

Before a joint hearing of the

Otago Regional Council  
Waitaki District Council

**RM 20.024**

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Under the Resource Management Act 1991

In the matter of applications by Oceana Gold (New Zealand) Limited for resource consents for the Deepdell North Stage III Project

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**Statement of evidence of Tim Kelly for Oceana Gold (New Zealand) Limited**

5 August 2020

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## **STATEMENT OF EVIDENCE**

**Evidence of:** TIM KELLY, Director Tim Kelly Transportation Planning Ltd  
**Subject Area:** Transportation Issues  
**On Behalf of:** Oceana Gold (New Zealand) Limited (Applicant)  
**Date:** 5 August 2020

### **INTRODUCTION**

- 1 My name is Tim Kelly. I am a director of my own traffic engineering and transportation planning practice.
- 2 I have worked in the traffic engineering and transportation planning field since 1983. I hold a Bachelor of Arts degree in Geography, and a Master of Science degree in Traffic Engineering and Transportation Planning, both from the University of Sheffield in the United Kingdom.
- 3 I am a full Member of the Chartered Institute of Logistics and Transport, and the IPENZ Transportation Group (a Technical Interest Group of IPENZ).
- 4 My career to date has been spent in the consultancy sector of transportation, in both the United Kingdom and New Zealand. During my career, I have provided policy advice regarding traffic and transportation matters, and undertaken assessments for a wide variety of development proposals across New Zealand.
- 5 This experience includes work on a number of quarrying proposals, including:
  - Webster Place Quarry, Picton;
  - Roydon Quarry, Templeton, Christchurch;
  - Barracks Quarry, Marlborough;
  - Willowbank Quarry, Judgeford, Porirua;
  - Kiwipoint Quarry, Wellington;
  - Winstones Quarry, Porirua;
  - Lee Valley Limestone, Takaka; and

- Black Marble Quarry, Takaka.

### **CODE OF CONDUCT STATEMENT**

6 While this is not an Environment Court hearing, I nonetheless confirm that I have read the Code of Conduct for Expert Witnesses issued as part of the Environment Court Practice Notes. I agree to comply with the Code and am satisfied that the matters which I address in my evidence are within my field of expertise. I am not aware of any material facts that I have omitted which might alter or detract from the opinions I express in my evidence. I understand that I have an overriding duty to assist the hearing in an impartial manner and that I am not an advocate for the party which has engaged me.

### **INVOLVEMENT**

7 I have been involved in this project since May 2018, when I was asked to review proposed arrangements for continued public vehicular and pedestrian access during mining activity associated with Deepdell North Stage 3 (**DDN3**) project.

8 Since this time, I have liaised closely with OceanaGold to understand the nature of its mining activities, and the transportation issues associated with those activities. I undertook a thorough site visit in May 2018 in which I drove and walked around the area. I was also driven through the active mining area by OceanaGold representatives.

9 My assessments have included analysis of the available traffic count and crash information, the current and proposed access arrangements for both vehicular traffic and pedestrian movements.

10 I prepared a Traffic and Pedestrian Access Management Report (**TPAMR**), dated October 2019 which formed part of the consent application material. This document forms **Annexure A** to this evidence.

11 I subsequently prepared a letter, dated 17 February 2020, responding to traffic matters raised in a further information request from the Waitaki District Council (**WDC**). This document forms **Annexure B** to this evidence.

12 More recently, I have read the submissions made in response to the application and the s42a report of the planning officer. Finally, I have prepared this statement of evidence.

## **SUMMARY OF EVIDENCE AND KEY ISSUES**

- 13 As my TPAMP of October 2019 forms part of the application material, I do not intend to repeat the information this contains except insofar as this is relevant to addressing issues raised by submissions or the s42a report.
- 14 Instead, my evidence focusses upon the key issue for this application, this being the potential for adverse effects associated with the proposed changes in access arrangements for vehicles and pedestrians.
- 15 In doing so, I:
- reiterate the underlying objectives of the changes proposed;
  - describe new information available since the preparation of the TPAMP and its relevance to the issues I address;
  - describe issues raised by the submissions and my response to these;
  - provide my comments on the s42a report of the planning officer; and
  - provide my overall conclusions regarding the effects of the proposal.

## **OBJECTIVES**

- 16 Section 1.3 of the TPAMP describes the objectives of the access arrangements as being:
- to ensure the safety of members of the public when in the vicinity of mining operations;
  - to ensure the safety of mining employees;
  - to prioritise public accessibility over the movement of mine-operated vehicles, within reasonable constraints;
  - to ensure the efficient movement of mine-related vehicles;
  - to provide for continued public access to non-operational areas, subject to safety requirements being guaranteed; and
  - to comply with the requirements of the district plan and all relevant local and national standards.

