill use the State Highway 1 – McLaren Gully Road – Big Stone Road route, except in emergencies where this route is impassable (e.g. flooding of SH1). This requirement will be captured in the Landfill Management Plan (LMP), and in Waste Acceptance Agreements that persons delivering waste to the landfill will be required to hold with the applicant. This confirmation has been included as an advice note.

[67] The application was forwarded to Dunedin City Council Roading department for assessment by Transportation Planner, Mr Logan Copland. The full assessment is attached at Appendix 4. Mr Copland advises that the following assessment was also peer reviewed by an external consultant traffic/transportation engineer. For completeness Mr Copland confirms that review undertaken by Antoni Facey of Avanzar Consulting who have a contract with Transport to provide transport advice on resource consent applications. Mr Copland advises that he has had no involvement with the preparation of the Resource Consent application or input to the Transport elements, and feels that he was sufficiently distanced from the project to provide an objective / independent review of the application details / merits. By then referring to Mr Facey for further review, Mr Copland felt more than comfortable that there were no conflicts of interest, and that his advice was independent.

[68] Mr Copland acknowledges that the application is supported by an integrated transport assessment (ITA) prepared by GHD, which has been updated as part of the further information response. Mr Copland’s assessment relates to the updated version of the ITA, dated 30 May 2021.

[69] Mr Copland notes that the key considerations from a transport perspective are:

- The ability of the surrounding transport network to cater for the anticipated additional vehicle movements, including heavy vehicle movements once the facility is operating.
- Whether or not the proposed roading upgrades will ensure that the transportation network will operate safely and efficiently.
- The temporary effects of the proposed roading upgrades on the ongoing operation of the transport network, during the construction phase.
- The new vehicle access to Big Stone Road.
- The realignment of McLaren Gully Road and Big Stone Road.

[70] Mr Copland advises that McLaren Gully Road and Big Stone Road are both classified as Local Roads in the 2GP's Road Classification Hierarchy, whereas Allanton-Waiholo Road (State Highway 1) is classified as a Strategic Road. DCC is the road controlling authority (RCA) for McLaren Gully Road and Big Stone Road, and Waka Kotahi – NZ Transport Agency (Waka Kotahi) is the RCA for Allanton-Waiholo Road. For completeness, Mr Copland advises that Waka Kotahi is the RCA responsible for the safe and efficient operation of the State Highway 1/McLaren Gully Road intersection.

[71] Mr Copland advises that his assessment is limited to the effects of the proposal on the local transport network and does not extend to actual or potential effects on the State Highway Network. He notes that such effects will need to be considered and assessed by Waka Kotahi as the RCA for Allanton-Waiholo Road. That said, Mr Copland considers that the upgrade of the McLaren Gully Road/State Highway 1 intersection will have effects on the State Highway network that will need to be considered by Waka Kotahi to ensure that these effects are mitigated through appropriate measures. The McLaren Gully Road/State Highway 1 Intersection upgrade is discussed later in this section.

Transport infrastructure / accessibility

[72] With regard to surrounding transport infrastructure / accessibility, Mr Copland notes that the site has frontage to Big Stone Road along its south-eastern boundary, where vehicle access to the landfill is proposed. The main vehicle access route to the landfill will be via Allanton-Waiholo Road, McLaren Gully Road and Big Stone Road. McLaren Gully Road intersects with State Highway 1 with a T-intersection configuration, which is controlled via give-way signage and road markings on the McLaren Gully Road leg.

[73] McLaren Gully Road runs in a south-eastern direction some 4000m from State Highway 1 before it reaches its intersection with Big Stone Road. Mr Copland notes that the road surface is metalled at this location and there does not appear to be any formal intersection controls. From this intersection, the route will continue in a southwestern direction along Big Stone Road, some 350m before reaching the proposed vehicle access location to the landfill.

[74] Mr Copland advises that McLaren Gully Road and Big Stone Road are currently unsealed and have substandard geometry to safely and efficiently accommodate two-way vehicular traffic. According to a recent estimate (June 2020) sourced from Council's RAMM Database, McLaren Gully Road has an estimated ADT of 70 vpd, and Big Stone Road has an estimated ADT of 50 vpd where it runs past the proposed vehicle access location.

[75] Mr Copland notes that State Highway 1 has a posted speed limit of 100km/h as it passes the McLaren Gully Road intersection. Mr Copland confirms that McLaren Gully Road and Big Stone Road both have a posted speed limit of 100km/h. The 85th percentile operating speeds on McLaren Gully Road and Big Stone Road is unknown since there has been no

speed data recorded on these roads. There is no dedicated pedestrian or cycling infrastructure on McLaren Gully Road or Big Stone Road.

- [76] Mr Copland notes that the ITA recognises several residential properties that use McLaren Gully Road and Big Stone Road as their main vehicle access. Mr Copland advises that these properties will likely experience access effects from the proposed road upgrade works. The applicant offers a Traffic Construction Management Plan (TCMP) and to further address these potential access effect, I recommend that one focus of the TCMP is to manage as far as possible disruption to private property access.
- [77] In respect of traffic generation, Mr Copland acknowledges that the ITA includes an assessment of traffic generation associated with the landfill when operating at full capacity, and traffic generation associated with the construction phase. Mr Copland notes that there will be no public access provided to the landfill and that the site will only receive deliveries from commercial operators. These are expected to be primarily by way of heavy commercial vehicles (HCVs), ranging from 6-wheel trucks through to truck and trailer units and B-Trains. Mr Copland notes that the revised ITA calculates that the landfill will generate an average of 10 heavy vehicle return trips per day, with a maximum of 25 per day. Additional truck movements (up to 25 per day) will be generated for the first 9 years, which will also include cartage of leachate/water. While public access will be excluded, the facility will still generate light vehicle traffic associated with landfill staff. The ITA estimates that the facility will generate up to 25 light vehicle movements per day.
- [78] With regard to construction traffic, Mr Copland notes that this is to occur over two construction seasons, generally defined between October-May. From a transport perspective, he notes that the initial construction activities will include the upgrade to the McLaren Gully Road / SH1 intersection plus the McLaren Gully Road and Big Stone Road upgrades. The site access from Big Stone Road will also be constructed in the initial stages.
- [79] The applicant proposes to prepare a Construction Traffic Management Plan (CTMP) and submit to Council and Waka Kotahi for approval. Mr Copland supports the preparation and implementation of a CTMP as offered by the applicant but advises that as McLaren Gully Road is currently utilised for logging/forestry operations, it will also be important for the CTMP to manage ongoing co-ordination with traffic generated by those activities, during the construction phases.
- [80] In respect of the proposed roading upgrades, Mr Copland has separated this out into two components as follows:
- the first being the upgrades to McLaren Gully Road and Big Stone Road and
 - the second being the upgrades to the McLaren Gully Road/State Highway 1 intersection.

McLaren Gully Road and Big Stone Road upgrades:

- [81] The applicant proposes that McLaren Gully Road and Big Stone Road are to be upgraded from the State Highway 1 intersection (inclusive), up to the point of the proposed landfill vehicle access location on Big Stone Road. The purpose of the upgrades is to ensure the road formations are sufficient to safely and efficiently accommodate two-way vehicular traffic for the design vehicle. Details of the upgrade are set out in the ITA.
- [82] Taking into account the surrounding land uses on Big Stone Road and McLaren Gully Road, and while acknowledging that these roads do serve a limited number of residential properties, Mr Copland accepts that there is little demand for active transport

infrastructure, such as footpaths or cycle-lanes on these roads. On that basis, he considers that the proposed typical cross-section and design parameters as set out in the ITA are generally appropriate for the anticipated use of these roads, however, he notes that detailed design for this is to be provided prior to construction.

Site Access

- [83] With regard to site access, the main access to the site will be from Big Stone Road, approximately 350m southwest of the McLaren Gully Road/Big Stone Road intersection. There is an existing vehicle access in this location, which will be upgraded in accordance with Council's Industrial Specification for Vehicle Entrances. This vehicle access will be used by all staff, construction traffic, waste and leachate trucks. As noted above, public access will not be permitted. Mr Copland notes that the vehicle access assessment is limited to the location and design of the vehicle crossing to Big Stone Road and does not extend to the internal site boundary at this stage.
- [84] Mr Copland notes that Big Stone Road has a posted speed limit of 100km/h. Therefore, a minimum sight distance of 139m is required for this vehicle access. The available sight distance to the south/southwest exceeds this requirement, however, the available sight distance to the northeast is slightly short, at around 125m. Sight visibility is currently affected by a crest on Big Stone Road. Attention should therefore be given to sight lines at the vehicle access as part of the upgrade to Big Stone Road. Should the Commissioners be of a mind to grant consent, this matter may be addressed through conditions of consent and a proposed condition is included in the draft conditions of consent.

McLaren Gully Road/ State Highway 1 Intersection upgrades:

- [85] The ITA promotes improvements to this intersection, to ensure that it will operate safely, and to an appropriate Level of Service. The ITA states that improvements are primarily required to address perceived and anticipated road safety concerns associated with increased demand at the intersection, which will be created by the operation of the proposed landfill. The ITA also notes that there are secondary benefits associated with intersection efficiency and capacity.
- [86] I note that Waka Kotahi are neutral submitters to the application and in its submission requested that three conditions be imposed on the consent, should the Commissioners be of a mind to grant consent. The applicant has confirmed that the conditions recommended by Waka Kotahi are now volunteered. These conditions have been included in the draft suite of conditions attached to this report and are reasonably anticipated to manage the effects on the State Highway network.

Summary

- [87] Overall, Mr Copland finds that the proposed upgrades to Big Stone Road and McLaren Gully Road are expected to generate effects which can be reasonably managed through conditions of consent such that these effects are acceptable. Additionally, as there are reasonably substantial upgrades proposed to the McLaren Gully Road / State Highway 1 intersection (albeit noting that these are proposed with the intention to mitigate potential effects on the safety and efficiency of the transport network once the facility is operating), the proposal will need to be managed in accordance with the conditions recommended by Waka Kotahi and volunteered by the applicant.
- [88] The assessment by Mr Copland and recommendations of Waka Kotahi are adopted for the purposes of this report and I consider that, with the reservation of assessment of the

direct effects on the three submitters identified above, the wider transportation effects are assessed as acceptable, subject to recommended conditions of consent.

