BEFORE THE HEARINGS PANEL FOR THE WELLINGTON CITY COUNCIL

IN THE MATTER of the Resource Management Act

1991

AND

IN THE MATTER of Proposed Plan Change 83 to

the Wellington City District Plan

STATEMENT OF EVIDENCE OF LINDSAY DAYSH

26 November 2018

1 Introduction

- 1.1 My name is Lindsay John Daysh. I hold a Bachelor of Regional Planning Degree from Massey University and a graduate qualification in Transport Systems Engineering from the University of South Australia. I am a member of the New Zealand Planning Institute and the Resource Management Law Association.
- 1.2 I have over 30 years' experience in town planning and resource management in New Zealand and in Britain. This includes extensive experience in central government agencies, local authorities and since 2004 as a consultant carrying out a broad range of planning matters including strategic planning, policy development, and project development particularly for infrastructure providers.
- 1.3 I am also an independent commissioner with a chairmanship endorsement and have conducted a number of hearings for Wellington City Council since 2010 including a number of infrastructure projects.
- 1.4 My current position is as a Director of Incite, a resource management and environmental consultancy. I am based in Wellington.
- Prior to my move to Incite in 2010 I was New Zealand Planning Manager with GHD Ltd, where I held national responsibility for all planning matters. Preceding that I was Regional Planning Manager at the former Transit New Zealand for Wellington and Nelson/Marlborough/Tasman. I have also had two periods of employment at Wellington City Council including through the hearings and appeals stages of the first District Plan under the Act. I also worked for the London Borough of Hillingdon, and the former Ministry of Works and Development.
- 1.6 I am very familiar with the planning framework in Wellington having worked on a number of planning tasks in the city and the region at strategic and project consenting levels for the majority of my career. I also have strong familiarity with the practical application of the Wellington City District Plan in particular, as well as the National instruments, the Regional Policy Statement and Regional Plans.
- **1.7** Recent relevant infrastructure projects of relevance include:
 - Alternatives Assessment and Project development for a new shared path on the seaward side of the railway lines between Ngauranga and Petone and a cycling and walking link between Petone and Melling. I have a long history of transport project development through New Zealand but

- particularly for Roads of National Significance projects in the Wellington region.
- As the primary consultant for CentrePort since 2014 including project consenting, a long involvement in the Harbour Channel Deepening Project and consideration of future development options particularly after the 2016 earthquake.
- I also provided extensive evidence at the six hearings that comprised the review of the Proposed Natural Resources Plan for CentrePort, for the rail and ferry operations of KiwiRail and I also assisted the Wairarapa Water Users in respect of water allocation provisions.
- Other infrastructure clients include telecommunications, electricity and petrochemical providers primarily in central New Zealand. I also have wide ranging civic infrastructure experience for a number of councils.
- 1.8 While I understand that the present hearing is not a matter to which the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note (2014) applies, I confirm that I have approached the preparation of this evidence in the same manner as I would for Environment Court proceedings and have complied with the requirements of the Code. I confirm that the issues addressed in this evidence are within my area of expertise and the opinions I have expressed are my own except where I have stated that I have relied on the evidence of other people. I have not omitted material facts known to me that might alter or detract from my evidence.

2 Executive Summary

- 2.1 I have been involved with Kiwi Point Quarry since 2015 and have carried out a number of investigations including an Analysis of Alternatives, the preparation of the s32 report and the plan change document itself,
- 2.2 I note the evidence of Mr Simpson and consider that from a regional economic perspective, the case for expanding quarrying on the southern face is sound. However, there are also adverse effects that need to be considered. The receiving environment is the Kiwi Point Quarry and the residential communities in closest proximity.
- 2.3 Options were considered and it was found that the there is a clear separation between Options 1 (no quarrying) and 2 (zoned land only) when compared to Options 3 and 4. Options 1 and 2 fail to achieve the fundamental objective of providing for aggregate to meet demand (in a cost efficient manner, as is the case with Option 2). Options 3 and 4 present viable options from a quarry

operations perspective but would have adverse environmental effects ranging from minor through to significant (although Option 2 would also have moderate adverse environmental effects).

- I participated in consultation and I note that the City Strategy Committee considered this as well as my s 32 report when deciding to adopt the Plan change for public notification.
- 2.5 The northern face is near exhaustion and development of the southern face has been considered. Mr Ormiston has outlined how this may occur. Key amenity factors have been considered such as dust, noise and vibartio. It is the consensus that adverse effects can be minimised through effective management and the implementation of a detailed controlled activity resource consent. There are no traffic or infrastructure matters that cannot be managed
- 2.6 At the outset of this project the team was aware that quarrying more of a vegetated hillside than permitted by the District Plan currently, would result in significant ecological effects through the destruction of vegetation and habitat.
- 2.7 Dr van Meeuwen Dijkgraaf notes that ecological matters must be addressed and that a mitigation and offsetting package for the loss of biodiversity has been developed if quarrying was to proceed.
- 2.8 I accept that there will be adverse visual effect in varying degrees and varying scales of significance. Variable factors include distance from the quarry, what activities are being carried out, relative height and other components of the dominant aspect from a property. There will also be visual effects for users of State Highway 1.
- 2.9 The expansion of Kiwi Point Quarry would take place over a number of years and there will be a long period of time before the cut faces in particular are remediated. I note that the Newlands interchange project was consented in 1995 and completed circa 1998 and that most of the cut batters have some form of vegetation with differences in success depending on location.
- 2.10 I also discuss the positive way in which the proposal will assist in achieving the National Policy Statement for Urban Development Capacity (NPSUDC) and the explicit support for sourcing aggregate as close as is feasible to the source of demand within the RPS.
- 2.11 I also consider that the plan change meets the purpose of the Act and that there are no absolute barriers in terms of Part 2 matters to adopting the plan change.
- 2.12 I have considered submissions and the s42A report. I support the plan change as amended by Mr Jones.

3 Involvement in Kiwi Point Quarry

- 3.1 My first involvement with the wider Kiwi Point environment was when I was employed as the WCC consents planner for the Northern Suburbs (which included the Ngauranga Gorge) in the late 1980's. This included considering development applications of previously quarried areas of Glover Street, part of Tyers Road and part of Jarden Mile as well as residential applications in the communities of Johnsonville, Broadmeadows, Khandallah and Newlands.
- 3.2 In my second period of work at WCC from 1995 to 1998 the majority of my time was completing the hearings and appeals phase of the first District Plan including suburban centres provisions as they were then called. I recall that the quarry was allowed for at that time via a site specific rule.
- 3.3 I was also the Council reporting officer on Notices of Requirement to implement the Newlands Interchange as well as the Wellington Inner City Bypass (Karo Drive).
- 3.4 My recent involvement commenced in October 2015 when I was requested by the current Transport and Infrastructure unit of WCC to scope the Resource Management Act 1991 (RMA) issues associated with potentially expanding the area of the southern face of the quarry over and above that which was provided for through Plan Change 25 (that was made operative within the District Plan in 2006). Plan Change 25 provided for a new southern face of the quarry to be developed subject to a range of site specific provisions.
- 3.5 Since 2015 I have been involved in several stages to the plan change. In particular:
 - I coordinated a higher-level Issues and Options Report that identified the key matters that would require further investigation.
 - I then designed and led a workshop to consider a Multi Criteria Analysis (MCA) process that compared the four available options from cessation of quarrying to the maximum development scenario. The workshop report¹ and the supporting documentation was included in the documents that were publicly notified.
 - I also assisted with the consultation process and was present at the open days in Johnsonville on Saturday 30th of September and Wednesday 4th

¹ Kiwi Point Quarry Expansion Alternatives Workshop Report Incite October 2016.

- of October 2017. I reviewed the Public Engagement Report² compiled upon receiving written comments on the proposal.
- Upon completion of that task I prepared Plan Change 83 (PC83) and carried out the associated evaluation of required under s32³ of the Act. All of this documentation was included as supporting information upon notification.
- In association with the WCC Project Manager, Mr Logeswaran, I have also
 overseen the technical assessments and evidence carried out after
 notification to ensure that all matters have been thoroughly assessed
 particularly in respect of matters raised by submitters.
- After notification and receipt of submissions I coordinated a combined meeting between WCC as plan change proponent with the s42A advisers on ecology, landscape and planning to discuss the "Mitigation Options for the Potential Loss of Indigenous Vegetation and Habitat" report prepared by Dr van Meeuwen Dijkgraaf as well as associated ecology and landscape issues. The minutes of this meeting are contained in Appendix A to this evidence.
- I have met with representatives of the New Zealand Transport Agency (NZTA) on 31 July 2018 and Greater Wellington Regional Council biodiversity staff on 12 November 2018 to discuss their submissions.
- The s42A author Mr Jones and I have also communicated frequently on matters that may need addressing and to discuss the detail of the Plan Change document itself.

4 Scope of Evidence

- 4.1 I have been asked by Wellington City Council to prepare planning evidence on its behalf as proponent of Proposed Plan Change 83.
- 4.2 I have relied on the evidence of many others in formulating this evidence including:-
 - Darcy Maddern, Holcim New Zealand Quarry Operations Manager;
 - Philip Simpson, Spire Regional economics/ demand forecasts;
 - Sandy Ormiston, Ormiston Associates quarry design, quarry management, geotechnical matters. Mr Ormiston also comments on noise

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² Public Engagement Report Kiwi Point Quarry Expansion Incite January 2018.