## **NEW INFORMATION SUBSEQUENT TO OCTOBER 2019 ASSESSMENT**

### *Crash History*

- 17 At Section 2.2 of the TPAMP, I reported on the crash history for this area. With the crash database being continually updated as incidents occur, I have updated my assessment to reflect more recent incidents.
- 18 Only one additional incident has been recorded. This occurred in June 2020 and involved an eastbound vehicle with three occupants on Golden Point Road which failed to negotiate the corner at the intersection of Macraes Back Road (conditions were dark and the driver was distracted by conversation in the vehicle). The vehicle skidded into an embankment and a pole, resulting in two serious injuries and one minor injury.
- 19 While the location of this incident means it is likely to have involved OceanaGold personnel, this has not been confirmed. The Deepdell North Stage III proposal will not change the intersection design or traffic movements at this point.

## **SUBMISSIONS – ISSUES RAISED**

### *Macraes Community Incorporated*

- 20 Although the Macraes Community Incorporated submission mentions ‘roading’ issues as a general point of concern, no further specific information is provided. Accordingly, I am unable to respond to the matters raised by this submission.

### *Neil Roy*

- 21 I have reviewed an email (dated 29 May 2020) from Neil Roy which provides an indication of the content of an intended submission.
- 22 This references a frequently locked barricade beside Highlay Creek which prevents its public use, about 500m from the proposed realignment of Horse Flat Road. OceanaGold is not responsible for the locking of this section of road and this issue is not directly related to the current consent application.
- 23 The Neil Roy material also references an issue with the temporary road linking Horse Flat and Matheson Roads. However, this matter does not appear to be relevant to the current consent application.
- 24 I note that no objections have been raised in response to the proposed vehicular and

pedestrian access arrangements as described in the application material.

## **REPORT OF THE PLANNING OFFICER & CONDITIONS**

25 I have reviewed the s42a report of Andrew Purves (consultant planner acting for WDC) dated 29 July 2020.

### *Effects on Rooding Network, Pedestrian Access and Traffic Safety*

26 These matters are addressed at paragraphs 112 to 126 of the report. In summary, this notes that:

- rooding conditions proposed by OceanaGold have been accepted in principle by the WDC Rooding Department (with some minor proposed changes);
- previous concerns raised by Macraes Community Incorporated (in relation to the Coronation consents) have been addressed; and
- the WDC Rooding Department staff have not raised any traffic issues.

### *Proposed Conditions*

27 The planning officer indicates that the draft conditions in the AEE are helpful and that he concurs with many of them. I have reviewed those relevant to rooding and access issues (15 – 17) and confirm that I consider these to be acceptable and appropriate.

## **CONCLUSIONS**

28 I reiterate the conclusions of the TPAMP, which are that a package of measures proposed to achieve both safety and accessibility will:

- maintain the ability of the public to access the Golden Point Historic Area by car from both Golden Point Road and Horse Flat Road;
- maintain an ability for the public to access the Golden Point Historic Area on foot from Horse Flat Road;
- ensure the mine operator is aware of the movement of any members of the public in this area;
- ensure that the Council is aware of access arrangements through a continued requirement for the review and approval of Traffic Management Plans; and
- ensure compliance with the relevant requirements of the district plan.

- 29 The WDC Roading Department has not raised any concerns in relation to the proposed mining activity.
- 30 On this basis, I consider that any adverse effects in terms of accessibility will be no more than minor and accordingly that consent should be granted for the proposed Deepdell III mining activity.

**Tim Kelly**

**August 2020**

**ANNEXURE A: Macraes Goldmine Deepdell North Stage 3 – Traffic and Pedestrian Access Management (October 2019)**

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# Macraes Goldmine Deepdell North Stage 3 Traffic & Pedestrian Access Management

prepared by: **Tim Kelly Transportation Planning Ltd**

for: **OceanaGold Corporation**

**October 2019**

Reference: deepdell s3 access assessment v5 oct19.docx



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# 1 Background & Scope

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## 1.1 Background

The OceanaGold Corporation has been operating the Macraes Open Pit goldmine in Otago since 1990.

The operation involves the progressive relocation of mining activity to new areas and backfilling of exhausted pit areas. Such relocation can impact upon established public vehicular and pedestrian access routes and controls are necessary to maintain this accessibility in a way which ensures the safety of the public and site employees.

