

Martha Mineral Zone – Private Plan Change

Landscape, Natural Character and Visual Effects Assessment
Prepared for Oceana Gold New Zealand Limited



18 October 2022

WAI-986-000-REP-LC-0002_RevB.3

TECHNICAL REPORT LANDSCAPE ASSESSMENT – MARTHA PIT PLAN CHANGE
GENERAL AREA 000



Document Quality Assurance

Bibliographic reference for citation: Boffa Miskell Limited 2021. <i>Martha Mineral Plan Change: Landscape, Natural Character and Visual Effects Assessment</i> . Report prepared by Boffa Miskell Limited for Oceana Gold New Zealand Limited.		
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Status: [FINAL]	Revision / version: [8]	Issue date: 18 October 2022
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Template revision: 20150331 0000

File ref: W17025_007_MarthaLandscape_and_Visual_20221018.docx

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Executive Summary

Oceana Gold New Zealand Limited commissioned Boffa Miskell to prepare a landscape, natural character and visual effects assessment for a proposal to expand the existing Martha Mineral Zone within Waihi's urban context. The purpose of the plan change is to provide for the potential future expansion of surface mining in the Martha Pit by way of resource consent applications (as a discretionary activity) which would remain subject to further assessment at such time this is proposed.

Landscape Context

Waihi is situated along the foothills of the Coromandel Ranges and along the edge of primary productive lowlands which extend across terraces along the Ohinemuri River to the south-east. The existing character of Waihi is influenced by mining activity, including the proximity of Martha Mine and associated artefacts within the town. The wider process and storage operations within the Martha Mineral Zone are located beyond Union Hill and are less visible from the town within a sequence of surrounding elevated landforms. Despite the physical proximity of ongoing mining operations, there are limited views of the existing mining operation from adjacent urban and wider surrounding residential and rural areas.

The Site and its general location are not in the coastal environment or identified as part of any outstanding natural feature or landscape or significant amenity landscape relating to amenity values or the quality of the environment. RMA matters relevant to this assessment include recognising and providing for the preservation of the natural character of inland water bodies and the protection of them from inappropriate subdivision, use and development (RMA S.6(a)) and having particular regard to the maintenance and enhancement of amenity values (RMA S.7(c)) and the quality of the environment (RMA S.7(f)).

Landscape Effects

The proposed extension of the Martha Mineral Zone remains confined within an existing modified landform associated with an operational mine and adjoining urban context within the broader undulating foothills of the Coromandel Range. Whilst the expansion of the Martha Mineral Zone will not in itself give rise to the expansion of the Martha Pit (given that a resource consent will be required for any expansion activities), the possible expansion of the existing pit rim within the expanded Martha Mineral Zone would result in physical changes that generate no more than localised effects. Given appropriate provisions in the Martha Mineral Zone, including the retention of a resource consent process to assess potential effects, the extension of the zone can provide for the expansion of the Martha Pit in a manner that ensures there will be minimal potential wider landscape effects beyond the site or immediate setting.

Despite its proximity to the proposed expanded Martha Mineral Zone, the character of Waihi's Town Centre would remain largely intact with residual areas of Martha Hill and elements within the Martha Mineral Zone continuing to have the ability to conceal mining operations from the commercial frontage along Seddon Street. Depending on how any future expansion of the Martha Pit might be configured, there are potential options for the relocation of the Pumphouse so that it is maintained as a prominent feature visible from within the Town Centre and further afield when combined with potential changes to the pit rim in this local area.

The potential expansion of the pit rim within an extended Martha Mineral Zone may also result in some reduction in height and containment along parts of the existing pit rim. In such circumstances necessary noise mitigation may also influence the character of some adjoining areas. This outcome would rely on mitigation which may include planting and a more sympathetic and modulated urban response to reduce the potential for more significant adverse effects. In some contexts, lowering the elevation of the pit rim could also enable increased future interaction between the town centre and a rehabilitated mine at project closure including a future mine lake. From Waihi's surrounding residential areas, the expanded Martha Mineral Zone can ensure an expanded Martha Mine will remain within its surrounding urban context and continue an enduring, albeit contained, aspect of Waihi's townscape character.