³ WCC District Plan Kiwi Point Quarry Extension s32 Evaluation Incite December 2017.

and vibration and attaches a Noise and Vibration survey from Marshall Day Acoustics;

- Dr Doug Boddy, Paddle Delamare Dust Management;
- Tim Kelly, Tim Kelly Transportation Traffic;
- Dr Astrid van Meeuwen-Dijkgraaf, Wildlands Ecology and mitigation package;
- David Cameron, Stantec Aquatic ecology and regional consents; and
- Gavin Lister, Isthmus Landscape and Visual.
- 4.3 I have also had particular regard to the s42A report prepared by Mr Jones and the accompanying technical supporting evidence from Mr Fuller on ecology, Mr Evans on landscape matters, Mr Spence on Traffic and Mr Cameron on Noise and Vibration.
- **4.4** Importantly I have also considered the content of the submissions and the further submissions received.
- **4.5** My evidence will address the following points:
 - (a) Aggregate resource requirements in the Wellington Region;
 - (b) The locational and planning context for the plan change;
 - (c) Consideration of alternatives;
 - (d) Consultation;
 - (e) City Strategy Meeting that endorsed the plan change for public notification
 - (f) Southern Face Expansion of Kiwi Point Development
 - (g) Geotechnical and slope stability matters
 - (h) Amenity Effects including noise, vibration, wind and dust.
 - (i) Traffic effects and Infrastructure matters
 - (j) Reginonla Consents
 - (k) Terrestrial Ecology/HAbitata and ecological Mitigation
 - (I) Landscape effects

- (m) Comment on the National and Regional Policy instruments;
- (n) The key conclusions of the S32 evaluation;
- (o) I will draw some conclusions as to Part 2.

5 Aggregate resource requirements in the Wellington Region

- 5.1 Before turning to matters of effects and RMA policy statements and plans it is worth emphasising the role of aggregate in the regional economy. The primary evidence on behalf of WCC as plan change proponent is from Mr Simpson who addressed the following points:
 - (a) The ongoing demand for aggregates to support building and construction in Wellington;
 - (b) The limited supply options for aggregates and limited alternative sources of aggregates;
 - (c) The strategic benefits of continued operation of the Kiwi Point Quarry; and
 - (d) The financial benefits to WCC and the community from continued operation of Kiwi Point Quarry.
- 5.2 I also note Mr Simpson's 5 key conclusions in his executive summary which I comment on in turn:
 - 3.1 Aggregates are an overlooked non-renewable resource that is necessary for building and construction. There is ongoing demand in the Wellington region for aggregates, with particularly high growth in residential building.⁴
- 5.3 The figures of aggregate demand in the Wellington Region have been provided by Mr Simpson and shows the extent of resource required to satisfy current and anticipated demand for sources of aggregate for wider regional development purposes⁵.
- 5.4 My office carries out a considerable number of consent applications for residential building in the Wellington Region and it is widely recognised that Wellington is undergoing a period of sustained growth. Consequently, the city

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⁴ Evidence of Philip Simpson Executive Summary

⁵ Aggregates in Wellington Regional Demand, Supply and Alternatives Spire November 2018 p4.

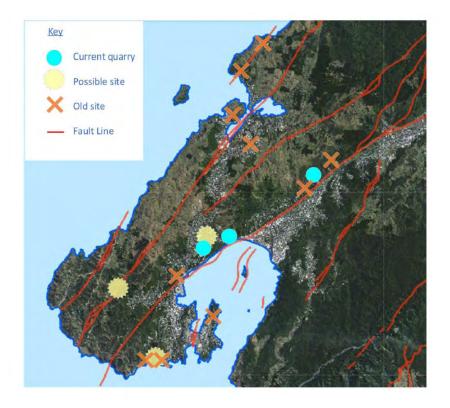
faces a range of significant housing affordability and availability challenges of which aggregate plays an important part.

- 5.5 I also note Mr Simpson estimated the significant amount of aggregate required to construct a new house⁶ along with considering the other primary end uses of quarrying product including for road maintenance.
 - 3.2 Three quarries currently supply the Wellington region: Kiwi Point Quarry. Belmont and Horokiwi. There are limited sources of suitable rock resources and there are significant barriers to establishing a new quarry.
- 5.6 The Wellington region has had a long history of quarrying and I note that there are only three current sites outside of Kapiti and the Wairarapa that are currently operational including Kiwi Point.
- 5.7 It is also clear from the evidence of Mr Ormiston and Mr Maddern that the freely available resource at the northern pit of Kiwi Point is nearing exhaustion and both discuss the investigations that have been carried out that justify, from an aggregate supply perspective, that further expanding the permitted quarrying at the southern face is worthwhile.
- 5.8 Ngauranga Gorge has had a long history of quarrying and I note from Mr Simpson's graphic⁷ that there has been quarrying activity since 1920 and prior to that filling and quarrying works involving the road between Ngauranga close to sea level, to Johnsonville which is higher in elevation.
- 5.9 I also note Mr Simpson's graphic⁸ which I reproduce below which shows the existing and former quarry sites.

⁶ Evidence of Philip Simpson at 4.3

⁷ Evidence of Philip Simpson at p7

⁸ Aggregates in Wellington Regional Demand, Supply and Alternatives Spire November 2018 p7



- 5.10 I note that the possible sites identified have not been progressed. The South Coast quarry at Owhiro Bay was closed in the early 1990's and the Taputeranga Marine Reserve has since been established. Sites within Newlands have been primarily utilised for housing development and have access difficulties while Makara sites have particular issues with road access and distance from the primary points of demand within the region.
- In any event locating and developing a new site for quarrying would at the very least be challenging from an environmental perspective let alone from an economic perspective.
 - 3.3 Kiwi Point Quarry supplies the adjacent concrete and asphalt plants and is well located to transport routes to supply the Wellington market.
- Aggregate from the quarry supplies two customers established in the Kiwi Point area, being Downers for WCC Maintenance and other contracts as well as Allied Concrete. In my view utilising an existing location for quarrying has considerable benefits. The Kiwi Point area has its own highway access and all traffic movements are conducted without having to travel through urban streets. In addition, Kiwi Point has significant locational advantages being at the centre of a triangle between Porirua City, the Hutt Valley and Wellington City. I understand that as a high weight to low value product transport access to markets are a significant factor in the overall cost structure.

3.4 Without the Plan Change and continued supply from Kiwi Point Quarry, there will be increased costs for all customers, particularly as transport is a significant cost for aggregate supply. Wellington City Council will also lose a source of revenue from the quarry and have direct cost increases for its infrastructure projects. With closure the negative impact on the community is estimated at a \$41 million (on a Net Present Value basis).

Economic wellbeing is a direct resource management issue and cost factors are critical for viability and in terms of considering both positive and adverse effects. Mr Simpson considers that the negative economic impact to the wider community of not extracting Kiwi Point resources to be a significant number.

- 3.5 Continued operation of the quarry provides for a competitive and resilient market for aggregates. It ultimately delivers flat land suitable for well-located commercial development. The benefit from the continued operations, partial leasing, and eventual sale of the entire site is estimated at \$25 million benefit (NPV basis). The difference between the negative impact of \$41 million and the benefit of \$25 million results in a net projected benefit of \$66 million.
- 5.13 An outcome of quarrying is that there is potential for flat land to be available for business development. While this is a factor this outcome will not be realised until cessation of quarrying of the southern face and after rehabilitation. This will be a significant time away. However, the land value is significant.
- 5.14 My observation is that such land is in short supply and I know of few vacancies in for example Jarden Mile, Tyers Road or Glover Street due presumably to excellent locational advantages for businesses through being in proximity to the highway network.
- 5.15 From a regional economic perspective, the case for expanding quarrying on the southern face is sound. However, there are also adverse effects that need to be considered. To this end an early part of the investigations was to carry out an assessment of alternatives for the Kiwi Point site while firstly considering the receiving environment.

6 The locational and planning context for the plan change

Ngauranga Gorge is a location well known to the wider Wellington community due to it's function as the primary vehicle access into and out of Wellington City from the north. State Highway 1 carries approximately 37,800 vehicles/day in the northbound direction per day with a similar number going in the opposite direction of which 6-7% are heavy vehicles⁹.

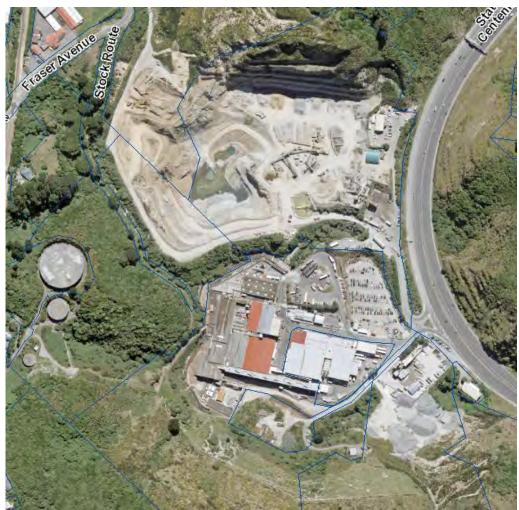
⁹ Kiwi Point Quarry Traffic Assessment Tim Kelly p6

- **6.2** Kiwi Point Quarry, and the other activities in the wider Kiwi Point area, enter left in and exit left out from the site via a specific entry and exit design.
- The area of the Plan Change is shown graphically below with the rezoning from Open Space B to Business 2 proposed shown below to the south of the Taylor Preston Abattoir up the hill towards Tyers Reserve.



The existing land use activities at Kiwi Point encompasses the following that can be seen from the aerial photograph below.