OceanaGold is now seeking consents to enable mining operation in the Deepdell North Stage 3 (**DDN3**) area and some changes to public access are necessary to ensure continued safety.

## 1.2 Scope

The purpose of this document is to identify and assess the necessary arrangements for continued public accessibility in this area during the DDN3 operations. Compliance with the relevant provisions of the Waitaki District Plan (**WDP**) is also addressed.

This document forms part of an Assessment of Environment Effects (**AEE**), which in turn supports the application for resource consent to be lodged with the Waitaki District Council (**WDC**).

## 1.3 Objectives

The objectives of the arrangements described by this document are:

- to ensure the safety of members of the public when in the vicinity of mining operations;
- to ensure the safety of mining employees;
- to prioritise public accessibility over the movement of mine-operated vehicles, within reasonable constraints;
- to ensure the efficient movement of mine-related vehicles;
- to provide for continued public access to non-operational areas, subject to safety requirements being guaranteed; and
- to comply with the requirements of the district plan and all relevant local and national standards.

## 2 Existing Situation

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### 2.1 Location

The Macraes Open Pit is located 35 kms driving distance from State Highway 1 (SH1) at Palmerston.

The location of the area to which the application relates is shown by **Figure 2.1**.

### 2.2 Road Environment

#### Golden Point Road

Golden Point Road provides access from Macraes Road to the Macraes Open Pit, processing plant and administrative complex.

The intersection of Golden Point Road with Macraes Road is priority controlled, with movements from Golden Point Road subject to 'Stop' controls.

From this intersection, Golden Point Road runs over a distance of 590m in a north-westerly direction to an uncontrolled intersection. This section is sealed, with two-lanes, narrow shoulders and is subject to a 70 km/hr speed limit for most of its length.

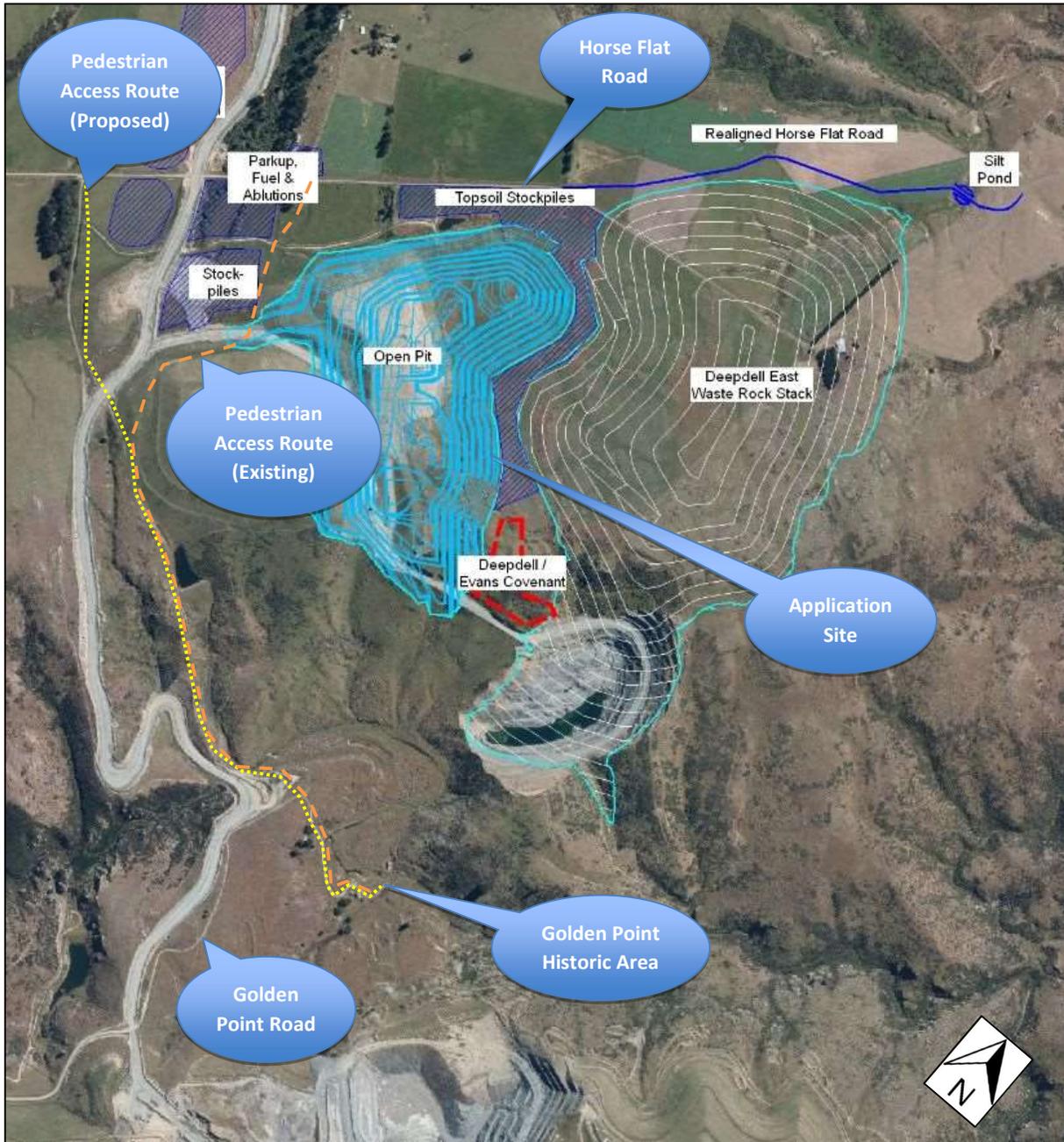
The Macraes Back Road runs north-east from the intersection and provides access to a number of mine support services (this was originally Golden Point Road prior to its diversion to accommodate the mine activity).