Effects on Biodiversity Values

- [89] The proposal involves clearance of approximately 16.5m² (0.0017ha) of indigenous wetland vegetation, encroachment into threatened fauna habitat and potential hydrological changes to the main waterway (Otokia Creek Tributary). The effects on wetland habitat and biodiversity arising from the widening of McLaren Gully Road cannot be mitigated at the point of impact as these habitats are on private land. Therefore, an ecological offset is proposed for the loss of these wetland habitats. The offset area is an area of existing wetland vegetation upstream of the swamp wetland at the designation site at the base of West Gully 3 and West Gully 4, (comprising 0.49 ha in total)
- [90] The proposal has been assessed by the Council's Biodiversity Advisor, Mr Richard Ewans. The full assessment is attached at Appendix 4. Mr Ewans is no longer employed by Dunedin City Council and has not made himself available for the hearing at the time of writing this report. However, I consider that Mr Ewans' technical assessment can still be relied upon by the Commissioners. Should they wish to question Mr Ewans, the Commissioners have the ability to call Mr Ewans pursuant to Section 41(1)(c) of the Resource Management Act 1991.
- [91] Mr Ewans notes that in respect of biodiversity, the proposal seeks to undertake activities which may affect indigenous biodiversity outside the designated landfill area such as the upgrade of access roads. .
- [92] Forest & Bird seek that the application be declined in its entirety. In particular Forest & Bird seeks that no earthworks for the landfill or road upgrades to occur within, or within 100m of natural wetlands where those earthworks may result in the partial drainage of the wetland and is also concerned at the loss of indigenous vegetation, especially associated with the upgrade of McClaren Gully Road, and seeks that this be avoided.
- [93] Elizabeth Wallace on behalf of the Department of Conservation raises concerns regarding the effects the road widening and upgrades will have on indigenous wetland vegetation, lizard habitat, exotic grasslands and riparian wetlands. DOC seek that if consents are granted then conditions be imposed to protect conservation values.
- [94] As noted previously, the assessment of effects on the wetland are expected to be addressed by ORC under the NESFW and, in this regard, this assessment relates to effect the earthworks and vegetation clearance associated with the road widening and upgrade has on the wetland habitat and ingenious biodiversity
- [95] In terms of indigenous vegetation and fauna, Mr Ewans notes that the relevant areas and activities for this proposal are as follows:

Area 1: Roadside Wetlands

- [96] The upgrade of access roads (McLaren Gully Road, Big Stone Road and the State Highway 1 intersection) require resource consent for the clearance of approximately 16.5m² (0.0017ha) of indigenous wetland vegetation, specifically:
- 0.0014ha of (purei) / (Yorkshire fog - cocksfoot) – rautahi sedgeland; and
 - 0.0003ha of [purei] - wiwi/ rautahi -exotic grass rushland.

Area 2: Roadside lizard habitat in exotic grasslands

- [97] The road upgrades will occur in some areas where threatened fauna listed in 2GP Appendix 10A.2 may be present, specifically, southern grass skink in roadside rank exotic grassland.

Area 3: Riparian wetland along Otokia Creek Tributary between Designation Site and McLaren Gully Road

- [98] Hydrological changes to the main waterway (Otokia Creek Tributary) 200-300m below the designation site (in the form of reduced water flow from groundwater and runoff from the landfill) may reduce the perennial extent of the waterway and result in conditions that are less favourable to some indigenous wetland plant species.
- [99] Mr Ewans notes that all of Areas 1-3 above are identified in the application as significant indigenous vegetation (wetlands, Areas 1 and 3) or likely significant habitat of indigenous fauna (roadside exotic grassland, Area 2).
- [100] With regard to Area 1, Mr Ewans advises that the immediate ecological effect of the proposal on wetlands outside the designated area is the removal of a very small area of roadside wetlands associated with the upgrade of access roads. He notes that following road redesign which avoided wetlands where practicable, approximately 16.5m² (0.0017ha) of indigenous wetland vegetation is proposed to be removed. Mr Ewans considers that the proposed mitigation/offset package to enhance 0.49ha of existing wetland modified by invasive weeds within the landfill site is sufficient to ensure no net loss of indigenous biodiversity. Mr Ewans notes that mitigation is detailed in the Draft Vegetation Restoration Management Plan.
- [101] With regard to Area 2, Mr Ewans notes that rank exotic grassland along the roadsides may support southern grass skink, a species classified as At Risk – Declining. No survey has been carried out to establish or quantify the presence of this species in these grasslands in the ecological assessment work carried out for the proposal. The clearance of exotic grass in this area does not breach any 2GP performance standards, however, the site has been identified as likely significant habitat of indigenous fauna.
- [102] The Draft Lizard Management Plan submitted with the application describes a detection and salvage regime for lizards along the roadsides prior to construction. As part of the Draft Lizard Management Plan, the use of salvage as a mitigation tool and the salvage regime are proposed be reviewed prior to road widening works. Mr Ewans considers that provided the detection and salvage regime is sufficiently robust to identify and relocate a high proportion of lizards present, particularly southern grass skink, adverse ecological effects should be low.
- [103] In respect of Area 3, Mr Ewans notes that a reduction in water flow into the Otokia Creek Tributary below the designation site may result in medium-long term changes to the structure and composition of riparian wetland vegetation, with potential reduction or localised loss of some indigenous wetland species that prefer wetter conditions. Mr Ewans advises that it is likely a reduction in flow would only affect the riparian wetland vegetation 2-300m below the designation site. Below this point, a large pond is likely to moderate and ensure continuous flow, and the East Gully tributary enters the waterway slightly further downstream.

- [104] Mr Ewans notes that the effects arising from a reduction in water flow is difficult to predict or quantify accurately due to the number of other variables affecting hydrology. He considers that the most likely effect (if any occurs) is a minor loss of purei, which may be replaced naturally with rautahi or another indigenous species such as flax or wiwi. However, exotic species may also replace purei, potentially creating a contravention of 2GP Rule 10.3.2.2.b.ii. That said Mr Ewans considers that the proposed mitigation/offset package to enhance 0.49ha of existing wetland within the landfill site is likely to be sufficient to ensure no net loss of indigenous biodiversity in this context.
- [105] Overall, Mr Ewans considers that the proposed Draft Conditions of Consent – Ecology are appropriate and notes the offer of further approval for the final versions of the Restoration Management Plan and Lizard Management Plan prior to any construction works.
- [106] Mr Ewans' assessment is adopted for the purposes of this report and I subsequently assess that the effects of the proposed indigenous vegetation removal are acceptable.

Effects on Landscape values

- [107] The application has been reviewed by Council's Landscape Architect, Mr Luke McKinlay. The full assessment is attached at Appendix 4. Mr McKinlay confirmed that he was not involved in preparing the application and advised that he was able to assess the effects on landscape values in an impartial manner. Mr McKinlay notes that several changes were made to the initial design, following the further information request, including a realignment of McLaren Gully Road. Mr McKinlay notes that there are identified wetlands on both sides of McLaren Gully Road and initially, (as proposed by the original application) a larger area of these wetlands was to be affected by the proposed road widening. Following these most recent revisions, the area of wetland affected by the widening will be reduced to approximately 16.5m². Mr McKinlay advises that his comments focus on the visual and landscape effects of the proposed upgrades of McLaren Gully Road (including its intersection with State Highway 1) and Big Stone Road.
- [108] Mr McKinlay notes that the proposed widening will result in earthworks either side of the existing road. The Visual Landscape Assessment (VLA) that supports the application indicates that cut batters generally reach a maximum of between 2- 4m at 1(v):0.3(h). However, due to constraints within the roadway around wetland areas, these batters will reach up to 7.4 – 7.6 m in two locations (chainage 2860 and 2440) at a grade of 1(v) in 0.2(h). The applicant is proposing that these slopes will be scarified and hydroseeded where possible or left to weather and tie-in with the surrounding vegetation. Mr McKinlay notes that there will also be localised areas of fill extending up to 6m, but predominantly between 2 and 4m at (1v):2(h).
- [109] Mr McKinlay advises that View Location 4 of the VLA provides a visual simulation of the appearance of the proposed upgrade works at the intersection with SH1. In addition to earthworks associated with road widening, some localised removal of existing gum trees within the road reserve will occur in the vicinity of 108 and 109 McLaren Gully Road.
- [110] Mr McKinlay agrees with the applicant that during construction, earthworks required as part of the proposed road widening and realignment will create some temporary adverse effects associated with disturbing existing landform and vegetation and exposing worked ground. Mr McKinlay also agrees that all completed cut and fill batters should be seeded with grass as soon as possible to restore a cover of vegetation and enable visual integration in this rural setting. Mr McKinlay notes that, based on observations of existing cuts, the clay conditions of some of these surfaces may make it difficult for successful

establishment of vegetation. Nevertheless, Mr McKinlay recommends that hydroseeding is attempted on all cut faces, including the two highest areas at chainage 2860 and 2440.

- [111] Mr McKinlay acknowledges that the reason for these highest cuts relates to the attempt to avoid wetland areas where possible. As such, Mr McKinlay considers that any potential adverse effects on amenity values associated with the cuts should be assessed in this context. Further, Mr McKinlay notes that there are no residential properties located near the largest/highest cut areas. As such, effects on visual amenity will largely be restricted to transitory views available to passing motorists.
- [112] While the road upgrade has been realigned to avoid as much of the nearby wetland areas as practicable, it is noted that the proposed widening of the road will result in the removal of approximately 16.5m² of wetlands. Mr McKinlay accepts that these water bodies adjoin an established road corridor, which passes through a modified rural environment. Mr McKinlay agrees that from a landscape amenity/natural character perspective, the removal of 16.5m² of wetland will result in a relatively low level of effect. Any ecological effects of this loss, in the context of other proposed ecological planting associated with this application, are not considered by Mr McKinlay.
- [113] Mr McKinlay notes that the gum trees proposed to be removed near 108 or 109 McLaren Gully Road do not appear to serve a critical visual screening function for the residents of either 108 or 109 McLaren Gully Road. Both dwellings are set well back from the road edge and both properties contain well-established vegetation that will act as a visual buffer between the dwellings and the road. As such, Mr McKinlay considers that the removal of the gum tree will have relatively low effects on the amenity of the residents of these properties and the general amenity of the surrounding area.
- [114] Mr McKinlay's assessment is adopted for the purposes of this report, and I consider that the landscape and visual effects of the proposal will be acceptable, subject to a condition of consent relating to hydroseeding of cut faces as recommended by Mr McKinlay.