¹⁰ PC 83 Summary Document p3

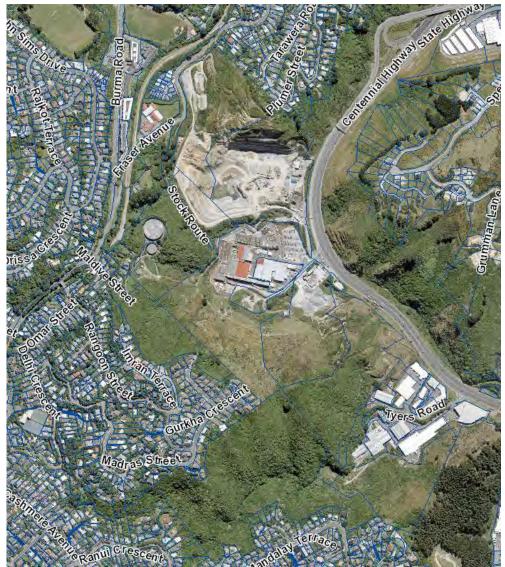


Source: WCC GIS

6.5 Key features include:-

- The existing quarry operations at the North Face including the deep pit
 where rock is currently being sourced. This is bound by cut faces and the
 steep haul and emergency access road (Stock Route) up towards Fraser
 Avenue.
- The batter slopes from completed quarrying at the north;
- · The crushing plant and storage area;
- The Downers yard and Asphalt Equipment on the north eastern edge of the site adjoining State Highway 1;
- The Taylor Preston Meat Processing Plant and its associated emergency grazing area;
- The Allied Concrete Plant; and
- Bulk water storage on a much higher elevation at the top of a knoll west of
 Taylor Preston with the primary bulk water pumping station adjoining SH1

- in the southeast In addition to the water supply infrastructure, the wider Kiwi Point site also has the main gas pipeline running through it as well as electricity and telecommunications infrastructure.
- 6.6 The southern face that is the subject of this plan change forms a steep vegetated promontory south of Taylor Preston towards Tyers Road. Mr Lister has also described landscape features extensively in his evidence particularly the prominence of the south face from State Highway 1.
- As a location Kiwi Point is surrounded by elevated residential development in the following wider communities and localities.



Source: WCC GIS

 The Plumer Street /Tarawera Road area of Raroa to the north above the northern quarry face.

- Fraser Avenue and Burma Road to the north and east. I understand that the
 former Westmount School on Fraser Avenue is closed, and that consent has
 been granted for a multi-unit residential development. The Malvina Major
 Retirement Complex is located in the wedge of land in between Burma Road
 and Fraser Avenue.
- Broadmeadows to the east that rises above Burma Road on the slopes of Mount Kaukau.
- The Rangoon Heights area of Khandallah to the south east. There are
 properties on the ridge above Kiwi Point in Imran Terrace, Shastri Terrace
 and the eastern end of Gurkha Crescent that are closest to Kiwi Point and
 those on the edge are also visible from a number of distant viewpoints to the
 north.
- The Tyers Road Industrial area zoned Business 2. This is behind the southern ridge that is the subject of the existing Plan Change 25 zoned southern face and the area of the proposed Plan Change 83 expansion.
- Further to the south are residential properties in Khandallah and what is a cul-de-sac extension of Homebush Road, and Mandalay Terrace.
- The Tyers Reserve between Gurkha Crescent and Mandalay Terrace.
- The Spenmoor Street /Grumman Lane extension of Newlands above the level of the proposed quarry on the eastern side of State Highway 1.

7 Consideration of Alternatives

- 7.1 An important component in the evaluation of a potential change to a statutory policy or plan, particularly if there are spatially based effects, is to consider alternatives. To this end a workshop was convened and an analysis of alternatives carried out.
- 7.2 The outcome was based upon inputs from a number of disciplines. The full workshop report¹¹ and appendices forms part of the information provided when the plan change was publicly notified and prior to consultation.

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¹¹ Kiwi Point Quarry Expansion Alternatives Workshop Report Incite December 2016.

- 7.3 The outcomes of this process are summarised in the Executive Summary to the Workshop Report which outlined the process and results from a workshop assessment of potential options for the expansion of the Kiwi Point Quarry (the Project).
- 7.4 This was in the context that the Project seeks to potentially enable a change to the District Plan provisions to provide for an expansion of the Quarry to meet forecast regional aggregate demand.
- **7.5** Project Objectives were firstly developed and agreed by the Project Team and were utilised to assess each option. There project objectives were:-
 - 1. To enable extraction activity in a cost efficient manner to assist in meeting future regional aggregate demand
 - 2. To plan and co-ordinate effective rehabilitation of the site post-quarry activity to enable viable long-term land use options
 - 3. To manage the immediate and long-term cultural, social, land use and other environmental impacts of the Project by so far as practicable avoiding, remedying or mitigating any such effects
 - 4. To minimise landscape impacts as far as practicable, recognising landscape values in the context of the gateway experience.
- 7.6 The workshop reviewed the analysis of alternative options carried out to date, identified any additional viable options and then assessed the identified range of alternative options within the RMA framework. Following completion of the workshop, information was consolidated to review specialist scoring and assessments, apply sensitivity testing and assess each of the identified options against the Project Objectives.
- 7.7 As the panel will be aware four options were developed as short list options to be assessed as part of the alternatives workshop process. A key assumption for all options was that the site will be rehabilitated following the completion of quarry activity in the respective areas. These options were.
 - Option 1 Do Nothing This option is to cease quarry activity in the North
 Face area and not to proceed at all with quarrying in the South Face. This
 option forms as the baseline option against which all other options will be
 assessed.

- Option 2 Permitted Activity Development This option is to develop the
 quarry as provided for as a permitted activity under the current District Plan
 framework within the Business 2 Area to the south of the site access road.
- Option 3 Five Stage Development The option extends into an Open Space B zone to incorporate a series of benches to the 190m contour of the hillside peak. The option provides for an approximate 100m buffer between the maximum extent of the quarry activity and the closest residential site boundary in Gurkha Crescent.
- Option 4 Maximum Expansion This option further extends into an Open Space B zone to maximise the western expansion to the boundary of the quarry site. The option provides for an approximate 70m buffer between the maximum extent of the quarry activity and the closest residential site boundary in Gurkha Crescent.
- **7.8** Results were assessed to identify the best performing option relative to aggregated raw and weighted specialist score scenarios as well as against the Project Objectives.
- 7.9 There is a clear separation between Options 1 and 2 when compared to Options 3 and 4. Options 1 and 2 fail to achieve the fundamental objective of providing for aggregate to meet demand (in a cost efficient manner, as is the case with Option 2). Options 3 and 4 present viable options from a quarry operations perspective but would have adverse environmental effects ranging from minor through to significant (although Option 2 would also have moderate adverse environmental effects).
- 7.10 It was found that the key impacts of the expansion options (Options 2, 3 and 4) relate to landscape, visual amenity and ecology effects, with key features being the gorge landscape and regenerating vegetation. None of the key features are identified as outstanding or significant within the current plan framework (i.e., outstanding natural features and landscapes or as areas of significant indigenous vegetation and significant habitats of indigenous fauna in accordance with section 6 matters of national importance). None of the expansion options were fatally flawed under specialist assessments. The effects of the expansion options were not considered to be detrimental to the point that they should not be considered further.
- **7.11** In summary, key considerations for each option were as follows:

- Option 1 Do Nothing: did not contribute to meeting aggregate demand and will require the development of an alternative quarry site or sourcing from a more distant location. Retains valued existing site characteristics (landscape and ecology) - these characteristics are not matters of national importance.
- Option 2 Permitted Activity Development: Not financially viable. Mr
 Ormiston's evidence explains what process was undertaken to confirm that
 the southern face Business 2 area where quarrying would be otherwise
 permitted, was too small and too difficult to be a viable quarry undertaking.
- Option 3 Five Stage Development: Provides for aggregate demand and future land use options. Moderate to significant adverse ecology and landscape effects.
- Option 4 Maximum Expansion: Provides for the highest amount of aggregate demand and land available for future land use options. Moderate to significant adverse ecology and landscape effects similar to those under Option 3.
- **7.12** These four options were taken forward for public consultation.

8 Consultation

- As stated I assisted WCC with consultation that was carried out in September and October 2017. The process and the outcomes are recorded in the Consultation Report¹². I note that there was both support raised for further quarrying and cleanfilling at Ngauranga Gorge as well as opposition primarily related to amenity factors such as dust, noise, proximity and visual effects.
- 8.2 There are two matters that I wish to comment on in relation to the process. In my view the overall process was robust despite two errors.
- 8.3 The first error was that while a large number of properties were directly notified and invited to attend open days and provide submissions some of the submissions were missed when the consultation report was considered by the WCC Policy and Strategy Committee. A rectified report was considered later by the Committee that endorsed taking the plan change forward for public consultation.

¹² Public Engagement Report Kiwi Point Quarry Expansion Incite January 2018.

- 8.4 The second matter was the fact that eight properties that should have been consulted and directly notified at the Homebush Road cul-de-sac were missed. As the panel will be aware this was identified late in the piece with the process stopped and notification occurring to these properties.
- 8.5 In my experience there are often concerns raised about consultation and these concerns are often larger the more prominent the proposal. I note that a number of environmental concerns were raised by some submitters and they broadly accord with the content of the submissions received after public notification.
- 8.6 For a plan change some form of consultation is mandatory but in any event it is commonplace where there is the potential for adverse effects. Consultation can also assist in identifying matters that could be addressed through standards in the District Plan especially in respect of amenity effects.
- 8.7 I am satisfied that interested parties have had the opportunity to express their views to the council including consideration of potential alternatives and the scope of effects, particularly visual.
- **8.8** Importantly this hearing is a further way that groups or individuals can express a differing view on the proposal.
- **8.9** Prior to notification of the plan change the matter was then considered by Council.