Golden Point Road continues towards the west – after 620m a priority intersection provides access to the OceanaGold administrative complex. Beyond this point, Golden Point Road continues, swinging to the north and descending to a priority intersection after a further 2.2kms.

From this location, the sealed road continues to the processing plant. Golden Point Road continues as an unsealed single carriageway - a sign indicates that this is the route to the Golden Point Historic Area. After 1.06kms the mine haul road is reached where a manned crossing provides access to the remainder of the route to the Golden Point Historic Area, a further 1.06kms.

Golden Point Road continues to Horse Flat Road on an alignment which is mostly occupied by the mine haul road – approximately 500m to the SE of Horse Flat Road, Golden Point Road takes a route further to the SW, intersecting with Horse Flat Road 240m from the haul road crossing.

Golden Point Road is a public road between Macraes Road and Horse Flat Road, though is maintained by OceanaGold. Any public access through the haul road section is managed by OceanaGold, as described below. There is little reason for any members of the public to use Golden Point Road for through access purposes.



**Figure 2.1: Location Plan** (Source: OceanaGold)

*Note: Pedestrian access route alignments are approximate only*

### Horse Flat Road

Horse Flat Road is a no-exit road which runs for 6.8kms in a NE direction from an intersection with Macraes Road and the Hyde – Macraes Road, located 6.6kms from the Macraes Road / Golden Point Road intersection. The intersection with Golden Point Road is reached after 5.1kms and the haul road crossing after 5.3kms. Horse Flat Road is unsealed with a single carriageway and provides access to a small number of residential properties / farms and a small quarry operated by OceanaGold. While the speed limit on Horse Flat Road is 100km/hr, the standard of road means that achievable speeds are considerably lower.

### Paper Roads

There are a number of 'paper roads' in this area. These are legal roads which have not been formed, most likely identified in the past as being required to provide access within this area but prior to the mining operation. Their relevance to this assessment is that the public has a right to use such public roads on foot, cycle, horses or vehicles (although in many cases the topography and/or lack of formation may preclude such use).

If such use would place the public and/or mining operations at risk, a legal road 'stopping' process is the preferred option to effectively close the paper road. Where this is necessary, an alternative route is provided to maintain public accessibility. This is discussed further in **Section 3** in relation to the proposed activity.

### Traffic Volumes

Recorded traffic volumes are not available for Golden Point Road or Horse Flat Road.

The southern section of Golden Point Road between the administration building and the haul road carries a small number of mining-related vehicle movements and an occasional vehicle wishing to access the Golden Point Historic Area.

Horse Flat Road is understood to carry less than 30 vehicle movements a day, these being associated with the Highlay quarry and the residential dwellings / farms.

The volume of haul road traffic activity is addressed below.

### Crash History

The crash history for the existing roads in this area for the ten-year period since January 2009 has been obtained from the database maintained by the New Zealand Transport Agency (**NZTA**).

Over this period, two minor incidents have been recorded in the general area of the mine, both of which occurred on Macraes Road and have been unrelated to the mining operations.

No incidents have been reported on either Golden Point Road or Horse Flat Road.