Noise Effects

- [115] With regard to noise effects arising from the road realignment, the applicant has addresses these in an Assessment of Acoustic Effects prepared by GHD dated May 2021.
- [116] The Acoustic Effects Assessment (AEA) identifies that the nearest receivers to the road upgrade works are anticipated to be 108 and 109 McLaren Gully Road respectively. The distance between the edge of the existing carriageway for both of these receivers is approximately 65 metres. No submissions were made in respect of road noise either generated through construction or realignment.
- [117] Based on the recommendation of the AEA, the applicant offers a Construction Noise Management Plan (CNMP) prepared by an acoustic specialist which to address the requirements of NZS6803: 1999 Acoustics –Construction Noise, and which includes measures to mitigate noise transmission from construction activity to the existing residential dwellings.
- [118] Rule 9.3.6.7.a of the 2GP states that vehicles operating on public roads are exempt from the noise limits specified under the rule. As such, the applicant has not undertaken a full quantitative assessment of road traffic noise from vehicles associated with the landfill site has not been assessed on SH1, McLaren Gully Road and Big Stone Road.
- [119] Consideration of noise effects is limited to where the areas of the newly created road corridor as noise generated within the existing noise corridor is exempt, pursuant to Rule

9.3.6.h. The AEA notes that the existing road surface for McLaren Gully Road and Big Stone Road is unsealed 'gravel' (AP40/Ap20) wearing course. The proposed upgrading of these roads will include a chip sealed surface. The AEA notes that the upgraded surface will significantly reduce road traffic noise.

- [120] I note that for the Rural zones, noise is to be measured at the notional boundary being the line 20m from any side of a residential building, or the site boundary where this is closer to the residential building.
- [121] Relying upon the AEA submitted with the application, and considering the proposed seal improvements, the current receiving environment and volunteered conditions of consent, I consider that noise effects arising from the construction noise and the new road realignment will be acceptable when measured at the relevant notional boundaries.

Earthworks Effects

- [122] The road upgrades will involve significant earthworks and engineered slopes. Earthworks will include an estimated:
- 46,700 m³ of cut, and 18,470 m³ of fill, representing an excess of cut material in the order of 28,230m³ which will be stored at the stockpile areas for reuse.
 - Cut slopes generally up to 4 m height, but with two sections being between 5 m and 7m in height.
 - Embankments up to 7.5 m in height, but with sections of retaining structures of between 0.5 m and 2.5 m, particularly where the road corridor is adjacent to roadside wetland areas
 - Cut face slopes will rise at a slope of 1V:0.2H, while fill embankments will slope at 1V:2H.
- [123] The final design of cut and fill slopes will be further addressed through the detailed design to ensure that they are stable. The detailed design of the road upgrades will be informed by geotechnical investigations and be in accordance with the DCC Code of Subdivision and Development 2010. The applicant states that no existing utilities along the road margins will be affected by the road upgrades.
- [124] The technical assessments submitted with the application states that the proposed road upgrades will be undertaken in a manner to ensure
- land stability risks are low,
 - detailed design appropriately addresses seismic risks, and
 - the stability of temporary and permanent cut and fill slopes for the road upgrades.
- [125] The applicant volunteers that the supervision of design, and certification of completed works, will be undertaken by a suitably experienced registered engineer.
- [126] The proposal has been assessed by the Council's Consultant Engineer. The full assessment is attached at Appendix 4. The Council's Consultant Engineer notes that the cuts have been designed at a suitable batter angle by a suitably qualified engineer. The proposed fill batters are typical for embankment fill. Subject to a suitably experienced registered

engineer certifying all temporary works and the final constructed design the Consultant Engineer is satisfied that there are no stability hazards as a result of the works.

- [127] One submission (Forest & Bird) relates to earthworks and seeks that no earthworks for the landfill or road upgrades to occur within, or within 100m of natural wetlands where those earthworks may result in the partial drainage of the wetland. While the specific wetland matters fall under the jurisdiction of ORC, I note that earthworks associated with the roading upgrades has the potential to generate stormwater containing sediment runoff and dust nuisance.
- [128] The applicant states that the road upgrade works will be undertaken in a way that minimises the areas of exposed soil surfaces and utilises localised sediment control measures such as filter socks, and temporary silt dams in channels. The sealing of the road will result in a long-term reduction in sediment runoff. The applicant confirms that design and implementation of sediment control measures will take into account site specific conditions, and be in accordance with best practice guidelines, including Auckland Council GD05 - Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region – June 2016, and the Environment Canterbury Erosion and Sediment Control Toolbox.
- [129] To manage the effects of these effects during the road construction, I recommend that the applicant prepare an Erosion and Sediment Management Plan (ESMP) which incorporates industry best practice methods (as identified above) to control sediment and dust within the disturbed environment.
- [130] Subject to the works being supervised by a suitably experienced registered engineer and sediment and dust effects being controlled, the effects of the earthworks are expected to be acceptable.

Effects on Cultural Values

- [131] Wetlands support entire ecosystems and have long held historical, cultural, economic, and spiritual significance for mana whenua and Māori in general. Southern Grass Skink are characterised as an At Risk – Declining lizard species of high ecological value.
- [132] The applicant submitted a cultural impact assessment (CIA), prepared by Aukaha Limited, updated May 2021, with the application. The CIA was prepared to assess the cultural impacts associated with the proposed works Smooth Hill, Dunedin. Te Rūnanga o Ōtākou submitted in support of the proposal.
- [133] The CIA, while primarily focussed on the landfill operation, makes the following relevant recommendations:
- Manu whenua are generally supportive of the NZHPT recommendations (discussed in the section below) with respect to archaeological works and handling of materials. However, should early Māori material be uncovered then mana whenua, through Aukaha, expect to be engaged to inform decision making with respect to any response. The applicant should make contact with mana whenua, through Aukaha, to discuss any archaeological finds near the area that have not been made public.
 - Any ecological management plans are developed prior to the granting of resource consent.
 - Best practice erosion and sediment control guidelines are adopted for all works connected to the Smooth Hill Landfill project (including design, construction

maintenance, operation, and roading). Contractors undertaking the works should prepare an erosion and sediment control plan which details current best practice and confirms that the measures proposed are appropriate to the site.

- Initiate wetlands and creek margins replanting programme.
- The applicant should consider a process of resourced and ongoing engagement with mana whenua, to enable input into and the exchange of information on any Falcon, Lizard and Environmental Management Plans including water quality management, rehabilitation, heritage and biodiversity monitoring. Mana whenua should be given the opportunity to review and comment on the effectiveness of Environmental Management Plans.

[134] The CIA assesses that the proposed mitigation measures above have the potential to manage key environmental impacts primarily through design elements and systems around sediment and dust control, waterway protection, enhancement and monitoring. The development and implementation of an Environmental Management Plan and Lizard management plans are seen as positive.

[135] The above mitigation measures have been incorporated into the draft conditions of consent and, subject to the inclusion of these conditions, the effects on cultural values can be managed such that these are assessed as acceptable.

Effects on Archaeological Values

[136] Sections of the upgrade areas for McLaren Gully Road fall within an Archaeological Alert Layer. An Archaeological Assessment, prepared by New Zealand Heritage Properties Limited, updated May 2021, was submitted with the revised application. The application was forwarded to the Dunedin City Council Heritage Advisor for review who advised that there are no scheduled sites located within the road upgrade area and declined to comment further. There are no listed items on the New Zealand Heritage List/Rārangi Kōrero.

[137] The Archaeological Assessment relates to the following areas; I45/71, I45/72, I45/67, I45/80, I45/81, and I45/82 (at 200 McLaren Gully Road, 700 and 750 Big Stone Road; as well as the road reserves of Big Stone Road and McLaren Gully Road; 949 Allanton-Waiholā Road, Taieri; 108, 109, 200, 211 McLaren Gully Road, Ōtokia; 200 Christies Gully Road, Henley; and, 350, 645 and 689 Big Stone Road, Brighton). Specifically relevant to this application are several archaeological sites associated with farmstead recorded in the properties adjacent to McLaren Gully Road and State Highway 1 (I45/67, I45/79, I45/80, I45/81, and I45/82).

[138] The assessment advises that historical research shows the brick and slate roofed building recorded at I45/67 still present on the site today was likely constructed by Peter McLaren the Younger in the late 1870s or early 1880s, though there was likely an earlier building on the premise from possibly as early as 1864. There are no pre-1900 physical remains visible within or immediately adjacent to the road boundary.

[139] The assessment refers to I45/79, where there is potential that buildings to the north of SH1 may also be pre-1900 structures, associated with the occupation of the area by the well-known Palmer family from the 1860s. However, the closest buildings to the proposed works were removed in the twentieth century and there were no pre-1900 physical remains visible within or immediately adjacent to the road boundary.

- [140] The assessment also alerts that three other farms, adjacent to the road reserve project area, were recorded during the course of this assessment, Rileys', Guthries', and the Souness' farms all likely occupied from the 1860s and 1870s onwards (145/80, 145/81 and 145/82). No physical remains were noted in current aerial photographs or from the road reserve on these properties except for large exotic trees demarcating the general extent of where buildings were located historically. The assessment advises that adjacent to the road boundary, any road widening has the slight potential to modify archaeological remains associated with these farmsteads such as fenceposts or rubbish pits that have extended, or were purposefully dumped, into the road reserve in the past.
- [141] The assessment applies a traffic light system to identify the risks to archaeology and managing archaeological involvement for the proposed works. The 145/67, 145/79 145/80, 145/81 and 145/82 are identified as within the yellow zones. In these areas, the assessment notes that there is the possibility of encountering such remains as post holes for fence lines, and rubbish dumped over the fence in the road reserve. The historic road parcels were also included as yellow zones as there is the potential to encounter pre-1900 road surfaces and infrastructure such as culverts or drains.
- [142] The assessment also notes several points of interest where it could not be determined if they were archaeological were also flagged as yellow zones as there may be potential for intact subsurface archaeological remains associated with these points of interest. Remains found in these areas would likely relate to the farming occupation of the area and may include foundations or other remnants of sheds as well as fence and animal pen post holes. There is further potential to encounter midden associated with both European and earlier mana whenua occupation of the area.
- [143] To manage the effects of the proposed works on archaeology, the assessment recommends conditions of consent. The applicant volunteers conditions relating to the yellow zone and these have been included in the draft conditions of consent. Subject to the imposition of these conditions, I consider that the effects of the proposed road widening and realignment on archaeological sites can be managed such that these effects are acceptable.