9 City Strategy Meeting

9.1 The Public Engagement report and the draft Plan Change to proceed with Option 4 was endorsed by the WCC City Strategy Committee on 22nd February 2018 where it resolved¹³:-.

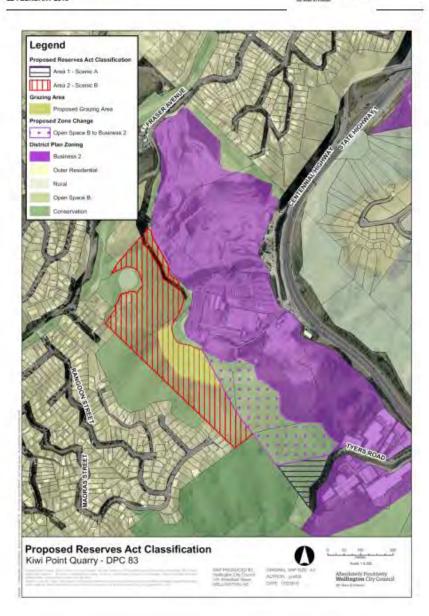
That the City Strategy Committee:

- 1. Note the contents of the Kiwi Point Quarry Public Engagement Report as set out in Attachment 1 of this report.
- 2. Agree to notify proposed Plan Change 83 Kiwi Point Quarry, as set out in Attachments 2 and 3 of this report, in accordance with the requirements of the First Schedule of the Resource Management Act 1991.

¹³ Minutes of City Strategy Committee 22 February 2018.

- 3. Agree that if Plan Change 83 is made operative, that Areas 1 and 2 as identified in Attachment 4 be classified respectively as scenic reserve, for the purposes specified in s.19(1)(a) and s.19(1)(b) of the Reserves Act 1977.
- 4. Agree to delegate to the Urban Development Portfolio Leader and the Chief Executive the authority to make any changes to the Plan Change document and the Section 32 report required as a result of decisions of this Committee, as well as minor editorial amendments, prior to Plan Change 83 being notified.
- 5. Request that Officers investigate and report back in time for the hearings process on the feasibility of funding further revegetation on suitable sites to mitigate the effects of the Kiwi Point Quarry expansion proposal, including but not limited to utilising royalties from future quarry operations.
- 6. As part of the Long Term Plan and the District Plan review, the Council will over time undertake a planning exercise to find either a new site(s) and/or alternative materials to meet future city needs in the construction industry.
- **9.2** I note three particular matters in this resolution that are important factors in consideration of the Plan Change being:
 - 3. Agree that if Plan Change 83 is made operative, that Areas 1 and 2 as identified in Attachment 4 be classified respectively as scenic reserve, for the purposes specified in s.19(1)(a) and s.19(1)(b) of the Reserves Act 1977.
- **9.3** This is shown on the following plan¹⁴.

¹⁴ Kiwi Point Quarry Plan Change Appendix 4 to City Strategy Committee 22 February 2018



- 9.4 This relates to the remaining land outside of the Business 2 land that is in Council ownership. Council was keen to ensure that there was a further level of protection for the identified parcels. These areas encompass a triangle of land in the south, which will be managed as part of the Tyers Reserve, and steep, elevated land on the eastern flank that also acts a buffer area for residential properties further east.
 - 5. Request that Officers investigate and report back in time for the hearings process on the feasibility of funding further revegetation on suitable sites

to mitigate the effects of the Kiwi Point Quarry expansion proposal, including but not limited to utilising royalties from future quarry operations.

- 9.5 With this resolution Council agreed to consider further revegetation on suitable sites to assist with offset mitigation of the loss of vegetation within the plan change area. This undertaking has been reflected in Dr van Meeuwen Dijkgraaf's Mitigation Options Report¹⁵ that I will discuss later.
 - 6. As part of the Long Term Plan and the District Plan review, the Council will over time undertake a planning exercise to find either a new site(s) and/or alternative materials to meet future city needs in the construction industry.
- 9.6 This part of the resolution does not focus on the specifics of Kiwi Point Quarry but on the real need to consider future sources of aggregate in future Long Term Plan and in terms of the upcoming District Plan review. Having an additional 15 to 20 years of supply from Kiwi Point would at least give some breathing space for the wider Wellington Region until such options are identified and more fully developed.

10 Southern Face Expansion Kiwi Point Quarry Development

10.1 The evidence of Mr Maddern, the Quarry Operations Manager for Holcim, outlines that the

The rock resource in the Northern Resource is nearing the end of its economic life. In 2013 planning commenced to quarry the portion of the Southern Resource area zoned Business 2. The area approved for quarry activities in the Southern Resource (known as Area H) was modelled with the data from drilling program completed in 2014. Analysis of resource modelling data identified that extraction of the high grade rock in area H in isolation would be uneconomical due to the volume of available resource compared to the overburden required to be stripped to gain access to these reserves.

Further modelling was undertaken, combining Area H and Open Space B, this model showed that the economics and viability of expanding the southern face into Open Space B that would extend the life expectancy of the KPQ by approximately 15 to 20 years (the basis for Plan Change 83.)¹⁶

This means that the Plan Change 25 area resource is difficult to get at and is uneconomic. Mr Maddern also considers that the economics and viability for a larger area will produce aggregate for potentially up to 20 years.

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¹⁵ Mitigation options for the potential loss of indigenous vegetation and habitat at the Proposed Kiwi Point Quarry Wildlands November 2018

¹⁶ Evidence of Darcy Maddern paras 3.2 and 3.3

- 10.3 He also outlines the way in which an established quarry operator manages environmental effects noting that there are District Plan rules and standards already in place and extensive resource consent requirements. It will be also be apparent that the quarry is also a significantly regulated industry for Health and Safety matters. I discuss the key components to be considered by a controlled activity consent later in this evidence.
- Mr Maddern also outlines design matters such as geology and geotechnical matters. These are expanded on in the evidence of Mr Ormiston who has also modelled the potentially available resource based on geological exposure and drilling and geological logging of 7 cored drill holes. As stated the current prediction of yield is up to 20 years but could be as low as 15.
- 10.5 Mr Ormiston then summarises the Investigations on site, and formulated a quarry design proposal. This included plans showing the ultimate extent of the Southern ridge quarry excavation, the location of benches and batter slopes, the position of roads and the location of sediment ponds for the treatment of stormwater runoff.¹⁷ These plans were the basis of what was Option 4 and as the basis of the Plan Change.

11 Geotechnical Matters/ Slope Stability

11.1 One of the concerns raised by submitters was in respect of slope stability in the case of a natural event. The evidence of Mr Ormiston states:-

I discuss slope stability risks on Gurkha Crescent and Shastri Terrace and conclude that based on slope stability analyses that the proposed ultimate pit excavation provides an acceptable factor of safety based on current guidelines. Some dwellings on Gurkha Crescent and Shastri Terrace are located on the crest of steep approximately 30° slopes descending to the north over an elevation of approximately 130 metres whilst the proposed Southern Ridge quarry batter crest is at least approximately 70 metres from the closest dwelling.¹⁸

11.2 I note Mr Ormiston considers that the design parameters he has used including batter slope gradients are the appropriate and conservative design. In addition precise design of quarry operations will depend on ground conditions but the boreholes have given good levels of information I understand. To this end the submission of a Quarry Management Plan as part of the controlled activity detailed resource consent will require consideration of slope stability to be carried out by persons with the appropriate qualifications and experience. This

¹⁷ Evidence of Sandy Ormiston para 7.2

¹⁸ Evidence of Sandy Ormiston para 3.4

is explicitly provided for through Rule 34.2.3.7 of the District Plan, which reads "measures required to maintain slope stability, and to prevent slope erosion or collapse" as a matter in which the District Plan reserves control".

12 Noise and Vibration Matters

- Another consistent matter raised by several submitters is in respect of noise and vibration. Attached to Mr Ormiston's evidence is a relatively short report on noise monitoring conducted by Marshall Day Acoustics¹⁹. Mr Ormiston's summary on noise is that in some locations that there is a variation where quarry noise is dominant while at other locations external factors such as State Highway 1 traffic, planes, trains or wind noise is dominant. He is confident that the adverse effects of noise can be managed.
- 12.2 I also note that Mr Ryan Cameron the Environmental Noise Officer from WCC has provided a report on noise effects as part of the s42A report. He concludes:-

The proposed quarrying activities as a result of this plan change must meet the criteria for Activity Noise and Fixed Plant Noise from the Business Area 2 Standards (34.6.1.1 and 34.6.1.2).

Provided the Business Area 2 Standards are complied with at all times with regards to quarry activity, then the reasonable protection of health and amenity can be achieved for the sites neighbouring the quarry.

Any blasting activities undertaken at the quarry that generate impulsive noise emissions can be specifically managed with the provisions of this plan change. At consenting stage, the application should reference appropriate International Standards and/or Policy to ensure any adverse effects associated with blasting are adequately mitigated.

The quarry management plan requirements under policy 33.2.2.7 retain the requirement to identify measures to manage noise effects.

The matters for control under the proposed Controlled Activity rule should clearly enable Council to ensure robust controls are applied by way of conditions with respect to any impulsive noise in particular associated with future quarry operations.²⁰

12.3 My view is that a working quarry can be a noisy activity as there is mechanical plant and machinery required to carry out the activity. However, the plant and machinery movements associated with quarrying or clean filling do not occur in the evenings and the site is remote from potentially affected parties by a minimum of 70 metres. The environmental noise from quarry operations is also in the context of other noise sources emanating in and around the site.