Overall, and depending on the final configuration of an expanded Martha Pit within an extension to the Martha Mineral Zone, potential landscape effects are expected to be **moderate adverse** in the short term and maintain an ability to be further reduced during operation through appropriate mitigation. In several instances, the expanded Martha Mineral Zone may provide benefits by improving opportunities to enhance amenity values associated with connecting an expanded mine with its adjoining urban area and rehabilitating mining activity through enhanced open space which includes focal points observed from the town centre and increased accessibility to a future inland recreational lake which promote potential longer term beneficial outcomes.

Natural Character Effects

The expanded Martha Mineral Zone intercepts parts of Mangatoetoe and Eastern Streams, both of which form tributaries to the Ohinemuri River through modified urban contexts. In these contexts, the expanded Martha Mineral Zone maintains an ability to maintain or enhance natural character through enhanced wetland and riparian planting which increases the overall connectivity across the larger development footprint. Accordingly, any adverse natural character effects from the potential expansion of the Martha Pit, following mitigation, will likely be **low** and will benefit longer term riparian enhancements.

Visual Effects

Because the potential extension of Martha Pit within the expanded area of the Martha Mineral Zone remains in the context of an established mine and wider urban environment, it will still be possible to retain intervening built, topographical and landcover elements in response to sensitive views. Accordingly, potential adverse visual effects retain an ability to remain limited and be progressively reduced over time.

In most contexts, the expanded Martha Mineral Zone typically avoids any potential for exposing views towards an operational mine. Within parts of Waihi, the greatest potential visual effects which may result from the expansion of the Martha Pit in an extended Martha Mineral Zone relate to replacing intervening landforms and vegetation with necessary noise mitigation along the margins of an expanded Martha Mine. As a result, some temporary **moderate-high** adverse visual effects may occur along parts of the pit rim primarily because of changes to existing planting and associated noise mitigation within the existing Martha Mineral Zone which contains the existing mine. Conversely the Pumphouse has potential to be relocated to support an expansion of Martha Pit within an expanded Martha Mineral Zone and retain a prominent pit rim location.

Beyond the extension of Martha Pit within an expanded Martha Mineral Zone, visual effects may result from a reduction in elevation of the pit rim and associated reduction in vegetation in some contexts. Whilst expanded mining activity would inevitably remain contained below ground level, changes beyond the expanded Martha Mineral Zone may initially result in some **moderate adverse** effects from some adjoining residential areas. Such effects can be gradually reduced through replacement vegetation or an equivalent positive urban response. Depending on the final configuration of any pit expansion, longer distance transient views, including views from State Highway 2 will have effects similar to the existing situation and can ensure the pumphouse remains as a visually prominent focal point.

Recommended Landscape Provisions

To support this plan change, the following measures are recommended to ensure the effective management of landscape and visual effects. Such measures should inform design outcomes as part of any resource consent application, including mitigation implemented during the active mining phase and to promote longer term natural character, landscape and visual amenity benefits where practicable.

- Ensure any changes to the margins of watercourses to accommodate mining activities maintain or enhance their natural character;
- Avoid or mitigate the adverse visual effects of any expansion of the Martha Pit including reliance on topography, screens and planting in key locations. In some contexts, this may include modulated 'feature walls' where necessary noise mitigation remains visible from adjoining townscape areas during mine operation. This should also include representative heritage aspects of the PYE Factory as part of retaining a suitable built interface in this area;
- Manage the interface of any expansion of the Martha Pit with adjacent residential, commercial and open space areas, such that the amenity of the urban areas of Waihi is maintained or enhanced during and at the completion of mining activities within the context of a rehabilitated mine;
- Facilitate progressive opportunities during operation to enhance open space and associated visual amenity outcomes along the perimeter of the mine that are no longer required for ongoing mining operations; and
- Maintain an enduring Pit Rim Walkway around the perimeter of the operational mine to provide a range of recreation experiences including elevated lookout opportunities, and access to heritage artefacts.