Positive Effects

- [144] Big Stone Road and McLaren Gully Road are currently used by heavy vehicles; namely logging truck traffic. The road upgrade and, in particular, the road widening, seal improvements, and the improvements at the intersection of McLaren Gully Road and State Highway 1, are anticipated to result in a better safety environment for the current traffic as well as adequately accommodating the increased traffic generated by the landfill.

Effects Assessment Conclusion

- [145] After considering the likely effects of this proposal above, overall, I consider the effects of the proposal can be appropriately mitigated by conditions of consent so as to be acceptable.

OFFSETTING OR COMPENSATION MEASURES ASSESSMENT

- [146] Section 104(1)(ab) of the Resource Management Act 1991 requires that regard to any measure proposed or agreed to by the applicant for the purpose of ensuring positive effects on the environment to offset or compensate for any adverse effects on the environment that will or may result from allowing the activity.

[147] I note wetland enhancement of 0.49ha is proposed to offset the indigenous vegetation and fauna habitat loss resulting from the road realignment. The Biodiversity Officer assessed that the wetland enhancement is likely to result in no net loss, however, there is no evidence that this is likely to result in any net gain overall.

OBJECTIVES AND POLICIES ASSESSMENT

Assessment of Objectives and Policies of the District Plan (Section 104(1)(b)(vi))

[148] In accordance with Section 104(1)(b) of the Resource Management Act 1991, the objectives and policies of the relevant provisions of the operative District Plan 2006 and the proposed 2GP were taken into account in assessing the application.

Operative District Plan 2006

Indigenous vegetation

Objective	Supporting Policies	Commentary
<p>Objective 16.2.1</p> <p>Enhance the indigenous biodiversity, ecosystem integrity, natural character and amenity values of the City through the retention of remaining areas of indigenous vegetation and habitats of indigenous fauna.</p>	<p>Policy 16.3.1</p> <p>Encourage the retention of areas of indigenous vegetation and habitats of indigenous fauna.</p>	<p>The proposal is supported by an ecological assessment which has been reviewed by the Council biodiversity officer who assesses that biodiversity values will be maintained with the 0.49ha wetland enhancement volunteered by the applicant and no net loss will occur.</p> <p>Sediment and dust controls are to be imposed as conditions of consent as volunteered by the application and amended by this report.</p> <p>The proposal is assessed as consistent with this objective and policies.</p>
	<p>Policy 16.3.3</p> <p>Avoid the effects of land use activities where those effects may compromise the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna in the City.</p>	

Earthworks

Objective	Supporting Policies	Commentary
<p>Objective 17.2.3</p> <p>Earthworks in Dunedin are undertaken in a manner that does not put the safety of people or property at risk and that minimises adverse effects on the environment.</p>	<p>Policy 17.3.9</p> <p>Control earthworks in Dunedin according to their location and scale. [</p>	<p>The earthworks will be designed and supervised by a suitably qualified and experienced engineer and in this regard no adverse effects on stability of land, buildings, and structures is anticipated.</p> <p>Sediment and dust controls are to be imposed as conditions of consent as volunteered by the application and amended by this report.</p> <p>The visual effects of the road upgrade have been assessed by a Landscape Architect and found to be acceptable.</p> <p>Overall, the proposal is assessed as consistent with this objective and policies.</p>

Transport

Objective	Supporting Policies	Commentary
<p><u>Objective 20.2.1</u></p> <p>Avoid, remedy, or mitigate adverse effects on the environment arising from the establishment, maintenance, improvement and use of the transportation network.</p>	<p>Policy 20.3.1</p> <p>Avoid, remedy or mitigate the adverse effects on the environment of establishing, maintaining, improving or using transport infrastructure.</p>	<p>The upgrades to McLaren Gully Road, Big Stone Road and the intersection with SH1 will better provide for the needs of all users along the road, including the proposed landfill, and existing forestry and residential activities.</p> <p>The road upgrades have been designed to integrate with</p>
<p>Objective 20.2.4</p> <p>Maintain and enhance a safe, efficient and effective transportation network.</p>	<p><u>Policy 20.3.2</u></p> <p>Provide for the maintenance, improvement and use of public roads.</p>	

	<p><u>Policy 20.3.9</u></p> <p>To sustainably manage transport infrastructure, particularly that of national or regional importance, in a way which will provide for its effective operation and preserve its capacity to meet the reasonably foreseeable needs of future generations, while avoiding, remedying or mitigating any adverse effects resulting from the operation of this infrastructure.</p>	<p>surrounding land uses by avoiding fragmentation of land, and providing for connections to existing vehicle access points.</p> <p>The upgrades are expected to enhance the safety and efficiency of the local road network, with any adverse effects being limited to the duration of upgrade works, which will be minimised as far as practicable by the adoption of construction management measures.</p> <p>The proposal is assessed as consistent with these objectives and policies.</p>
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Environmental issues

Objective	Supporting Policies	Commentary
<p>Objective 21.2.2</p> <p>Ensure that noise associated with the development of resources and the carrying out of activities does not affect public health and amenity values.</p>	<p>Policy 21.3.3</p> <p>Protect people and communities from noise and glare which could impact upon health, safety and amenity.</p>	<p>Any potential adverse effects of noise from the road upgrade works will be temporary and managed through ensuring a sufficient setback to sensitive residential receptors or otherwise implementing a Construction Noise Management Plan to ensure adverse noise effects will be insignificant on people's health.</p> <p>The proposal is assessed as consistent with this objective and policies.</p>
	<p><u>Policy 21.3.7</u></p> <p>Encourage the establishment of buffer areas around activities giving rise to adverse effects on adjoining areas.</p>	

2GP

Temporary Activities

Objective	Supporting Policies	Commentary
<p>Objective 4.2.1 <u>Temporary activities are enabled while:</u></p> <p>a) minimising, as far as practicable, any adverse effects on the amenity and character of the zone; and</p> <p>b) ensuring any adverse effects on people's health and safety are minimised as far as practicable.</p>	<p>Policy 4.2.1.1 (under appeal) Require temporary activities to be designed and operated to minimise, as far as practicable, adverse effects on:</p> <p>a) the amenity of surrounding properties; and</p> <p>b) people's health and safety.</p>	<p>The applicant proposes to prepare and give effect to a number of management plans to manage the adverse temporary effects during the road construction activities.</p> <p>The proposal is assessed as consistent with this objective and policy.</p>

Transport

Objective	Supporting Policies	Commentary
<p>Objective 6.2.1 Transportation infrastructure is designed and located to ensure the safety and efficiency of the transport network for all travel modes while:</p> <p>a) minimising, as far as practicable, any adverse effects on the amenity and character of the zone; and</p> <p>b) meeting the relevant objectives and policies for any overlay zone, scheduled site, or mapped area in which it is located.</p>	<p>Policy 6.2.1.1 (Under appeal) Enable the operation, repair and maintenance of the roading network.</p> <p>Policy 6.2.1.3 Only allow new roads or additions or alterations to existing roads where:</p> <p>a) the road is designed to provide for the needs of all users and to integrate with surrounding land uses as appropriate for the surrounding environment and road classification</p>	<p>The proposal is assessed in part as enabling the operation, repair and maintenance of the existing road</p> <p>The realigned and upgraded road will provide for the needs of all users and will integrate with existing and proposed land uses in the surrounding environment.</p> <p>The applicant is currently negotiating with the affected land owners and, subject to an agreed outcome, the effects of the realigned and upgraded road in respect of severance effects, changes to drainage patterns, and vibration, noise, glare and fumes from vehicle movements will be able to be</p>

	<p>hierarchy mapped area; and</p> <p>b) the location and design of the road:</p> <p>(i) minimises, as far as practicable, adverse effects on surrounding residential or other sensitive activities, including severance effects, changes to drainage patterns, and vibration, noise, glare and fumes from vehicle movements; and</p> <p>(ii) maintains or enhances the safety and efficiency of the overall transport network.</p>	<p>addressed through conditions of consent.</p> <p>The realigned and upgraded road will enhance the safety and efficiency of the overall transport network.</p> <p>The proposal is assessed as consistent with this objective and policies.</p>
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Earthworks

Objective	Supporting Policies	Commentary
<p>Objective 8A.2.1 Earthworks necessary for permitted or approved land use and development are enabled, while avoiding, or adequately mitigating, any adverse effects on:</p> <p>a) visual amenity and character;</p> <p>b) the stability of land, buildings, and structures; and surrounding properties.</p>	<p>Policy 8A.2.1.1 Require earthworks, and associated retaining structures, to be designed and located to avoid or minimise, as far as practicable, adverse effects on the stability of land, buildings, and structures by:</p> <p>a) being set back an adequate distance from property boundaries, buildings, structures and cliffs; and</p> <p>b) using a batter gradient that will be stable over time.</p>	<p>The earthworks will be designed and supervised by a suitably qualified and experienced engineer and in this regard no adverse effects on stability of land, buildings, and structures is anticipated.</p> <p>Sediment and dust controls are to be imposed as conditions of consent as volunteered by the application and amended by this report.</p> <p>The visual effects of the road upgrade have been assessed by a</p>
	<p>Policy 8A.2.1.2 Require earthworks and any associated retaining structures, to be designed, located and undertaken in a way that minimises, as far as practicable, adverse effects on surrounding</p>	