¹⁹ Kiwi Point Quarry Environmental Noise Survey Marshall Day November 2018.

²⁰ S 42A report Appendix 3 Noise effects – Ryan Cameron

- 12.4 However the management of noise and vibration effects is a key part of the controlled activity consent process as set by the plan change provisions where I expect that an agreed set of process and procedures will be further developed as the best practicable option to manage the adverse effects of noise and vibration. This particularly applies to blasting operations that create impulsive noise and routine measures of good practice to comply with the s16 RMA duty to avoid unreasonable noise.
- 12.5 Also of importance is clear lines of communication between quarry management, the city council in its compliance role and the community. I note that there have been few complaints and that there is a system of informing any party that wishes to know when blasting activities are to take place.
- 12.6 Mr Jones recommends some text changes to the plan change to put more certainty as to information requirements concerning noise, vibration and the use of blasting.

The amendments I have recommended will combine with the existing provisions in the operative plan and proposed plan change for the management of blasting, including:

- a. the QMP requirements to set out specific provisions relating to onsite management of noise and vibration and procedures for addressing complaints;
- b. buffer area requirements in policy explanation, standards and proposed matter of control;
- c. limiting blasting activities to between 10am and 2pm, Monday to
- d. a standard requiring that the quarry operator notify nearby residential properties by mail no less than one week from any blasting activity; and
- e. a standard requiring a siren or hooter to precede any blasting activities.²¹
- 12.7 These alterations are considered acceptable and I understand reflect current practice in any event.

13 Dust effects

As quarrying and clean filling can generate unreasonable levels of dust it is appropriate that the of use best practice quarry management operations are implemented to keep dust nuisance to a minimum. Dust nuisance effects were a key concern of some submitters. This aspect is also a key aspect of the quarry

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²¹ S42A Report para 4.16

management plan that needs to be provided through a controlled activity consent application.

13.2 Dr Boddy's evidence outlines:

My assessment considered the potential dust-generating activities, the location of the Kiwi Point Quarry site (the 'Site of the Plan Change') and sensitive receptors, the local meteorology, and also the range of commonly used mitigation measures that could be implemented to control dust emissions.

I am satisfied that the potential dust nuisance effects can be effectively controlled through the requirement to implement a Quarry Management Plan and a Dust Management Plan. Condition 28 of resource consent 345141 requires a Dust Management Plan to be prepared and adhered to prior to undertaking dust generating activities associated with cleanfilling. The mitigation measures recommended in paragraphs 6.19 to 6.23 below should be incorporated into the Dust Management Plan.

Consequently, I am confident that the Plan Change can be implemented without causing dust nuisance effects, or adverse effects on human health or the environment at or beyond the boundary of the site.

13.3 I note that the discharge to air of dust is also subject to a regional consent approval. In my experience with large scale earthworks the better the management of the activity the better the minimisation of effects. I am satisfied as is Dr Boddy, that dust nuisance effects can be managed through the controlled activity and regional resource consents required as well as good practice.

14 Wind Effects

- 14.1 Two submitters have commented on the effect that the landform change arising from the proposal will change wind flow in the area and result in adverse effects on people and property.
- 14.2 I note that Mr Jones has requested a review of these two submissions and that an assessment of wind effects has been commissioned. It is understood that the information will be available to all parties closer to the start of the hearing.

15 Traffic Effects

15.1 No traffic impact assessment was undertaken during the preliminary phases as it was assumed that the use of the left in left out arrangement onto the north bound carriageway of State Highway 1 would continue. In addition, it was assumed that traffic volumes attributable to quarrying would be similar to that which is occurring with quarrying of the north face.

- 15.2 The New Zealand Transport Agency submitted that there needed to be a more detailed assessment to justify the conclusion that traffic effects were minor. To this end Mr Kelly was commissioned to produce a report on the traffic effects²²..
- 15.3 That report was shared with the NZTA and a meeting was held that was also attended by Mr Spence as part of the s42A team. On the basis of that report Mr Kelly concludes in his evidence that:

In relation to the concerns raised in the NZTA submission, Mr Spence and myself concur that the overall transportation effects of PC83 upon the operation of the adjacent state highway will be minimal. We also agree that, since Kiwi Point is the most conveniently located quarry for Wellington, the expected effect of declining PC83 would be an overall increase in truck haulage activity.²³

15.4 There is consensus between Mr Kelly and Mr Spence that any traffic effects are minor as a result of the plan change.

16 Infrastructure matters

- As stated in the site description the Kiwi Point environment contains utilities that need to be managed. These include gas, electricity, telecommunications, bulk water, sewage and stormwater disposal. The Council as plan change proponent and the quarry operators are well aware of the existence of significant utilities and the procedures for protecting them as well as procedures should any relocations be required.
- 16.2 I am satisfied that through the existing site knowledge, utilities are recognised and protected. In addition, utility operators often have other powers that can be used under other legislation to ensure that these functions can continue.

17 Regional Consents

- 17.1 Prior to considering the final two effects matters being ecology and landscape it is worth noting that there are a current suite of regional consents that covers both the Northern face and that part of the Southern face already zoned Business 2. The evidence of Mr Cameron also outlines the aquatic environment that is controlled through these consents.
- 17.2 I note that these consents cover a large number of matters pertaining to the operation of a quarry. The consents currently held are:

²² Kiwi Point Quarry Traffic Assessment Tim Kelly Transportation Ltd August 2018

²³ Evidence of Tim Kelly para 15

- [34508]: Land use consent to undertake **soil disturbance and vegetation clearance** on erosion prone land.
- [34510]: Water permit to **divert and take water** from the Ngauranga stream for the purpose of dust suppression and aggregate washing.
- [34512]: Discharge permit to discharge treated sediment laden storm water and wash water to the Ngauranga stream.
- [34513]: Discharge permit for the **discharge of contaminants to land** associated with the operation of a cleanfill.
- [34514]: Discharge permit to **discharge contaminates (dust) to air** in association with the operation cleanfill.
- [34515]: Land use to **construct and maintain an intake structure** in the bed of the Ngauranga Stream.²⁴
- 17.3 In conjunction with the s42A team and as recorded in **Appendix 1** to this evidence we agreed that the outcomes of the plan change should recognise the need for integration of all environmental effects on the site particularly concerning the Waitohi Stream.
- 17.4 This is important in terms of mitigation and particularly the way in which the land or district aspects are covered in the plan change information requirements. The amended wording put forward by the s42A team recognises the interface of the District Plan with the discharge and beds of lakes and rivers matters contained within the current Regional Plans and the Proposed Natural Resources Plan and ideally provides a more integrated solution.
- 17.5 Mr Cameron's evidence seeks to bridge the gaps between the District Plan and the Regional Plans as matters concerning the aquatic environment were raised. He observes firstly that:

Urbanisation of the Ngauranga catchment has resulted in widespread habitat loss and reduced ecological function in the Waitohi Stream. Nevertheless, in the vicinity of the Quarry, some areas of open channel aquatic habit remain, and, in my assessment, the lower Waitohi Stream has retained 'Moderate' ecological value. Tyers Stream, the main tributary of the Waitohi, has retained a significant area of good quality habitat and has 'High' ecological value.

²⁴ Evidence of Darcy Maddern para 7.4

17.6 Further Mr Cameron states

Proposed Plan Change 83 does not have any direct impact on freshwater streams, although it does have the potential to cause several indirect effects on Waitohi Stream. In my assessment these indirect effects are adequately addressed by existing conditions of the GWRC consent WGN170175, held by WCC. The residual level of ecological effect is low and, when considered in isolation, would not require mitigation.

17.7 However at the workshop held it was agreed that impacts on the aquatic environment should be looked at holistically with other ecological effects particularly in respect of stream restoration and riparian planting opportunities.

18 Terrestrial Ecology/Habitat and Ecological Mitigation

- 18.1 At the outset of this project the team was aware that quarrying more of a vegetated hillside than permitted by the District Plan currently, would result in significant ecological effects through the destruction of vegetation and habitat.
- 18.2 To that end it was always expected that ecological matters must be addressed and that a mitigation and offsetting package for the loss of biodiversity would need to be developed if quarrying was to proceed.
- Dr van Meeuwen Dijkgraaf and her team first developed a draft of an ecological mitigation report. This covered not only the description of the vegetation and habitat lost but also opportunities for either direct mitigation on site or for off site mitigation. Input into this was able to be provided by the Councils Parks and Gardens team including the Parks and Open Space Manager at Council Ms Emeny and Ms Benbrook the Restoration Technical Adviser. Drafts were shared with the s42A team and Greater Wellington Regional Council.
- 18.4 In my view the process of sourcing off site mitigation opportunities has been made considerably easier through the Council being both plan change proponent and also the owner of reserve and open space land in the immediate vicinity.
- 18.5 In relation to ecological matters there was a useful workshop (minutes Appendix 1 to this evidence), with the ecological and landscape advisers from the plan change proponent and the s42A team that worked through the issues of concern.
- 18.6 In her final report Dr van Meeuwen Dijkgraaf outlined the potential mitigation tasks and locations for adverse ecological effects of the proposed Kiwi Point

Quarry extension. This has again been shared with Mr Fuller from the s42A team and with Greater Wellington and I understand there is close to consensus on the mitigation proposed.