By law, only those crashes involving personal injuries are required to be reported. Accordingly, it is possible that a number of other non-injury crashes may have occurred which have not been included in these records.

## 2.3 Site Operation

### General Description

In 2013, OceanaGold obtained consents to enable the excavation of the Coronation Pit area on the ridgeline to the north of Horse Flat Road.

After blasting, ore from the Coronation Pit is transported to the existing processing plant by means of ore transporter vehicles using a haul road having a width of approximately 25m. After descending from the Coronation Pit area, the haul road crosses Horse Flat Road 240m from the Golden Point Road intersection, then continues south to meet with a haul road from the Deepdell area before generally following the alignment of Golden Point Road.

Approximately 5,000 tonnes of ore is transported each day from the pit to the processing plant. Each ore transporter carries 100 tonnes of ore, typically resulting in around 50 return movements (100 one-way movements) over an eight-hour period 8am – 4pm. In any one hour, the number of one-way ore transporter vehicle movements is 10 – 15.

### Public Access Management - Vehicular

The current haul road alignment to the south of Horse Flat Road is located on private land owned by OceanaGold. As this does not follow the road reserve, public access to this road can be and is lawfully restricted for safety reasons. Public road connections between Horse Flat Road, the Golden Point Historic Area and the Golden Point Road (south) exist as paper roads only and have not been formed.

Any crossing or use of the haul road by public vehicles is subject to procedures which are detailed in Traffic Management Plans (**TMPs**). These procedures include:

- any public vehicles along Horse Flat Road are required to wait at a gate until clearance is confirmed by mine personnel at the haul road crossing;
- any public vehicles wishing to access the Golden Point Historic Area from Golden Point Road (south) are required to cross the haul road - this crossing is permanently (24/7) staffed with access gates and upon arrival of a public vehicle, radio communications are used to stop any ore transporters in the area before the public vehicle proceeds through the crossing; and
- the use of radio communications ensures that all mine personnel have an awareness of any public vehicles or individuals which are within the operating mine area.

TMPs are subject to annual renewal and require approval from the Council.

Once mining operations are complete in this area, the intention is that the haul road will be formed and vested as public road.

### Public Access Management - Pedestrian

A public walking route between Horse Flat Road and the Golden Point Historic Area was provided as part of the Coronation / Coronation North consent.

This is an unformed pedestrian access, which was originally defined with a series of blue

marker pegs along the alignment identified as Pedestrian Access Route (Existing) by **Figure 2.1**.

This avoided the active mine area and the requirement for any pedestrian arriving by vehicle along Horse Flat Road to firstly pass through the controlled haul road crossing ensured that mine personnel were aware of their presence in the area. This is to be realigned, as described in **Section 3**.

## 3 Proposed Activity

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### 3.1 General Description

The activity for which consent is now sought is excavation of the DDN3 area, located to the south of Horse Flat Road and east of Golden Point Road.

The proposed activity at Deepdell will gradually replace that which is currently occurring at the Coronation Pit, with an expected overlap period of around 12 months.

### 3.2 Material Volume, Timing

The area of the proposed excavation is 38 hectares and is expected to result in the movement of 57m tonnes of material.

Waste rock material will be transported to the Deepdell South backfill (a previously disturbed open pit area) or the Deepdell East Waste Rock Stack (**WRS**).

Site establishment works are expected to commence in October 2020, with the first ore being extracted within a few months. Mining operations are expected to be complete in November 2022.

The operating hours of mining operations and associated vehicle movements will be unchanged.

### 3.3 Road Access

A new 25-30m wide haul road will be extended into the open pit area from the existing haul road to the south of Horse Flat Road.

A haul road to the Deepdell South backfill waste rock disposal area is not required as this currently exists. A haul road will be formed to the Deepdell East WRS along the northern perimeter of the excavation area (and broadly parallel to Horse Flat Road).

The establishment of the Deepdell East WRS will require a realignment of Horse Flat Road from a point slightly under 800m NE of the current haul road crossing, as shown by **Figure 2.1**. Instead of heading ENE and then turning N over a distance of 1.1kms, the road will instead take a more direct alignment towards the NE, a distance of 0.97kms.

### 3.4 External Vehicular Activity

As the DDN3 activity will replace that currently taking place at the Coronation Pit, there will be no material change to staffing numbers or vehicular activity on the external road network.

### 3.5 Public Access Control - Vehicular

The arrangements for the control of public vehicle movements from Golden Point Road (south) to the Golden Point Historic Area and along Horse Flat Road will remain the same.