	<p>sites and the wider area, including from:</p> <ul style="list-style-type: none"> a) sediment run-off onto any property, or into any stormwater pipes, drains, channels or soakage systems; and b) dust nuisance on the amenity of surrounding sites. 	<p>Landscape Architect and found to be acceptable.</p> <p>Overall, the proposal is assessed as consistent with this objective and policies.</p>
	<p>Policy 8A.2.1.3</p> <p>Only allow earthworks that exceed the scale thresholds (earthworks - large scale) and any associated retaining structures, where the following effects will be avoided or, if avoidance is not practicable, adequately mitigated:</p> <ul style="list-style-type: none"> a) adverse effects on visual amenity and character; b) adverse effects on the amenity of surrounding properties, including 	

Public Health

Objective	Supporting Policies	Commentary
<p>Objective 9.2.2</p> <p>Land use, development and subdivision activities maintain or enhance people's health and safety.</p>	<p>Policy 9.2.2.1</p> <p>Require activities to be designed and operated to avoid adverse effects from noise on the health of people or, where avoidance is not practicable, ensure any adverse effects would be insignificant.</p>	<p>The application provides a noise assessment which find that the generated noise will meet both the Construction noise standards during construction and the District Plan limits for the operation of the newly re-aligned road.</p> <p>The proposal is assessed as consistent with this objective and policies.</p>

Natural Environment

Objective	Supporting Policies	Commentary
Objective 10.2.1 Biodiversity values are maintained or enhanced, including by protecting areas of significant indigenous vegetation and the significant habitats of indigenous fauna.	Policy 10.2.1.1 Only allow land use, development and city-wide activities where biodiversity values are maintained or enhanced.	The proposal is supported by an ecological assessment which has been reviewed by the Council biodiversity officer who assesses that biodiversity values will be maintained with the 0.49ha wetland enhancement volunteered by the applicant and no net loss will occur. Sediment and dust controls are to be imposed as conditions of consent as volunteered by the application and amended by this report. The proposal is assessed as consistent with these objectives and policies.
	Policy 10.2.1.2 (Under appeal) Avoid adverse effects on areas of significant indigenous vegetation and significant habitats of indigenous fauna or, if avoidance is not practicable, ensure that: <ul style="list-style-type: none"> a) there is no net loss and preferably a net gain in the biodiversity values of the area; or b) where there are no practicable alternative locations, any proposal for a biodiversity offset is in accordance with Policy 2.2.3.6; or c) where a biodiversity offset is not practicable, environmental compensation is proposed in accordance with Policy 2.2.3.7. d) 	
	Policy 10.2.1.6 (Under appeal) Only allow indigenous vegetation clearance - large scale in the rural and rural residential zones where adverse effects on biodiversity values are avoided or, if avoidance is not practicable, no more than minor.	
	Policy 10.2.1.7 (Under appeal) Only allow indigenous vegetation clearance in a wetland, or where there are threatened plant or fauna species or mature trees on the important native tree species list present, where there is no net loss and preferably a net gain in biodiversity values.	

<p>Objective 10.2.2 (Under appeal)</p> <p>The biodiversity values and natural character of the coast and riparian margins are maintained and enhanced.</p>	<p>Policy 10.2.2.2 (Under appeal)</p> <p>Require buildings, structures, storage and use of hazardous substances, network utility activities, and earthworks - large scale to be set back from the coast and water bodies an adequate distance to enable the biodiversity and natural character values of coastal and riparian margins to be maintained or enhanced.</p>	
	<p>Policy 10.2.2.3</p> <p>Require vegetation clearance to be set back an adequate distance from the coast and water bodies, including wetlands, to</p> <ul style="list-style-type: none"> a) minimise, as far as practicable, the risk of erosion; and b) protect, or enable the enhancement of, biodiversity and natural character values. 	
	<p>Policy 10.2.2.5</p> <p>Require earthworks and scheduled mining activities to be located and undertaken in a way that minimises, as far as practicable, the risk of sediment entering the sea or water bodies.</p>	
	<p>Policy 10.2.2.6 (Under appeal)</p> <p>Only allow activities adjacent to water bodies and the coast where the biodiversity values and natural character of the coast and riparian margins are maintained or enhanced.</p>	

Manawhenua

Objective	Supporting Policies	Commentary
<p>Objective 14.2.1</p> <p>The relationship between Manawhenua and the natural environment is</p>	<p>Policy 14.2.1.2</p> <p>Require buildings, structures, earthworks and network utilities to be set back an adequate distance</p>	<p>The design and proposed monitoring and management measures recognise and provide for</p>

maintained or enhanced, including the cultural values and traditions associated with: wāhi tūpuna; mahika kai; and occupation of original native reserve land through papakāika.	from the coast and water bodies that are wāhi tūpuna and are identified as having mahika kai values in Appendix A4, to maintain or enable access to the coast and riparian margins for the purpose of gathering mahika kai.	<p>the relationship of Te Rūnanga o Ōtākou and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga to the extent possible.</p> <p>The applicant has undertaken early consultation with Manawhenua and have adapted the proposal to ensure that cultural values of the area are maintained and enhanced. Manawhenua have submitted in support of the proposal.</p> <p>The proposal is assessed as consistent with this objective and policy.</p>
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Heritage

Objective	Supporting Policies	Commentary
Objective 13.2.4 Dunedin's archaeological sites are protected from inappropriate development and use.	Policy 13.2.4.1 Require an archaeological authority to be obtained, if one is required, prior to undertaking earthworks on a scheduled archaeological site.	<p>The applicant volunteers specific conditions to manage archaeological sites including obtaining an archaeological authority as part of the process.</p> <p>The proposal is assessed as consistent with this objective and policy.</p>

Overall Objectives and Policies Assessment

- [149] In terms of an overall assessment of the objectives and policies, where these are not under appeal, I consider that full weight should be given to the 2GP objectives and policies. In respect of the objectives and policies which are under appeal (namely Objective 10.2.2 and Policies 10.2.1.2, 10. 2.1.6, 10.2.1.7, 10.2.2.2 and 10.2.2.6 along with Policies 4.2.1.1 and 6.2.1.1), I note that the 2GP applies a more nuanced approach which seeks to achieve more direct environmental outcomes rather than the broad brush approach taken by the 2006 District Plan. I further note that, in all instances, the proposal is found to be consistent with the relevant provisions.

Assessment of Regional Policy Statements (Section 104(1)(b)(v))

[150] Section 104(1)(b)(v) of the Act requires that the Council take into account any relevant regional policy statements. The Regional Policy Statement for Otago (RPS) 1998 is now revoked. The Partially Operative Regional Policy Statement for Otago (PORPS) was made partially operative on 14 January 2019. Specific to this proposal are the following objectives and policies:

Objective 3.1 The values (including intrinsic values) of ecosystems and natural resources are recognised and maintained, or enhanced where degraded

Policy 3.1.9 Ecosystems and indigenous biological diversity.

Manage ecosystems and indigenous biological diversity in terrestrial, freshwater and marine environments to:

- a) *Maintain or enhance:*
 - i. *Ecosystem health and indigenous biological diversity including habitats of indigenous fauna;*
 - ii. *Biological diversity where the presence of exotic flora and fauna supports indigenous biological diversity;*
- b) *Maintain or enhance as far as practicable:*
 - i. *Areas of predominantly indigenous vegetation;*
 - ii. *Habitats of trout and salmon unless detrimental to indigenous biological diversity;*
 - iii. *Areas buffering or linking ecosystems;*
- c) *Recognise and provide for:*
 - i. *Hydrological services, including the services provided by tall tussock grassland;*
 - ii. *Natural resources and processes that support indigenous biological diversity;*
- d) *Control the adverse effects of pest species, prevent their introduction and reduce their spread.*

Policy 3.1.2 Beds of rivers, lakes, wetlands, and their margins

Manage the beds of rivers, lakes, wetlands, their margins, and riparian vegetation to:

- a) *Safeguard the life supporting capacity of fresh water;*
- b) *Maintain good quality water, or enhance it where it has been degraded;*
- c) *Maintain or enhance bank stability;*
- d) *Maintain or enhance ecosystem health and indigenous biological diversity;*
- e) *Maintain or enhance, as far as practicable:*
 - i. *Their natural functioning and character; and*
 - ii. *Amenity values;*
- f) *Control the adverse effects of pest species, prevent their introduction and reduce their spread; and,*
- g) *Avoid, remedy or mitigate the adverse effects of natural hazards, including flooding and erosion.*

Objective 3.2 Otago's significant and highly-valued natural resources are identified, and protected or enhanced where degraded .

Policy 3.2.2 Managing significant indigenous vegetation and habitats

Protect and enhance areas of significant indigenous vegetation and significant habitats of indigenous fauna, by all of the following:

- b) Beyond the coastal environment, and in the coastal environment in significant areas not captured by above, maintaining those values that contribute to the area or habitat being significant;*
- c) Avoiding significant adverse effects on other values of the area or habitat;*
- d) Remedying when other adverse effects cannot be avoided;*
- e) Mitigating when other adverse effects cannot be avoided or remedied;*
- f) Encouraging enhancement of those areas and values that contribute to the area or habitat being significant;*
- g) Controlling the adverse effects of pest species, preventing their introduction and reducing their spread*

Objective 4.3 Infrastructure is managed and developed in a sustainable way

Policy 4.3.1 Managing infrastructure activities Recognise and provide for infrastructure by all of the following:

- a) Protecting and providing for the functional needs of lifeline utilities and essential or emergency services;*
- b) Increasing the ability of communities to respond and adapt to emergencies, and disruptive or natural hazard events;*
- c) Improving efficiency of natural and physical resource use;*
- d) Minimising adverse effects on existing land uses, and natural and physical resources;*
- e) Managing other activities to ensure the functional needs of infrastructure are not compromised.*

Policy 4.3.2 Nationally and regionally significant infrastructure

Recognise the national and regional significance of all of the following infrastructure:

- e) Roads classified as being of national or regional importance;*
- i) Municipal infrastructure.*

Objective 4.4 Energy supplies to Otago's communities are secure and sustainable

Policy 4.4.6 Energy efficient transport

Enable energy efficient and sustainable transport for Otago's communities, by all of the following:

- a) Encouraging the development of compact and well integrated urban areas, to reduce travel needs within those areas;*
- b) Ensuring that transport infrastructure in urban areas has good connectivity, both within new urban areas and between new and existing urban areas, by all of the following:*
 - i. Placing a high priority on walking, cycling, and public transport, where appropriate;*
 - ii. Maximising pedestrian and cycling networks connectivity, and integration with public transport;*
 - iii. Having high design standards for pedestrian and cyclist safety and amenity;*