- **18.7** This report includes a table²⁵ outlining several different locations and activities including:
 - Stream restoration;
 - Areas adjacent to Kiwi Point quarry for mitigation planting;
 - Imran Terrace/Maldive Street Reserve;
 - Ngauranga Site;
 - Benches with transplanting; and
 - Visual amenity and remediation planting;
- 18.8 This totals 11.84 ha compared to the total lost of 12.32 ha (comprised of 4.15 ha of indigenous vegetation and habitat and 8.17 ha of non-indigenous vegetation or habitat). There is also 15.9 hectares of rodent control for at least 5 years on 6 sites in the immediate vicinity. Finally there are items such as fencing the abattoir holdover stock pen and retention of local genetic diversity plant specifies that complete the package.
- 18.9 It should be acknowledged that there is a temporal dimension to the mitigation in that some activities can start now while others will take some time and others can only be commenced when quarrying ceases as part of site rehabilitation.
- 18.10 I consider that ecological effects are understood and that a package of beneficial enhancements has been established. The final detail plus timing will be subject to the controlled activity resource consent. I note that Mr Jones has proposed the following amendments to the notified plan change provisions:
 - a. addition to proposed objective 33.2.14 to clarify that an anticipated outcome of the quarry will be 'remediation' of the site this outcome is implemented already through existing and proposed policies, rules and methods and it is appropriate that the objective more expressly establish remediation as an ultimate aim for the site:

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²⁵ Table 4 Mitigation options for the potential loss of indigenous vegetation and habitat at the Proposed Kiwi Point Quarry Wildlands November 2018

- b. additions to the rehabilitation requirements in the QMP under the explanation to policy 33.2.2.7 to include phasing of works, details of anticipated cut faces, timetables, associated budgets and effectiveness monitoring procedures for remediation works;
- c. additions to the policy 33.2.2.7 explanation, kiwi point standards and the Business Zone Appendix 2 map to refer to a vegetated bank to be established and maintained for screening purposes adjacent to State Highway 1; and
- d. a further addition to the rehabilitation requirements to have regard to the gateway/townscape values of the Ngauranga Gorge and to be compatible with those values.²⁶
- 18.11 I agree with the changes proposed as they are based upon agreed outcomes from the workshop referred to in **Appendix 1**.

19 Landscape Effects

- 19.1 In my view the one aspect of the proposal that has enduring effects is landscape and visual effects. I note that two of the country's experts on landscape and visual effects have considered this aspect being Messrs Lister and Evans. I note the agreed conferencing statement²⁷ between them as to the scale and significance of landscape effects.
- 19.2 In terms of character Mr Lister states:-

The relevant landscape comprises Ngauranga Gorge and the surrounding hills above the Gorge. Ngauranga Gorge has a mixed character. On the one hand it is characterised by bold hills, rugged rock faces and regenerating vegetation. On the other hand, it is the conduit for SH1, and contains the existing Kiwi Point Quarry and pockets of industrial activities.²⁸

Ngauranga Gorge gains particular landscape significance as part of the gateway journey into Wellington City. For that reason, the most important landscape and visual effects of the quarrying of the 'south face' will be on the experience from SH1. Options 3 and 4 will both have 'high' adverse visual effects from SH1 for the duration of the quarrying. Option 2, provided for by the existing zoning, would also have 'moderate-high' adverse visual effects – similar in nature but of less degree than the other options. Without taking away from such effects, the quarrying will occur in the context of the existing modified, gritty character of the Gorge.

19.3 Mr Lister has considered the visual effects of what could be quarried under the existing District Plan and compared it to both options 3 and 4. The gorges'

²⁷ S42A Report Appendix 7

²⁶ S42A Report para 4.46

²⁸ Evidence of Gavin Lister para 2.2 and 2.3

landscape significance as part of the gateway experience into Wellington City is also recognised. He also acknowledges the "gritty" character and has noted the fact that the Ngauranga Gorge has already been the subject of extensive quarrying.

19.4 In relation to the residential communities he further comments:

> The quarrying would also have adverse visual effects on the amenity values of properties on the surrounding hills overlooking the Gorge. In general, visual effects from these areas are moderate to high in degree (depending on location), the degree of effects being moderated by distance and relative difference in elevation. While properties around the perimeter have views into the Gorge, they also typically have wider outlook over the top of the Gorge.²⁹

- 19.5 Mr Lister has also outlined the significance of effect on the 5 distinct residential communities being:
 - Spenmoor Street (Newlands);
 - Kitchener Terrace area (Raroa);
 - Burma Road-Broadmeadows;
 - Broadmeadows;
 - Rangoon Heights (Gurkha Crescent, Shastri Terrace, Imran Terrace); and
 - Mandalay Terrace/ Homebush Road³⁰.
- 19.6 I accept that there will be adverse visual effect in varying degrees and varying scales of significance. Variable factors include distance from the quarry, what activities are being carried out, relative height and other components of the dominant aspect from a property.
- 19.7 An important component is the screening of the quarry to the extent possible from State Highway 1 particularly southbound. This is supported by the landscape advisers. I note that Mr Jones in his s42A report recommends inserting the location of the vegetated bank on the Appendix 2 map with the words "Indicative location of vegetated bank to provide screening. Final height,

²⁹ Ibid para 2.4

³⁰ Evidence of Gavin Lister paras 6.8 to 6.17

width and landscaping subject to future detailed design. See 34.2.3.5." I support this recommended change.

19.8 Mr Lister also outlines mitigation where he states:

Rehabilitation of the quarry face will depend principally on natural colonisation and regeneration, which will gradually soften the face and reduce adverse visual effects. Such rehabilitation will occur over a long period of time, in a similar manner to other cut faces in the Gorge such as those around the Newlands Interchange. The rehabilitation will commence at the top of the 'south face' and will follow the quarrying as it progressively works down the hill. Mitigation measures are recommended to assist these processes. Other mitigation measures include screening by revegetation for properties south of the quarry face (those in the Rangoon Heights area), and retaining a bank 10m-25m high adjacent to SH1.

- 19.9 The expansion of Kiwi Point Quarry would take place over a number of years and there will be a long period of time before the cut faces in particular are remediated. I note that the Newlands interchange project was consented in 1995 and completed circa 1998 and that most of the cut batters have some form of vegetation with differences in success depending on location.
- 19.10 I also note Mr Evans criticisms of the process to date and some of the conclusions. However aside from rehabilitation or potentially not quarrying at all there is little more than can be done to mitigate adverse visual effects when the quarry face is being worked. The degree of effect is influenced by distance, height and orientation towards the southern face. Rehabilitation can occur immediately the batter face has been completely worked and this will assist.

20 National and Regional Policy instruments

- I need not comment in detail about the statutory instruments as they have already been discussed at the length in the s32 report³¹ and in Mr Jones s42A³² report which I largely endorse.
- 20.2 I also do not discuss the District Pan provisions further in this evidence as these have been well traversed. I also endorse Mr Jones alterations to the Proposed Plan Change as we have discussed and agreed improvements that could be made in terms of clarity and in relation to information requirements.
- 20.3 However there are two matters that I consider need to be emphasised being the National Policy Statement for Urban Development Capacity (NPSUDC) and the

³¹ WCC District Plan Kiwi Point Quarry Extension s32 Evaluation Incite December 2018 pages 8 to 26

³² S42A Report pages 18 to 27

explicit support for sourcing aggregate as close as is feasible to the source of demand within the RPS.

- 20.4 In respect of the NPSUDC it is well known that there is a shortfall of new homes in Wellington, and that a significant number of new housing units are required to meet the range of projected population growth and that housing should be enabled close to the central city. As I have previously stated Mr Simpson has outlined the importance of aggregate to achieving the required development of housing as well as employment opportunities.
- 20.5 Consequently, development of further quarrying and clean filling at Kiwi Point can only assist Wellington to meet its current and projected future housing demand. It will also assist Wellington City Council to plan and provide for the needs of its own infrastructure particularly the roading network.
- **20.6** The second matter is Objective 31 and Policy 60 of the Regional Policy Statement. These state:-

Objective 31: The demand for mineral resources is met from resources located in close proximity to the areas of demand; and

Policy 60: Utilising the region's mineral resources – consideration

When considering an application for a resource consent, notice of requirement, or a change, variation or review of a district or regional plan, particular regard shall be given to:

- a) the social, economic, and environmental benefits from utilising mineral resources within the region: and
- b) protecting significant mineral resources from incompatible or inappropriate land uses alongside.
- 20.7 Policy 60 is a directive policy to achieve Objective 31. Utilising an existing resource in an area with a long history of quarrying is directly in accordance with this policy.
- 20.8 Mr Jones³³ considers that this supportive objective and policy also need to be weighed against other matters based on the following objectives.

Objective 1 Discharges of odour, smoke and dust to air do not adversely affect amenity values and people's wellbeing.

³³ S42A Report Table 1 p22

20.9 Dr Boddy discusses amenity effects particularly from dust in his evidence. He concludes that any adverse effects can be managed through a Dust Management Framework within the Quarry Management Plan.

Objective 10 The social, economic, cultural and environmental benefits of regionally significant infrastructure are recognised and protected.

20.10 Quarry sites are not listed as regionally significant infrastructure but aggregate is a vital component for the maintenance, operation and development of Regionally Significant Infrastructure.

Objective 12 The quantity and quality of fresh water:

- (a) meet the range of uses and values for which water is required;
- (b)safeguard the life supporting capacity of water bodies; and
- (c) meet the reasonably foreseeable needs of future generations.
- 20.11 The use of freshwater is primarily governed by Regional Plans. However the plan change proponent team has considered the interface of the Waitohi Stream in the development of mitigation and offsetting measures as well as in rehabilitation.

Objective 16 Indigenous ecosystems and habitats with significant biodiversity values are maintained and restored to a healthy functioning state.