Although not formed, an application will be made to legally stop the existing paper road to the south of Horse Flat Road. As described in **Section 2**, it is intended that once mining

operations are completed in this area, the haul road will be formed and vested as public road, providing for vehicular access between Horse Flat Road, the Golden Point Historic Area and the southern (public) section of Golden Point Road.

### 3.6 Public Access Control to Golden Point Historic Area - Pedestrian

The Deepdell proposal will result in a significant increase in the number of mine vehicles crossing the existing pedestrian route between Horse Flat Road and the Golden Point Historic Area.

Accordingly, an alternative pedestrian access route has been developed (shown as Pedestrian Access Route (Proposed) by **Figure 2.1**). This leaves Horse Flat Road from a point a short distance to the SW of the haul road crossing (avoiding a requirement for vehicles to cross the haul road).

There will be single crossing of the haul road by the pedestrian access route. It is proposed to manage safety associated with this crossing, by:

- fencing the approaches with normal stock fences leading into deer fences as the haul road is approached;
- fences to have signage identifying that entry into the mining area outside of the fences is prohibited;
- each side of the haul road crossing will have a locked gate with a call box and instructions (e.g. a 'push to talk' arrangement);
- the pedestrian will push the button, linking to the Minestar control room and advise their request to cross the haul road;
- the Minestar controller will then notify the pit supervisor who will drive to the crossing;
- mine traffic in the area will be halted then the pedestrians will be escorted across the road; and
- once the crossing is completed the gates will be locked and normal haulage will resume.

These measures, which will be encapsulated into a TMP, will ensure the safety of pedestrians and are considered to be appropriate in the context of very low levels of pedestrian activity in this area (there has been little or no utilisation of the existing pedestrian access route in recent years).

### 3.7 Public Access Control between Horse Flat Road and Matheson Road

The DDN3 proposal does not affect public accessibility between Horse Flat Road and Matheson Road (this is currently being addressed as part of the separate Coronation and Coronation North consenting processes).

## 4 Assessment of Effects

The only potential 'effects' arising from the proposal relate to public accessibility and safety.

### 4.1 Public Accessibility

#### Golden Point Historic Area

The Golden Point Historic Area will continue to be accessible by vehicle from both the southern part of Golden Point Road (and Macraes Road), and from Horse Flat Road.

Pedestrian access to the Golden Point Historic Area will continue to be provided from Horse Flat Road.

In both cases, the 'effect' of the proposal upon the ability of the public to access the Golden Point Historic Area, relative to the existing situation, will be negligible.

#### Horse Flat Road

The low number of non-mine vehicle movements along Horse Flat Road will continue to be subject to a controlled crossing of the haul road.

The realignment of Horse Flat Road to the NE of the haul road will have no tangible effect upon road users (the stopping of the existing alignment will follow the construction and availability of the new alignment, ensuring that access is retained).

Again, the 'effect' of the proposal upon the ability of the public to use Horse Flat Road, relative to the existing situation, will be negligible.

#### Matheson Road – Horse Flat Road

As noted in **Section 3.7**, the DDN3 proposal will not affect public accessibility between Horse Flat Road and Matheson Road.

### 4.2 Safety

The control of any points where public access routes cross mine operational areas will continue to be subject to TMPs which stipulate the detailed arrangements for such aspects as warning signage, gate control, radio communications, etc.

All TMPs are subject to the approval of the Council, ensuring the safety of the measures proposed.

As indicated above, an outcome of these procedures is that the mine is aware of any members of the public who may be in the area. In this manner, relevant mine staff can be alerted to their presence, further ensuring that the public are not placed in any danger as a result of mine operations.

Accordingly, the proposals will not result in any 'effects' upon the safety of either members of the public or mine personnel.

## 5 District Plan Provisions & Compliance

### 5.1 Operative District Plan

#### *Relevant Plan & Status*

The relevant plan is the Waitaki District Plan (**WDP**), which became operative in May 2010.

While a process of reviewing the WDP is currently underway, this a draft plan has yet to be notified and as such has no legal 'weight' for the purposes of this assessment.

The application site lies within the 'Macraes Mining' zone.

All of the public roads in this area are classified as 'local roads' in the roading hierarchy defined by the plan.

### 5.2 Compliance with Macraes Mining Zone Rules (WDP Part III, Section 6)

Section 6.2 of the WDP draws attention to a need to comply with the district-wide rules in relation to Transport / Car Parking.

There are no other specific transportation rules which apply to this zone.