For most people living in and around Waihi, the expansion of mining activities within an expanded Martha Mineral Zone will remain visually contained, resulting in no significant change in landscape or visual effects. Depending on the final configuration of any expansion of the Martha Pit within an extended Martha Mineral Zone, the resource consent process will enable consideration of the need for landscape mitigation and enhancements to ensure the project remains well integrated within its local landscape setting with positive landscape outcomes in the long-term.

CONTENTS

Executive Summary	i
1.0 Introduction	1
2.0 Landscape Context	1
2.1 Site Location	1
2.2 Site Appraisal	2
2.3 Topography	3
2.4 Land Cover	3
2.5 Landscape Character	4
2.6 Viewing Areas and Representative Viewpoints	5
2.7 Summary of Context and Character	7
3.0 Proposed Plan Change	7
4.0 Statutory Planning Context	8
4.1 Resource Management Act	8
5.0 Assessment of Landscape, Natural Character and Visual Effects	9
5.1 Assessment of Effects	9
6.0 Landscape Effects	11
6.2 Landscape Effects Assessment	13
7.0 Natural Character Effects	14
8.0 Visual Effects	14
8.1 Summary of Visual Effects Assessment	23
9.0 Cumulative Effects	26
9.1 Cumulative Landscape Effects	26
9.2 Cumulative Visual Effects	26
10.0 Statutory Provisions	27
10.1 Recommended Landscape Provisions	27
11.0 Summary and Conclusion	28
12.0 References	29

Appendices

Appendix 1: Landscape and Visual Effects Methodology

Figures

Figure 1: Site Location

Figure 2: Site Appraisal

Figure 3: Topography

Figure 4: Statutory Context

Figure 5: Townscape Character

Figure 6: Visual Appraisal

Viewpoint Photography

Viewpoint 1: Seddon Street (East)

Viewpoint 2: Gilmour Street

Viewpoint 3: Seddon Street and Mueller Street Intersection

Viewpoint 4: Haszard Street

Viewpoint 5: Seddon Street (West)

Viewpoint 6: Moresby Avenue and Martha Street Intersection

Viewpoint 7: Moresby Avenue

Viewpoint 8: Moresby Avenue and Savage Street Intersection

Viewpoint 9: Islington Terrace

Viewpoint 10: Walker Street (East)

Viewpoint 11: Moresby Avenue (North)

Viewpoint 12: Walker Street (West)

Viewpoint 13: Cambridge Road

Viewpoint 14: Symonds Street

Viewpoint 15: Grey Street

Viewpoint 16: Slevin Street

Viewpoint 17: Kenny Street

Viewpoint 18: State Highway 2

1.0 Introduction

Boffa Miskell has been engaged by Oceana Gold New Zealand Limited (OGNZL) to prepare a landscape, natural character and visual effects assessment for a proposed private plan change to expand the Martha Mineral Zone within the existing urban area of Waihi. This assessment considers the potential landscape effects on Waihi's existing townscape and associated impacts on available views. Specific resource consents are not sought as part of this plan change application and would remain subject to future more detailed assessments. Notwithstanding this, to assist this assessment of potential effects, a representative pit expansion scenario (Phase 5 Martha Pit Crest) has been considered within the proposed expanded Martha Mineral Zone to inform provisions necessary to address the potential for "worse case" landscape and visual effects.