- c) *Enabling the development or upgrade of transport infrastructure and associated facilities that both:

 - i. *Increase freight efficiency; and*
 - ii. *Foster the uptake of new technologies for more efficient energy uses, and renewable or lower emission transport fuels.**
- c) *Fostering uptake of public transportation through provision of safe, reliable and well sheltered alternatives to private transport.*

Objective 5.2 Historic heritage resources are recognised and contribute to the region's character and sense of identity

Policy 5.2.3 Managing historic heritage Protect and enhance places and areas of historic heritage, by all of the following:

- a) *Recognising that some places or areas are known or may contain archaeological sites, wāhi tapu or wāhi taoka which could be of significant historic or cultural value;*
- b) *Applying these provisions immediately upon discovery of such previously unidentified archaeological sites or areas, wāhi tapu or wāhi taoka;*
- c) *Avoiding adverse effects on those values that contribute to the area or place being of regional or national significance;*
- d) *Minimising significant adverse effects on other values of areas and places of historic heritage;*
- e) *Remedying when adverse effects on other values cannot be avoided;*
- f) *Mitigating when adverse effects on other values cannot be avoided or remedied;*
- g) *Encouraging the integration of historic heritage values into new activities;*
- h) *Enabling adaptive reuse or upgrade of historic heritage places and areas where historic heritage values can be maintained.*

Objective 5.4 Adverse effects of using and enjoying Otago's natural and physical resources are minimised

Policy 5.4.6 Offsetting for indigenous biological diversity

Consider indigenous biological diversity offsetting, when:

- a) *Residual adverse effects of activities cannot be avoided, remedied or mitigated;*
- b) *The offset achieves no net loss and preferably a net gain in indigenous biological diversity;*
- c) *The offset ensures there is no loss of individuals of Threatened taxa other than kānuka (*Kunzea robusta* and *Kunzea serotina*), and no reasonably measurable loss within the ecological district to an At Risk-Declining taxon, other than mānuka (*Leptospermum scoparium*), under the New Zealand Threat Classification System ("NZTCS");*
- d) *The offset is undertaken where it will result in the best ecological outcome, preferably;*
 - i. *Close to the location of development; or*
 - ii. *Within the same ecological district or coastal marine biogeographic region;*
- e) *The offset is applied so that the ecological values being achieved are the same or similar to those being lost;*
- f) *The positive ecological outcomes of the offset last at least as long as the impact of the activity, preferably in perpetuity;*

- g) *The offset will achieve biological diversity outcomes beyond results that would have occurred if the offset was not proposed;*
- h) *The delay between the loss of biological diversity through the proposal and the gain or maturation of the offset's biological diversity outcomes is minimised.*

Policy 5.4.6A Biological Diversity Compensation

Consider the use of biological diversity compensation:

- a) *When:*
 - i. *Adverse effects of activities cannot be avoided, remedied, mitigated or offset; and*
 - ii. *The residual adverse effects will not result in*
 - 1. *The loss of an indigenous taxon (excluding freshwater fauna and flora) or of any ecosystem type from an ecological district or coastal marine biogeographic region;*
 - 2. *Removal or loss of viability of habitat of a threatened or at risk indigenous species of fauna or flora under the New Zealand Threat Classification System ("NZTCS");*
 - 3. *Removal or loss of viability of an originally rare or uncommon ecosystem type that is associated with indigenous vegetation or habitat of indigenous fauna;*
 - 4. *Worsening of the NZTCS conservation status of any threatened or at risk indigenous freshwater fauna.*
- b) *By applying the following criteria:*
 - i. *The compensation is proportionate to the adverse effect;*
 - ii. *The compensation is undertaken where it will result in the best practicable ecological outcome, preferably;*
 - 1. *Close to the location of development;*
 - 2. *Within the same ecological district or coastal marine biogeographic region;*
 - iii. *The compensation will achieve positive biological diversity outcomes that would not have occurred without that compensation;*
 - iv. *The positive ecological outcomes of the compensation last for at least as long as the adverse effects of the activity; and*
 - v. *The delay between the loss of biological diversity through the proposal and the gain or maturation of the compensation's biological diversity outcomes is minimised.*

[151] The proposal is considered to enable the upgrade of transport infrastructure that will increase freight efficiency and will provide for the functional needs of essential services. It proposes to maintain indigenous biological diversity and remedy (through the wetland enhancement) adverse effects on those values which contribute to the significance of the area or habitat. Conditions are volunteered to protect archaeological sites. The proposal is assessed as generally consistent to the PORPS.

[152] The Proposed Regional Policy Statement (PRPS21) was notified on 26 June 2021 but decisions have not been released.

The Kāi Tahu ki Otago Natural Resources Management Plan 2005 (NRMP)

5.5.3 Mahika Kai and Biodiversity Objectives

- i. Habitats and the wider needs of mahika kai, taoka species and other species of importance to Kāi Tahu ki Otago are protected.*
- v. Indigenous plant and animal communities and the ecological processes that ensure their survival are recognised and protected to restore and improve indigenous biodiversity within the Otago Region.*
- ix. To create a network of linked ecosystems for the retention of and sustainable utilisation by native flora and fauna*

5.5.4 Mahika Kai and Biodiversity General Policies

- 1. To promote catchment-based management programmes and models, such as Ki Uta Ki Tai.*
- 3. To encourage collaborative research into indigenous biodiversity.*
- 12. To protect and enhance existing wetlands, support the reinstatement of wetlands and promote assistance for landowners for fencing-off wetlands.*
- 13. To promote the development of a cultural monitoring tool for vegetation and ecosystem health.*

5.6.3 Cultural Landscapes Objectives

- i. The relationship that Kāi Tahu ki Otago have with land is recognised in all resource management activities and decisions.*
- i. The cultural landscape that reflects the long association of Kāi Tahu ki Otago resource use with in the Otago region is maintained and enhanced.*

Earth Disturbance policy:

- 19. To require all earthworks, excavation, filling or the disposal of excavated material to:*
 - i. Avoid adverse impacts on significant natural landforms and areas of indigenous vegetation;*
 - ii. Avoid, remedy, or mitigate soil instability; and accelerated erosion;*
 - ii. Mitigate all adverse effects.*

Roading policy:

- 20. To require an accidental discovery protocol for all road realignments and widening and forest harvest roads and to avoid any sediment run-off during earthworks and road construction to avoid contamination of waterways*
- 21. To require indigenous re-vegetation with locally sourced species for all disturbed areas. Revegetation should be monitored by an assessment of the vegetative cover at one growing season after establishment and again at three seasons from establishment*

[153] The design and proposed monitoring and management measures recognise and provide for the relationship of Te Rūnanga o Ōtākou and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga to the extent possible. Ongoing engagement with Te Rūnanga o Ōtākou, including input into the detailed management and monitoring measures will recognise and provide for mana whenua and actively protect Māori interests.

DECISION MAKING FRAMEWORK

Part 2 Matters

- [154] It is considered that there is no invalidity, incomplete coverage or uncertainty within the Proposed 2GP. As a result, there is no need for an assessment in terms of Part 2 of the Resource Management Act 1991.

Section 104

- [155] Section 104(1)(a) states that the Commissioners must have regard to any actual and potential effects on the environment of allowing the activity. This report assessed the environmental effects of the proposal and concluded that the likely adverse effects of the proposed development overall will be acceptable and can be adequately avoided remedied or mitigated provided recommended conditions of consent were adhered to.
- [156] Section 104(1)(ab) requires the Commissioners to have regard to any measure proposed or agreed to by the applicant for the purpose of ensuring positive effects on the environment to offset or compensate for any adverse effects. These were discussed at paragraphs [146] and [147].
- [157] Section 104(1)(b)(vi) requires the Commissioners to have regard to any relevant objectives and policies of a plan or proposed plan. This report concluded that the application would be consistent with the key objectives and policies relating to the operative Plan and proposed 2GP.
- [158] Section 104(1)(b)(v) requires the Commissioners to have regard to any relevant regional policy statement. In this report it was concluded that the application is consistent with the relevant objectives and policies of the Partially Operative Regional Policy Statement for Otago.

Other Matters

- [159] Section 104(1)(c) requires the Commissioners to have regard to any other matters considered relevant and reasonably necessary to determine the application. I consider that there are no other matters relevant to this application for the road widening and upgrade.

Lapse Period

- [160] The applicant seeks a 10 year lapse period for the resource consents, pursuant to section 125(a) of the RMA. Given the scale of the works associated with this project, I consider that a 10 year lapse period is reasonable.

RECOMMENDATION

- [161] Having regard to the above assessment, I recommend that the application be assessed as a discretionary activity pursuant to Section 104 and 104B and be granted subject to appropriate conditions.

REASONS FOR RECOMMENDATION

- [162] Provided that the recommended conditions of consent are implemented, I consider that the likely adverse effects of the proposed activity can be adequately mitigated and will not be significant and acceptable.
- [163] The proposal, considered under this report, is assessed as consistent with the key relevant objectives and policies of the Proposed 2GP.
- [164] The proposal, considered under this report, is assessed as consistent with the objectives and policies of the Regional Policy Statement for Otago.
- [165] Overall, the proposed development has been assessed as not being likely to give rise to adverse effects on those elements of the environment that the 2006 Operative District Plan and the Dunedin City 2GP District Plan seeks to protect.

Report prepared by:

Report checked by:



Kirstyn Lindsay
Consultant Planner

14 April 2022

Date



Phil Marshall
Senior Planner

14 April 2022

Date

APPENDIX 1:

DRAFT CONDITIONS

Consent Type: Land Use Consent

Consent Number: LUC-2020-405

Purpose: To undertake road widening and safety improvements on Big Stone Road, McLaren Gully Road and State Highway 1.

Location of Activity: Road Reserve, Dunedin.