20.12 There will be loss of indigenous vegetation and habitat. As such a package of practicable mitigation, offset and rehabilitation measures has been proposed to be considered through the District Plan. These have been outlined in Dr van Meeuwen Dijkgraaf's evidence

21 Section 32 Components of the Plan Change

- 21.1 As the panel will know I authored the s32 report that accompanied the plan change. This comprised the following matters:-
 - The background to quarrying in the Ngauranga Gorge including the fact that there is insufficient land currently appropriately zoned to enable continuation of quarrying;
 - A description of the site and surrounding area;
 - Identification of what the key resource management issues are;

- Relevant considerations under the RMA;
- Commentary on the relevant parts of higher order planning documents including National Policy Statements and the Regional Policy Statement's objective for well-located sources of minerals in the Wellington region;
- An outline of the current District Plan framework for the existing quarry operations for the northern face and for the existing Business 2 zoned part of the southern face;
- An outline of the key background reports and advice that have contributed to the plan change;
- A review of the alternatives process carried out;
- An assessment of the options against project objectives developed for the proposal;
- A consideration of site specific resource management issues;
- Consultation processes carried out to date and the feedback received;
- An evaluation of the above processes in respect of s32 of the RMA consideration of "Requirements for preparing and publishing evaluation reports".
- 21.2 I have revaluated my conclusions under s32(2)³⁴ upon receipt of submissions and the s42A report. I outline those relevant sections and my re-evaluation of those as follows.

An assessment under subsection (1)(b)(ii)35 must—

- (a) identify and assess the benefits and costs of the environmental, economic, social, and cultural effects that are anticipated from the implementation of the provisions, including the opportunities for—
- 21.3 I remain of the opinion that the overall benefits and costs of the environmental, economic, social, and cultural effects that are anticipated from the

³⁴ S 32 report page 56

³⁵ Assessing the efficiency and effectiveness of the provisions in achieving the objectives;

implementation of the provisions have been fully outlined in the background reports, the s32 evaluation and from the evidence of others.

- (i) economic growth that are anticipated to be provided or reduced: and
- I consider that by providing for continuation of quarrying this will assist with the city and regions economic growth by providing a well-located source of aggregate that is currently utilised for a range of purposes. If quarry operations were to cease economic growth would be impacted as alternative sources would need to be found leading to higher costs per cubic metre of material. As has been stated in the evidence and the attached report from Mr Simpson, new quarrying locations within the region would at the very least be challenging to find and develop.
 - (ii) employment that are anticipated to be provided or reduced; and
- 21.5 The existing employment at the quarry would be lost if quarrying was to cease. It has been presumed that this can be offset by quarry employment elsewhere. However the role that aggregate has in terms of economic growth and therefore employment growth cannot be underestimated.
 - (b) if practicable, quantify the benefits and costs referred to in paragraph (a); and
- **21.6** To restate Mr Simpsons evidence

Without the Plan Change and continued supply from Kiwi Point Quarry, there will be increased costs for all customers, particularly as transport is a significant cost for aggregate supply. Wellington City Council will also lose a source of revenue from the quarry and have direct cost increases for its infrastructure projects. With closure the negative impact on the community is estimated at a \$41 million (on a Net Present Value basis).

Continued operation of the quarry provides for a competitive and resilient market for aggregates. It ultimately delivers flat land suitable for well-located commercial development. The benefit from the continued operations, partial leasing, and eventual sale of the entire site is estimated at \$25 million benefit (NPV basis). The difference between the negative impact of \$41 million and the benefit of \$25 million results in a net projected benefit of \$66 million.

21.7 The panel will of course make its own evaluation under s32AA . I agree with Mr Jones that.

Section 32AA requires a further evaluation report to be prepared where any changes are proposed to the notified provisions of PC83. The further

evaluation must follow the same approach as the requirements of s32, including that the level of detail applied is commensurate with the scale and significance of the change proposed. Any changes to the notified plan change adopted by the Panel will need to be considered within this context.³⁶

22 Part 2

- I have also briefly considered Part 2 matters. It has been identified that the key resource management issue for Kiwi Point Quarry is that part of the site's regulatory planning framework (i.e. the current Open Space B zoning) does not align with making that specific land available for quarrying. In this regard, part of the current zoning of the site is not effectively catering for use and development that "enables people and communities to provide for their social, economic and cultural well-being" and therefore not meeting the sustainable management purpose of under the Act.
- 22.2 Providing for aggregate demand while minimising adverse effects is the key management issue for the site. However, there are other relevant management issues such as the importance of local landscape and visual character, that also need to be balanced against the rezoning.
- 22.3 In terms of s 6 matters of national importance the only ones which are directly relevant are s 6(a) the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development and s6(e) "the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna". These matters of the stream environment as well as ecological mitigation, offset and rehabilitation has been a central issue for the Plan change.
- 22.4 There are no known s8 matters and in respect of s7 the following matters have been given due regard through the process being
 - (b) efficient use and development of natural and physical resources:
 - (c) the maintenance and enhancement of amenity values:
 - (d) intrinsic values of ecosystems;
 - (f) maintenance and enhancement of the quality of the environment; and
 - (g) any finite characteristics of natural and physical resources:

³⁶ S 32 Report para 3.23

23 RESPONSE TO ISSUES RAISED IN SUBMISSIONS

23.1 Each of the s42A report writers and the other experts from the Plan Change proponent team have commented individually on submissions as appropriate. I endorse the reasoned explanations that have been given to each of the submission points raised. I consider that the range of issues has been well covered and discussed including in my evidence where necessary

24 CONCLUSION

- In this evidence I have outlined the preliminary investigations carried out, the alternatives assessed and the process of consultation. I have also considered the economics case for the plan change and believe that there is considerable benefit in expanding a quarry in a location that has been quarried for many years.
- **24.2** I have also considered the content of the submissions and the s42A report.
- 24.3 I am confident that amenity effects such as dust, noise and vibration can be managed through a controlled activity resource consent and a quarry management plan. Similarly, I consider that the package of mitigation measures proposed can mitigate or offset the loss of vegetation and habitat that currently exists in the southern face.
- 24.4 Visual effects of quarrying are significant to some receivers and there will be a change to the form of the Ngauranga Gorge that currently exist. However remediation and mitigation of these effects can be carried out over time.
- 24.5 It is concluded that the plan change, as amended by Mr Jones, is the most appropriate way to achieve the purpose of the RMA and to give effect to the Regional Policy Statement. This conclusion is based on the recognition that the changes proposed to the District Plan are consistent with the purpose of the RMA and seeks to overcome the lack of appropriately zoned land for future aggregate extraction in an area that has been used for quarrying for many years.

Lindsay Daysh
Incite
26 November 2018

Appendix 1.

Minutes of Ecology/Landscape Meeting 9 October 2018.

PROPOSED DISTRICT PLAN CHANGE 83

MEETING: KIWI POINT MITIGATION OPTIONS

MINUTES

Date: Tuesday 9th October 2018

Location: Wellington City Council, MOB7 Meeting Room 1

Time: 10:00 a.m. - 11:25 a.m.

Attendees:

Lindsay Daysh, Incite
Anita Benbrook, Wellington City Council
Boyden Evans, Boffa Miskell
Gavin Lister, Isthmus
Jason Jones, Resource Management Group
Stephen Fuller, Boffa Miskell
Mitch Lewandowski, Wellington City Council
Logen Logeswaran, Wellington City Council
Astrid van Meeuwen-Dijkgraaf, Wildlands
Tabitha Proffitt, Wellington City Council
Myfanwy Emeny, Wellington City Council
David Cameron, Stantec

Agenda:

- 1. Start 10:00 at WCC
- 2. Ecological Assessment
- 3. Comments on ecological mitigation package.
- 4. Comments on remaining landscape mitigation issues.
- 5. Any other business.

I. Introductions

Lindsay welcomed the group and a roundtable of introductions took place. The new hearing date was noted which is scheduled for the week of the 10th of December 2018 (10th and 11th December (12th as a reserve day)).

Lindsay briefly recapped the delay of the plan change as the hearing was temporarily postponed in order to provide further notification to properties on Homebush Road. From this, one additional submission has been received.

Lindsay noted that the extra time as a result of the delay has been useful in terms of continuing the work on the ecological report. Lindsay explained he sent around a loose agenda prior to the meeting noting the focus would likely be on Astrid's report (Revised Draft – 'Mitigation Options for the Potential Loss of Indigenous Vegetation and Habitat at the proposed Kiwi Point Quarry, Wellington')

Astrid summarised the main points from the revised report, noting the following:

- The biggest change was to the agreement for the onsite area to be used as part of the mitigation and the ability for rodent control.
- Still some uncertainty around the exact size of grazing and holding area
- Mitigation of the stream as it is noted as being outside of the scope of the project
- The additional area north of SH1 allows to meet the 1:3 ratio suggested by Greater Wellington

Lindsay noted that the revised report just went out yesterday, and enquired if in terms of the Section 42A expert reports, it has resolved the issues raised?

Stephen noted the following:

- He remains concerned that the considerable width of un-vegetated habitat that will result from the quarry extension, separating Tyers Reserve from the escarpment north of SH1 and impacting on bird movement along Wgtn coastal escarpment..
- He does not believe a planted corridor crossing the site will put birds at risk due to height of platform above SH1 (confirmed by Logen to be 25m at the location of this recommended planting).
- He remains of the view that best practice for stream and terrestrial impact assessments and mitigation requires integration.
- He also reiterated his concern at the lack of site remediation as part of the mitigation package.