### 5.3 Compliance with District Wide Transport Objectives (WDP Part II, Section 6)

**Objective 1** is 'to promote the efficient use of the District's existing and future transportation resource and of fossil fuel usage associated with transportation, and the maintenance and improvement of access, ease and safety of all vehicular, cycle and pedestrian movements'.

**Objective 2** is to 'avoid or mitigate adverse effects on the surrounding environment as a result of transport'.

The only relevant issue associated with the application relates to ensuring continued and safe accessibility to the Golden Point Historic Area by public vehicles (from Golden Point Road and Horse Flat Road) and on foot (from Horse Flat Road). The assessment above describes how this will be achieved in a manner which will ensure the on-going safety of the public and mine employees.

### 5.4 Compliance with District Wide Transport / Car Parking Rules (WDP Part III, Section 12)

Section 12.2.1 defines a number of standards relating to provision for parking and loading. The large area of the Macraes mining site means that there are no problems or issues arising from compliance with these standards.

#### *Vehicle Access*

Rules at 12.2.2 (a) require the provision of legal access to all lots with a complying vehicle crossing, with a drivable surface between the carriageway and road access lot and provision of an access space on the lot.

The DDN3 proposal will not change the location of the haul road crossings with either Golden Point Road or Horse Flat Road, though there may be some change in intensity of

use as activity shifts between areas. Accordingly, the proposal will not give rise to any issues of compliance with these requirements.

#### *Formation and Sealing of Vehicle Crossings*

Rules at 12.2.2 (b) relate only to crossings of sealed roads and so are not relevant to either Golden Point Road or Horse Flat Road.

#### *Location of Vehicle Crossings with Frontage in Relation to Intersections of Roads*

Rules at 12.2.2 (c) seek to ensure the provision of a safe separation distance of any crossing from an intersection. This is not relevant in the context of the remote crossings of either Golden Point Road or Horse Flat Road.

#### *Length of Vehicle Crossings*

Rules at 12.2.2 (d) define a maximum crossing length for non-residential activities of 9m. This is exceeded by the haul road crossings, which are around 25m to accommodate the large haulage vehicles. There is no adverse effect of this non-compliance, as the purpose of the rule is primarily to ensure the safety and convenience of pedestrians.

#### *Minimum Distance Between Vehicle Crossings*

Rule 12.2.2 (e) requires a minimum separation distance of 7m between crossings on the same road frontage. This is easily achieved.

#### *Maximum Number of Vehicle Crossings*

Rule 12.2.2 (f) requires that no site is to have more than 4 vehicle crossings plus 1 vehicle crossing per km for site with over 4km of frontage. It is unclear whether the site as a whole has more than 4 vehicle crossings. Regardless, the intent of the rule is to ensure that vehicle turning movements are controlled to fewer points where safety can be controlled – in the case of the DDN3 proposal, there will be no change to the number of vehicle crossings and safety will be ensured.

#### *Sight Distance from Vehicle Crossings*

Rule 12.2.2 (g) defines sight distance requirements at vehicle crossings based upon the legal speed limit. As indicated in **Section 2.2**, the legal speed limit on Golden Point Road is 70 km/hr (requiring a sight distance of 95m) and on Horse Flat Road it is 100 km/hr (requiring a sight distance of 195m).

It is unlikely that the requirement is met on Horse Flat Road, but there are no associated adverse effects because achievable speeds on these roads are considerably lower than the legal speed limits, the crossings are controlled by gates and few, if any, vehicles are making turns at these crossing points. Further, any potential interaction of public and mine-operated vehicles is minimised through the use of radio communications and procedures defined through TMPs.

### *Vehicle Orientated Commercial Activities*

Rules 12.2.2 (h) defines further sight-distance requirements for sites generating over 60 vehicle movements per day with vehicle access to non-arterial roads. The same comments as for 12.2.2 (g) above apply.

## **5.5 Summary**

The district-wide transportation rules are primarily focussed upon controlling the effects of more traditional activities in urban and rural areas, and do not fit well with the nature of the Macraes mining activities.

The DDN3 proposal will not result in any changes to the location of operation of existing haul road crossings of public road, though some change in the intensity of use is likely.

Procedures for the control of public vehicle movements in the vicinity of the haul road crossings are clearly defined in TMPs approved by WDC. These are heavily focussed upon ensuring the safety of the public and mine employees and have operated well for a number of years.

As a result, any areas of non-compliance with the WDC rules are 'technical' in nature and will not be associated with any adverse effects in terms of the safe or efficient operation of the public road network in this area.