The existing Martha Mineral Zone encompasses the existing Martha Mine within the urban area of Waihi. Beyond this the Martha Mineral Zone also encompasses the processing and associated storage facilities in the vicinity of the existing Baxter Road Process Plant. This assessment relates entirely to the proposed expansion of the Martha Mineral Zone to the west of SH25 in the context of Waihi's existing urban area and land currently subject to the Town Centre Zone, Low Density Residential and Residential Zones in the Hauraki District Plan (hereinafter referred to as the Site)¹. The assessment has therefore informed necessary landscape provisions to address potential for adverse effects which may result from expanded mining activity proposed in this context.

This assessment has involved a combination of visibility analysis, fieldwork and representative viewpoints to understand the likely landscape and visual effects which may result from the potential expansion of the Martha Pit accommodated within an extended Martha Mineral Zone.

2.0 Landscape Context

2.1 Site Location

In broad terms, the Site maintains a close relationship with the existing mining operations established within and surrounding Waihi (see **Figure 1**). This includes the existing Martha Mineral Zone which encompasses an open cast mine and associated processing and storage facilities alongside open space opportunities providing visual containment and recreation opportunities within the existing Waihi township and beyond.

The existing Martha Pit adjoining the town centre is physically connected to the existing Process Plant via a low profiled conveyer which passes through a tunnel formed through Union Hill. The Process Plant and associated tailings storage facilities straddle the Ohinemuri River and are relatively well enclosed from surrounding private and public views by a sequence of surrounding hills and semi-mature riparian vegetation within the broader balance area of the Martha Mineral Zone.

The proximity of the Martha Pit near the urban centre of Waihi reinforces a strong mining influence on the character of the town. Despite its proximity, mining activity has not resulted in major adverse visual impacts on adjoining areas, primarily due to the topography and vegetation which maintains an effective screen around the pit rim. Several mining artefacts, including the relocated Cornish Pumphouse and replica Poppet Head located along the

¹ Existing road corridors are not subject to District Plan Zones and are not included in the Site.

periphery of Martha Pit, have become significant features within the township - along with introduced heritage associations and waypoints visible from surrounding areas.

2.2 Site Appraisal

Martha Pit has been operating as an open pit gold and silver mine in Waihi since 1988. The existing landform of Martha Pit is therefore strongly associated with mining activity and expresses a 'raw' excavated form below existing ground level (see **Figure 2**). Steep stepped cut slopes characterise most of the existing mine with operational plant and mining equipment typically located along the north-eastern pit edge. Despite its proximity to the town centre, much of the mining operation is not visible unless viewed from the pit rim. The existing Pit Rim Walkway extends around the periphery of the mine from which expansive views into the mine are obtained.

The south-eastern edge of the Martha Mineral Zone and the Martha Pit skirts the periphery of Waihi's Town Centre, coming approximately 40 metres from the northern end of Seddon Street. Here the proposed Martha Mineral Zone encompasses three residential zoned properties to the south of Seddon Street and east of Gilmour Street. The intervening area between Seddon Street and the existing pit rim, which includes the relocated Cornish Pumphouse, is located within the existing Martha Mineral Zone. Associated gardens established by Waihi Gold Company including planting retained in former residential gardens and eight Significant Trees listed in the Hauraki District Plan also occur in this area. Further south, the Rangatira Statue is located on an elevated highpoint (134 masl) on part of the residual toe of Martha Hill.

To the south of Martha Pit and west of an unformed section of Mueller Ave, the existing pit rim adjoins part of the Town Centre Zone. Here it is proposed to extend the Martha Mineral Zone along part of the remaining toe slopes of Martha Hill. This area currently accommodates four residential dwellings accessed along Haszard Street, a further dwelling and Hub Building to the west of Haszard Street, the former PYE Factory and adjoining dwelling at 35 Moresby Ave fronting Moresby Avenue and a further Significant Kauri Tree along the pit rim. An existing dwelling and the former locations of the Forester's Hall and a c.1890s miners cottage to the east of Haszard Street (ref # HAU094, HAU123 and HAU272) and the PYE Factory (ref # HAU091) are also listed in the District Plan. All of these buildings to be included within the extension to the Martha Mineral Zone are owned by OGNZL.