Stephen noted that he is aware that the District Plan has jurisdictional limitations with respect to the streams, but he hoped that stream restoration and enhancement could be addressed though the plan change by other means - for example via the objectives and and in the Management Plan requirements. Stephen believes the mitigation design should integrate terrestrial, freshwater and landscape objectives as again, this approach is considered international best practice and can result in more beneficial outcomes.

Stephen explained that both he and Boyden have approached their recommendations in an integrated manner and considered that the remedial and planting they proposed within the wider quarry site should would address both landscape and ecological needs and this was consistent with the approach taken with the be required previous rehabilitation.

David mentioned the consent conditions from the Regional Council provide for robust stream mitigation and enquired if this would help to address these concerns.

Stephen agreed it would help but still believes the determination of mitigation quantities should be integrated, the riparian planting would also provide habitat and corridors for terrestrial flora and fauna, and so would fulfil a number of objectives as opposed to just one.

Jason enquired how strict the Regional Consent conditions were. David provided the conditions for review by other attendees.

Stephen observed the condition was more general and states items must be implemented by July 2027 (noting that implementation in terms of the condition means commencing giving effect to the condition)

Lindsay commented on the conflicts between the Regional and District functions and agreed that an integrated policy approach is required.

The idea of addressing at the policy level to include what can be done in stream margins both feasibly and usefully, (given the site constraints and topography of the area), was discussed. The key issue identified was how this can be achieved? What realistically can be done with the general condition on the regional consents and can/should be done with the District Plan policy?

Stephen noted it needs to be done for fish and other fauna and is more about the integrated connections through the site.

Myfanwy addressed one of her main concerns, that being the haul road and the lack of room to do any riparian mitigation where the haul road adjoins the stream.

Jason suggested the possibility of staged interventions, which is allowed for in the QMP and the related plan change provisions.

The group agreed with the integrated ecology approach as it is best practice.

Stephen commented that doing calculations are fine to get to a certain point but eventually need to assess if they are adequately addressing the effects of the activity. If they are not, need to set to something else in place.

Lindsay suggested that the spatial solution needs to be mapped.

Gavin displayed 3D print models that showed the potential quarry area. Landscape aspects were discussed. It was noted for land mitigation enhancement can be done at the beginning of the project and not just at the end. This can help with the mitigation of the bird corridors.

The future of the land that is of concern to NZTA (at the southern end of the quarry site) was discussed. It was noted more should be known from ongoing discussions with NZTA in the next few weeks. Logen noted at the moment they are corresponding with NZTA and indicated that they are not worried about what happens to the land so long as there is no risk for them.

Stephen described his preferred outcome for planting behind the to widen the fringe of vegetation to allow for a reasonable corridor for bird movement.

Gavin asked for clarification around the terminology of this area, referring to it as a 'bund' as it would be manmade and retaining the area back. Preferred to consider it as retaining the existing landform as a bank above the (eventually) lowered quarry floor.

Some discussion occurred regarding the specific dimensions of this area. Logen provided that detail.

Jason summarised what was being discussed and suggested the action to refine the relevance of:

- Details of the 'bank'/'bund'
- Options and details for Riparian Management of the stream
- the efficacy of the offset planting option in Ngauraga East

Jason – package of information presented in the s42A report was to inform resource consent application and provide a menu to choose from. Based on discussions today, seems likely the provisions can get closer to something fully agreed.

Lindsay - Resource consent – controlled activity – still will need more detail – but more extent of spatial mitigation agreed and link into plan change doc will make clearer.

Myfanwy mentioned her overall concerns noting that the site is very constrained making it difficult to provide an ideal 20 metre riparian buffer area.

Astrid noted the suggested option to be phased in.

Jason confirmed that there is flexibility to manage variables like the haul road, however there needs to be a clearly defined beginning, middle, and end.

Logen explained that once the activity was finished the area will not be of use. Logen continued that in 10 years the northern side operations will have happened and the crushing facilities could be moved to the other side.

The group briefly discussed the future of the Taylor Preston site. It was noted that there was not much additional room around their area as it currently pushed right up to the boundary.

The group also discusses the potential for a conveyor belt to be provided as opposed to a haul road. Majority agreed the conveyor belt would help address the issues to the management of the stream, and this option should be pushed for if possible. It was noted that not having a conveyor belt could lead to worse issues.

Logen commented further on the possibility for a conveyor belt system and explained the issues with the strict quarry regulations, and ultimately an operator decision. The capital cost and operational cost of the conveyor belt system also need to be considered. Because of the length and the type it has to be imported from overseas.

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Myfanwy mentioned her concern over the road and stated it needs more thought. All of the group agreed.

Stephen reminded that the management plan has to address stream, and the need to think more about policy or objective as the resource consent is going to be where implementation would occur. This speaks to the preference for mitigation to occur on the site where the effect is experienced, rather than offsetting elsewhere (including the Ngauranga East sites).

Jason commented to the fact that there are limits to the potential methods proposed in the plan change given jurisdictional limitations.

Jason read the GWRC consent conditions to the group, it was noted that more detail was needed particularly around the wording of the future enhancement required.

The group discussed recommendations and amendments to the Wildlands report, in particular in Table 4:

- Practicality of water tank weed management suggested be extended for longer period of time (at least 5 years) and should be across all of the sites as the weed management will need to be a staged operation.
- Concerns of how realistic mitigation task number 8 (newly –available for mitigation: mixedindigenous/exotic forest) is
- For mitigation task number 13, which states to 'remove pine trees' suggested to take out 'remove' wording or remove reference
- Combine mitigation task number 14 and 15 so can utilise more of the area.
- Raised concern around site 8 as this is close to the quarrying operation, how feasible it will be to do any work in the site and also that if the grazing area for Prestons is not large enough then area 8 and 9 provide a better option for increasing the grazing area rather than pushing up into area 6.

Discussion around the idea to use 'direct transfer' as a potential mitigation option was discussed. The concern was around the uncertainty as to whether or not it should be used as a mitigation contribution and should be used as a trial.

Boyden noted that shouldn't rely too much on direct transfer as there is significant potential for it to not be successful.

Stephen agreed, adding that he hoped that north face would provide some opportunities but thinks this new face will have a hard time growing much of anything.

There was further discussion around the width of the 'bench' that would separate the quarry floor from SH1 to the north east, and separate the quarry floor from properties on Tyers Road to the southeast of the quarry site. Logan confirmed the bench would be retained landform, 8m wide, and 3m higher than the finished quarry platform. There were concerns regarding the possibility of regrowth on this bench. Stephen commented that he expected his proposed corridor planting to sit on a prepared area behind the bund, but not on it. He was not confident the bund could be successfully planted and contribute to total vegetation width. He agreed to review his recommended width and provide confirmation.

Gavin discussed the cross sections he developed between SH1, the 'bank' and the quarry floor that provide visuals of the different options. Gavin noted the cross sections just show the landform. Planting on the landform will increase the amount of screening.

Boyden commented that these cross sections will help commissioners to understand the level of screening that the landform and associated planting will achieve as viewers move along the road.

Logan raised the possibility of forming a new access road from Tyers Road through to the southern corner of the quarry floor. This would allow for one-way traffic into and through the site. He confirmed that this is not part of the current plan change and would need additional consents. If it proceeded it

would have an impact on Stephens proposed corridor planting and that would need to be considered at that time.

The group discussed the issues and options for providing certainty over staging of mitigation. Stephen noted that the north face restoration plan that was set 14 years ago required staging, yet none of it had happened. Logen noted that the north face had been cut steeper than planned and that the Council is investigating options for reshaping and remediation.

Astrid stated the intent to have mitigation measures built in upfront, so issues can be dealt with now. Stephen agreed that ideally all mitigation would be done upfront, but this would rule out remediation as a mitigation action, including stream rehabilitation, riparian planting, planting of a buffer between the site and SH1, and planting of a forest corridor at the south east corner. So, he believes there needs to be a mix of up front and staged.

The group agreed robust staging, including budgets will be beneficial for the achievement of ecological and landscape mitigation. It was also noted that annual budgets and programme are included in rehabilitation work on the northern face.

Stephen commented that if remediation within site was accepted and would include integrated corridors for terrestrial and aquatic wildlife, he would be comfortable reducing the mitigation requirements outside the site.

Logen mentioned that access will be restricted into an operating quarry (Quarry regulations & Work Safe rules) as such how staging will work.

Jason reminded that at the moment this is a plan change not resource consent and that the revised provisions will be dealt with at the consent phase and that references in the policy can contribute as well. He noted also that the ability to impose conditions via the controlled activity rule is an increase in regulatory stringency relative to the status quo.

Boyden commented his concern of how realistic it is that things will be implemented as intended.

Lindsay stated the aim it to at least try to provide compulsion so does happen, but detailed thinking from the guarry operations perspective will be needed.

Lindsay asked from the group if there were any other items that needed to be addressed.

Jason asked for any comments on proposed provisions and noted to the group to let him know if thought of any.

Lindsay noted he was generally happy with the most recent copy of these and just needed to double check with others who are not at this meeting. Lindsay also noted the need to send the new submission to everyone and that other additional items may be requested soon.

With no further business the meeting ended at 11:25 a.m.

Actions:

- Lindsay to circulate recent submission received from further notification
- Tabitha to circulate meeting minutes in draft form
- Stephen to further consider the bank at the southern end and options for 50m width and planting
- Jason and Lindsay to confer on amendments to codify proposed provisions
- Work on more precise detail of the width of the eastern area
- Issue of stream needs policy recognition
- Astrid to cross reference GW resource consent conditions in work already done