Legal Description:

- Part Section 71 Irregular Block East Taieri Survey District, Section 2 of 6, Section 8-9, Section 2 of 17, Section 26-27, Section 1 of 28, Section 2 of 28, Section 3 of 28, Section 1 of 29, Section 41, Part Section 10-11, Part Section 1 of 19, Part Section 2 of 29, Part Section 7 and Part Section 30 Block II Ōtokia Survey District and Deposited Plan 2677, held in Record of Title OT17C/503 and comprising 467.9659 hectares.
- Lot 1 DP 19819 held in Record of Title OT11A/153 and comprising 12.02 hectares.
- Lot 7 DP 21420 held in Record of Title OT19C/49 and comprising 20.4150 hectares.
- Lots 3-5 DP 21420 held in Record of Title 244203 and comprising 42.86 hectares.
- Lot 6 DP 21420 held in Record of Title 209912 and comprising 38.2199 hectares.
- Lot 1 DP 21420 held in Record of Title 209914 and comprising 24.5 hectares.
- Lot 2 DP 21420 held in Record of Title 209913 and comprising 185.5 hectares.
- Section 2 of 19 and Section 21 Block II Ōtokia SD held in Record of Title OT7A/953 and comprising 74.4622 hectares.
- Section 2 of 22, Section of 23, and Part 34 Block II Ōtokia Survey District (CFR OT253/283) held in Record of Title OT253/283 and comprising 26.1022 hectares.
- Part Section 3 of 23, 2 of 25 Block II and Part Section 1 of 22 Block III Ōtokia Survey District held in Record of Title OT13C/900 and comprising 69.8226 hectares.
- Section 1-2 Section 21 Block III Ōtokia Survey District held in Record of Title OT245/105 and comprising 23.6565 hectares.
- Lot 1 DP 21447 held in Record of Title 209915 and comprising 436.5960 hectares.
- Lot 8 DP 427870 held in Record of Title 510238 and comprising 26.9539 hectares.

Lapse Date: 14 April 2032, unless the consent has been given effect to before this date.

Conditions:

1. The proposed activity must be undertaken in general accordance with the approved plans attached to this certificate as Appendix One, and the information provided with the revised resource consent application received by the Dunedin City Council on 31 May 2021 and further information received on 5 April 2022, except where modified by the following conditions. In the event of differences or conflict, between the measures in the documents and the conditions, the conditions shall prevail:
2. The consent holder:
 - a) is responsible for all contracted operations relating to the exercise of this consent; and

- b) ensure that all personnel (contractors) working on the site are made aware of the conditions of this consent, have access to the contents of consent documents and to all associated erosion and sediment control plans and methodology; and
- c) ensure compliance with land use consent conditions.

Engineering

- 3. All investigations, detailed design, and construction of the road upgrades must be supervised by a suitably experienced Chartered Professional Engineer (CPEng).
- 4. Prior to construction commencing,
 - a) the detailed design of the road, including cut and fill slopes must be informed by geotechnical investigations and be in accordance with the road design standards contained in the Dunedin City Council Code of Subdivision and Development 2010 or alternative land development/traffic engineering standards as accepted by the Rooding Manager, Dunedin City Council.
 - b) The detailed design of the road upgrades must be provided to the DCC Rooding Manager for review and certification that the detailed design complies with this consent.
- 5. The completed road upgrade works must be certified by the suitably experienced Chartered Professional Engineer (CPEng) that they have been completed in accordance with the detailed design approved by the Transport Manager, Dunedin City Council. As-built plans, detailing full asset data, must be provided to the Transport Manager, Dunedin City Council.
- 6. Upon completion of construction of the required rooding upgrades, all works must be tested to demonstrate that they meet the acceptance requirements of the DCC Code of Subdivision and Development, or alternative land development/traffic engineering standards as accepted by the Dunedin City Council and evidence of such provided to the Transport Manager, Dunedin City Council.

Ecology

- 7. The area directly impacted by construction of the road upgrades is limited to and must not exceed the following maximum areas as set out in Smooth Hill Landfill, Ecological Impact Assessment Prepared for Dunedin City Council, 19 August 2020 (updated 28 May 2021) prepared by Boffa Miskell:
 - a) (Purei) / (Yorkshire Fog – Cocksfoot) - Rautahi Sedgeland – 0.0014 ha.
 - b) (Yorkshire Fog) – Cocksfoot Grassland – 2.97 ha.
 - c) [Purei] – Wiwi/ Rautahi – Exotic Grass Rushland – 0.00027 ha.
- 8. Prior to construction commencing, a Lizard Management Plan (LMP), based on the Draft Smooth Hill Lizard Management Plan prepared by Boffa Miskell Ltd, dated May 2021, must be prepared by a suitably qualified ecologist, to ensure effects on any lizards during the construction of the road upgrades are avoided or minimised. The plan must be developed in consultation with Te Rūnanga o Ōtākou. As a minimum the plan must include:
 - a) A summary of the impact assessment for herpetofauna.

- b) Detail of onsite surveys that have been undertaken to inform the Lizard Management Plan.
 - c) Mitigation methodologies including salvage and relocation, and any habitat enhancement measures undertaken in accordance with condition 7.
 - d) Key responsibilities of onsite personnel.
 - e) An adaptive management and review process that includes Te Rūnanga o Ōtākou, the independent peer review panel, Otago Regional Council, and Dunedin City Council.
9. Prior to construction commencing, the LMP prepared under Condition 8 above must be submitted to the Resource Consents Manager, Dunedin City Council at rcmonitoring@dcc.govt.nz for certification that it addresses the requirements of this condition. The plan is to be implemented for the duration of any road construction works.
10. Prior to the commencement of construction, a Restoration Management Plan (RMP), based on the Draft Smooth Hill Vegetation Restoration Plan prepared by Boffa Miskell Ltd, dated May 2021, must be prepared by a suitably qualified ecologist, to address the loss of or impact to freshwater, wetland and terrestrial environments caused as a result of construction of the road upgrades, to achieve no net loss of ecologically significant habitat / features in terms of type, amount, or condition. The plan must be developed in consultation with Te Rūnanga o Ōtākou. As a minimum the plan must include::
- a) A summary of the impact assessment for freshwater, wetland, and terrestrial environments.
 - b) Mitigation, offsetting and / or compensation measures, which as a minimum must include:
 - i. Wetland restoration that not only includes the area of wetland to be restored itself, but also a 10 m buffer from the wetland edge, other than where the landfill toe bund is within 10 m of the wetland edge.
 - ii. Stock exclusion from any restoration area using permanent fencing including gates for access.
 - iii. Pest plant control methods, including types of pest plant species to be controlled, areas in which they are to be controlled (including targets to be met), and in which areas or circumstances gorse (or another specified plant pest) may be tolerated as a nurse crop.
 - iv. Pest animal control, including annual performance pest animal targets for the site using standardised Department of Conservation residual trap catch, tracking tunnel or chew card indices.
 - v. A process for reviewing and adapting pest plant and animal controls in the event that the performance targets are not achieved over two consecutive years. This review process must include Te Rūnanga o Ōtākou, the independent peer review panel, and Otago Regional Council.
 - vi. Ground preparation, planting and maintenance specifications. All plants used for restoration must be eco-sourced from the same eco-region and be free of pest plants. Plant size and densities must be

relevant to the location of where they are being placed and restoration outcomes.

- vii. A detailed programme of works.
 - viii. Standardised methodologies for onsite biosecurity control (bring onto site / onsite / taking off site).
 - ix. Long term success-based monitoring at year 0, 1, 3, 5, 10, 15, 25 and 30.
 - x. Key responsibilities of onsite personnel.
- c) An adaptive management and review process that includes Te Rūnanga o Ōtākou, the independent peer review panel, Otago Regional Council, and Dunedin City Council.

The plan must be submitted to Resource Consents Manager, Dunedin City Council at rcmonitoring@dcc.govt.nz no less than 3 months prior to commencement of construction for approval by the assigned compliance or monitoring officer that it addresses the requirements of this condition. The plan is to be implemented for the duration of any road construction works.

Advice note:

Where offsetting or compensation measures are applied, these shall follow best practice methods such as those set out in Stream Ecological Valuation (SEV): a method for assessing the ecological functions of Auckland Streams (October 2011); Biodiversity Offsetting Under the Resource Management Act: a guidance document (September 2018); or A Biodiversity Compensation Model for New Zealand: a user guide – version 1 (October 2021), or updated similar guidance. Where biodiversity offset accounting / compensation modelling approaches (BOAM / BCM) are used, the same metrics used in the development of the models shall form the basis of monitoring standards as may be required.

Landscape

11. Where practicable, all completed road cut and fill batters must be hydroseeded with grass as soon as possible and not later than completion of the road upgrade works

Archaeology

12. An archaeologist must be retained to provide advice, recording, and reporting on any archaeological material encountered during the road upgrade works.
13. Every practical effort must be made to avoid damage to any archaeological site, whether known, or discovered during the road upgrade works.
14. Prior to the commencement of the road upgrade work, an archaeological site briefing must be delivered to all contractors undertaking earthworks that may affect archaeology. The briefing must outline:
- a) The history of the site and its archaeological potential.
 - b) The standing archaeological remains to be retained.
 - c) The role of the archaeologist and requirements for archaeological involvement.

- d) What sort of archaeological features could be expected and what they might look like.
- e) What to do if a possible archaeological site is found and the archaeologist is not on site.
- f) The process required to record and investigate these archaeological deposits should any be discovered.

Evidence of the archaeological site briefing must be provided to a warranted DCC officer upon request.

15. The following must occur where suspected archaeological material is encountered during road upgrade works:

- a) Work must cease within 25 metres of a suspected burial find, and 10 metres of any other find and the project archaeologist alerted to determine whether it is archaeological material.
- b) Where any suspected archaeological material is Maori in origin, HNZPT and Te Rūnanga Ōtākou. (via Aukaha) must be notified of the discovery to enable appropriate cultural procedure's and tikanga to be undertaken. Materials are not to be removed until such time as HNZPT and iwi have responded.
- c) Where human remains are uncovered, NZ Police, HNZPT and Te Rūnanga o Ōtākou. (via Aukaha) must be notified of the discovery to enable appropriate cultural procedures and tikanga to be undertaken. Remains are not to be removed until such time as the Police, HNZPT and Aukaha have responded.
- d) An archaeological authority must be obtained from HNZPT prior to any modification of an archaeological site.
- e) All archaeological material must be recorded by an archaeologist prior to work recommencing.
- f) A report on any archaeological material that is encountered must be provided to HNZPT within one year of the completion of any works affecting an archaeological site.