## 6 Conclusions

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OceanaGold is seeking consents to enable mining operation in the Deepdell North Stage 3 (DDN3) area. This will result in some changes to the location and intensity of mine-related activity and vehicle movements in the wider area.

The existing mining area currently includes the Golden Point Historic Area, which attracts occasional public visitation. In addition, there are a number of 'paper' roads in this area, which members of the public are legally entitled to utilise for access purposes.

The over-riding objective for OceanaGold is to ensure the continued high safety standards which have applied to date for both the public and mine employees. At the same time, it is seeking to maintain the ability of the public to access the Golden Point Historic Area and utilise routes across this area.

A package of measures is proposed to achieve both safety and accessibility. This package will:

- maintain the ability of the public to access the Golden Point Historic Area by car from both Golden Point Road and Horse Flat Road;
- maintain an ability for the public to access to Golden Point Historic Area on foot from Horse Flat Road;
- ensure the mine operator is aware of the movement of any members of the public in this area;
- ensure that the Council is aware of access arrangements through a continued requirement for the review and approval of Traffic Management Plans; and
- ensure compliance with the relevant requirements of the district plan.

On the basis of the transportation issues addressed by this assessment, it is recommended that consent be granted for the Deepdell proposal.

**ANNEXURE B: Macraes Goldmine Deepdell North Stage 3 – Response to Waitaki District Council Request for Further Information (Traffic) (February 2020)**

17 February 2020

MitchellDaysh Ltd  
PO Box 489  
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For the attention of: Phil Petersen

[via email: phil.petersen@mitchelldaysh.co.nz]



Phil

**OceanaGold Corporation: Macraes Goldmine: Deepdell North Stage 3  
Response to Waitaki District Council Request for Further Information (Traffic)**

**Background**

OceanaGold has lodged an application with the Waitaki District Council (**WDC**) for consents for the Deepdell North Stage 3 project at the Macraes goldmine.

The application was supported by an assessment of Traffic and Pedestrian Access Management issues, prepared by Tim Kelly Transportation Planning Ltd.

WDC has recently responded to the application with a request for further information.

The purpose of this document is to provide a response in relation to the traffic-related issues in the WDC request.

**Issue 1**

**Request: The traffic assessment report refers to the access standards in the Plan. In relation to Rule 12.2.2.(g), which concerns sight distances from vehicle crossings, the report states that it is unlikely that the requirement is being met but there are no associated adverse effects because of achievable speeds on these roads is considerably lower than legal speed limits. However, no details are provided in support of this assessment.**

Section 5.4 of the report states that the legal speed limit on Horse Flat Road is 100km/hr, requiring a sight distance of 195m. This also states that:

*'It is unlikely that the requirement is met on Horse Flat Road, but there are no associated adverse effects because achievable speeds on these roads are considerably lower than the legal speed limits, the crossings are controlled by gates and few, if any, vehicles are making turns at these crossing points. Further, any potential interaction of public and mine-operated vehicles is minimised through the use of radio communications and procedures defined through TMPs.'*

Section 2.2 of the report describes Horse Flat Road, noting that this is a single carriageway and unsealed. These characteristics restrict vehicle speeds, in addition to the undulating vertical profile, as shown by **Figure 1**.



**Figure 1:** Horse Flat Road, looking SW from haul road crossing

These lower speeds (expected to be 60 – 70 km/hr), the use of the road primarily by locals who are familiar with its standard and the provision of advance signage warning of the haul road crossing means that there is a negligible risk of any safety issues at this location. It is emphasised that the same arrangement has been in place for a number of years and has operated safely.

## Issue 2

**Request:** The report does not detail the proposed number of vehicle crossings associated with the proposal in context of Rule 12.2.2 (f).

Section 5.4 of the report states that:

*'the intent of the rule is to ensure that vehicle turning movements are controlled to fewer points where safety can be controlled – in the case of the DDN3 proposal, there will be no change to the number of vehicle crossings and safety will be ensured.'*

The purpose of district plan rules such as this is to control the potential effects of development upon the efficiency and safety of adjoining roads. For example, vehicle turning movements associated with a supermarket are generally more safely controlled with fewer points of access. In the context of the rural goldmine operation, such a rule has little relevance, particularly (as noted above) the number of access points is not being changed, safety is closely controlled, and levels of vehicular activity are low. Again, the absence of any recorded incidents in the past indicates that the number of vehicle crossings is in any way problematic for other road users.

Yours sincerely,

*Tim Kelly*

**Tim Kelly**

Tim Kelly Transportation Planning Limited

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