Transportation

16. Prior to construction of the road upgrades commencing, a Construction Traffic Management Plan must be prepared by a transportation engineer that includes measures to ensure the safe, effective, and efficient interaction of construction activity with other road users, and specifically address the following matters:

- a) Delivery of heavy or oversized loads, such as excavators, to avoid peak periods on State Highway 1.
- b) Management of the interactions of construction traffic and other road users.
- c) Minimising the impact on existing users of McLaren Gully Road and Big Stone Road users such as residents and other commercial activities.

The Construction Traffic Management Plan must be provided to Waka Kotahi NZ Transport Agency (NZTA) for review, and then submitted to the Dunedin City Council for approval that it addresses the requirements of this condition prior to commencement of the road upgrade works.

17. The road upgrade works must be undertaken in accordance with the approved Construction Traffic Management Plan.

18. Prior to the State Highway 1 intersection works occurring, the consent holder must submit to the Resource Consents Manager, Dunedin City Council at rcmonitoring@dcc.govt.nz a copy of Waka Kotahi NZ Transport Agency's approval to undertake works on the State Highway (as detailed in the advice notes below).
19. Prior to construction of the road upgrades commencing, the consent holder must submit the detailed design of the road upgrades and the State Highway 1 intersection works to Waka Kotahi NZ Transport Agency and the Resource Consents Manager, Dunedin City Council at rcmonitoring@dcc.govt.nz to the assigned compliance or monitoring officer for approval that the detailed design complies with this consent.
20. Prior to waste being accepted at the landfill, a right turn bay, auxiliary left turn lane, localised shoulder widening for left turn out movement and flag lighting (the 'State Highway 1 Intersection works') must be constructed at the intersection of State Highway 1 and McLaren's Gully Road.
21. Prior to waste being accepted at the landfill, the consent holder must provide to the Resource Consents Manager, Dunedin City Council at rcmonitoring@dcc.govt.nz correspondence from Waka Kotahi NZ Transport Agency confirming that the works to the State Highway 1 intersection with McLaren Gully Road have been constructed to Waka Kotahi NZ Transport Agency standards.
22. The completed road upgrade and State Highway 1 intersection works must be certified by the suitably experienced Chartered Professional Engineer (CPEng) that they have been completed in accordance with the detailed design approved by Waka Kotahi NZ Transport Agency and Dunedin City Council. That certification must be provided to Waka Kotahi NZ Transport Agency and the Resource Consents Manager, Dunedin City Council at rcmonitoring@dcc.govt.nz.

Waka Kotahi Advice Notes:

- a) It is a requirement of the Government Roading Powers Act 1989 that any person wanting to carry out works on a state highway first gain the approval of Waka Kotahi New Zealand Transport Agency for the works and that a Corridor Access Request (CAR) is applied for and subsequently a Work Access Permit issued (WAP) before any works commence. A CAR will be required for the State Highway 1 Intersection works.
- b) Detailed design approval from Waka Kotahi NZ Transport Agency shall be gained by the consent holder prior to applying for a CAR. The detailed design shall be prepared by a suitably qualified professional who has been certified by Waka Kotahi. In developing the detailed design, the consent holder will need to consult with the Waka Kotahi appointed state highway maintenance contractor for Coastal Otago (Highway Highlanders; coastalotago@downer.co.nz) and a Waka Kotahi Safety Engineer.
- c) A Corridor Access Request is made online via www.submitica.co.nz. The CAR needs to be submitted at least 21 working days before the planned start of works. A copy should also be sent to the Waka Kotahi NZ Transport Agency System Design and Delivery Planning Team at EnvironmentalPlanning@nzta.govt.nz. The Corridor Access Request will need to include:
 - The detailed final design for the right turn bay, auxiliary left turn lane, localised shoulder widening, flag lighting and stormwater management;

- A Construction Traffic Management Plan that has attained approval from the Waka Kotahi NZ Transport Agency appointed state highway maintenance contractor for Coastal Otago (Highway Highlanders).
- If requested by Waka Kotahi, a design safety audit which has been prepared, processed and approved in accordance with Waka Kotahi guidelines for Road Safety Audit Procedures for Projects (<https://www.nzta.govt.nz/assets/resources/road-safety-audit-procedures/docs/road-safety-audit-procedures-tfm9.pdf>).

23. At the time the construction is being undertaken, all existing (or relocated) driveways adjoining the upgraded (sealed) McLaren Gully Road and/or Big Stone Road must be hard surfaced from the edge of the respective road carriageways, toward the respective property boundaries for a distance of not less than 5.0m and be adequately drained.
24. The new vehicle access to the landfill must be a minimum 5.0m, maximum 9.0m formed width, hard surfaced from the edge of the Big Stone Road carriageway, toward the property boundary for a distance of not less than 5.0m and be adequately drained for its duration.
25. The new vehicle access must be constructed in accordance with Council's Industrial Specification for Vehicle Entrances.
26. A minimum sight distance of 139m must be achieved at the new vehicle access to Big Stone Road unless an assessment from a suitably qualified transport expert determines that a lesser sight distance can be supported from a road safety perspective. The sight distance must be measured in accordance with Figure 6B.13 of the 2GP.
27. All traffic associated with the landfill must use the route described within the application, (SH1 – McLaren Gully Road – Big Stone Road) unless a hazard is present on this route which renders it inoperable.
28. Deleterious material must not, at any stage, migrate onto the Big Stone Road carriageway.

Noise

29. The road upgrade works is limited to between 7.30am – 6pm Monday to Saturday (inclusive). No works are permitted to occur outside of these times, on Sundays, or public holidays, except where emergency works are required to protect public health and safety.
30. A minimum separation distance of 40 metres must be maintained between road construction equipment and the residential dwellings located at 108 and 109 McLaren Gully Road, if those houses are occupied during the work.
31. The following must occur if construction equipment is required to encroach upon the 40 metre setback specified in condition 30 above, and/or the hours of work extend beyond those in condition 29, and the houses are occupied during the work:
 - a) A Construction Noise Management Plan (CNMP) must be prepared by an acoustic specialist which addresses the requirement of Appendix E of addresses NZS6803: 1999 Acoustics –Construction Noise, and which includes

measures to mitigate noise transmission from construction activity to the existing residential dwellings.

- b) The CNMP must be submitted to the Resource Consent Manager, Dunedin City Council, @rcmonitoring@dcc.govt.nz for certification that it addresses the requirement of this condition at least two weeks prior to commencement of the road upgrade works.
- c) The road upgrade works must be undertaken in accordance with the approved CNMP.

Earthworks

- 32. The earthworks must be undertaken with the principles of industry best practice applied at all stages of site development including site stability, stormwater management, traffic management, along with dust and noise controls at the sites.
- 33. Prior to commencement of any construction works, an Erosion and Sediment Management Plan (ESMP) must be prepared by a suitably qualified person which includes methods to ensure effective management of erosion and sedimentation during earthworks including measures to:
 - a) divert clean runoff away from disturbed ground;
 - b) control and contain stormwater run-off;
 - c) avoid sediment laden run-off from the site'; and
 - d) protect existing drainage infrastructure sumps and drains from sediment run-off.
 - e) Manage dust
- 34. Any change in ground levels must not cause a ponding or drainage nuisance to neighbouring properties.
- 35. Any introduced fill material must comprise clean fill only.
- 36. Slopes must not be cut steeper than 1:1 (45°) or two metres high without specific engineering design and certification
- 37. Slopes must not be filled steeper than 2h:1v (27°) or two metres high without specific engineering design and certification
- 38. All temporary slopes shall be inspected and signed off by a suitably experienced Chartered Professional Engineer (CPEng)
- 39. As-built records of the final extent and thickness of any un-engineered fill must be recorded and submitted to the Resource Consent Manager, Dunedin City Council, @rcmonitoring@dcc.govt.nz within 6 months of the completion of the works.
- 40. The consent holder's engineer must be engaged to determine any temporary shoring requirements at the site during earthworks construction and the consent holder must install any temporary shoring recommended by the engineer.

41. Surplus of unsuitable material is to be disposed of away from the site to a Council approved destination.
42. Should the consent holder cease, abandon, or stop work on site for a period longer than 6 weeks, the consent holder must first take adequate preventative and remedial measures to control sediment discharge/run-off and dust emissions, and must thereafter maintain these measures for so long as necessary to prevent sediment discharge or dust emission from the site. All such measures must be of a type and to a standard which are to the satisfaction of the Resource Consent Manager.
43. If at the completion of the earthworks operations, any public road, footpath, landscaped areas or service structures that have been affected/damaged by contractor(s), consent holder, developer, person involved with earthworks or building works, and/or vehicles and machineries used in relation to earthworks and construction works, must be reinstated to the satisfaction of Council at the expense of the consent holder.
44. At the end of each main earthwork stage (or earlier, if conditions allows) the affected areas must be immediately adequately top-soiled and vegetated (e.g. hydro-seeded) as soon as possible to limit sediment mobilisation.

Advice Notes:

Earthworks

1. Neighbouring property owners should be advised of the proposed works at least seven days prior to the works commencing.
2. Where there is a risk that sediment may enter a watercourse at any stage during the earthworks, it is advised that the Otago Regional Council be consulted before works commence, to determine if the discharge of sediment will enter any watercourse and what level of treatment and/or discharge permit, if any, may be required.

Noise

3. Noise from the road upgrade works must comply with the recommended noise limits outlined in Rule 4.5.4.1 Construction of Dunedin City Council's 2nd Generation District Plan.

Transport

4. The vehicle crossing, between the road carriageway and the property boundary, is within legal road and will therefore require a separate Vehicle Entrance Approval from DCC Transport to ensure that the vehicle crossing is constructed/upgraded in accordance with the Dunedin City Council Vehicle Entrance Specification (note: this approval is not included as part of the resource consent process).
5. The vehicle access will need to be designed so that sight distances are optimised.

It is advised that in the event of future development on the site, Transport would assess provisions for access, parking and manoeuvring upon receipt of an Outline Plan application.

APPENDIX 2:

FURTHER INFORMATION

APPENDIX 3: SUBMISSIONS

APPENDIX 4:
COUNCIL OFFICER EVIDENCE