Further north along Moresby Avenue towards the intersection with Savage Road, the south-west edge of the existing Martha Mineral Zone coincides with the eastern edge of Moresby Avenue. Here substantial bunding and planting occupies the land between the existing pit rim and Moresby Avenue within the existing Martha Mineral zone. The OGNZL Education Centre and adjoining mining artefacts, including a haul truck and mill girth gear, are also located along the pit rim within the existing Martha Mineral Zone in this area and accessible from the Pit Rim Walkway.

To the west of Moresby Avenue, the proposed extension to the Martha Mineral Zone extends over existing residential zoned land which slopes down towards the Mangatoetoe Stream. This area includes a further walkway connecting Walker Street and Moresby Avenue over the Mangatoetoe Stream. South of this walkway, the proposed extension to the Martha Mineral Zone includes four residential zoned properties at 68 Moresby Avenue adjoining Waihi Central School. North of the walkway, the proposed extension to the Martha Mineral Zone encompasses two further residential zoned properties accommodating pasture and riparian planting along the Mangatoetoe Stream and an existing residential dwelling at 48 Moresby Avenue.

The western edge of Martha Pit adjoins parts of a mixed residential and low-density residential area adjoining Savage Road, Miners Place, Bulltown Road and Cambridge Road. Here the proposed extension to the Martha Mineral Zone encompasses four residential dwellings on eight residential zoned properties to the west of Savage Road and a further five residential dwellings on 15 residential and low-density residential properties which adjoin and continue to

slope away from the existing pit rim south of Cambridge Road. Some existing residual garden areas also occur in this area including several fruiting trees, camellias, magnolia, rimu and a large kauri combined with areas of lawn and garden beds.

The northern edge of the pit rim is the highest part of Martha Pit reaching an elevation of 168 masl to the east of Bulltown Road. Two further dwellings on three low-density residential zoned properties extend to the north of Cambridge Road. This is consistent with facilitating the realignment of Cambridge Road as consented as part of Martha Phase 4. Beyond this, rural lifestyle development extends into the lower slopes along the foothills of the Coromandel Range to the west and north. The pit rim walkway also traverses this area and continues east towards the Grand Junction Refinery within the existing Martha Mineral Zone.

The north-eastern edge of Martha Pit adjoins a former residential area subject to underlying GNS Hazard Zones. This is separated from the operational mine by an existing planted noise bund through which a low-profiled conveyor connects the mine with the Process Plant beyond Union Hill at its southern end. To the north of this existing bund, native planting including a grove of young kauri trees has been established along part of the Pit Rim Walkway. Land subject to an underlying hazard zone adjoins this area to the east, within which several dwellings have been removed and residual areas of planting and trees have been retained within the existing Martha Mineral Zone. Five adjoining OGNZL owned residential properties adjoining closed sections of Grey Street and Slevin Street occupy the Proposed Martha Mineral Zone in this area.

2.3 Topography

The landform associated with Waihi and the existing mining operations forms part of the south-eastern slopes of the Coromandel Range that adjoin a broad basin along the Ohinemuri River (see **Figure 3**). Martha Hill (*Pukewa*), within which Martha Mine is now located, previously formed part of this broader foothill's landform.

The existing Martha Pit forms a distinctive feature within this landscape, the base of which is currently some 220 metres below the surrounding ground level and approximately 100 metres below sea level. The urban area surrounding the mine is typically flat to gently undulating between 80 and 160 masl with the meandering form of Mangatoetoe Stream flowing through an urban area to the west of Martha Pit.

To the northwest of the township, the topography dips into a valley associated with the Mangatoetoe Stream before rising towards rural lifestyle properties extending into more steeply vegetated slopes of the Coromandel Range, approximately 4 kilometres from the town centre. The foothills of the Coromandel Range express a series of gently sloping and rounded spurs and gullies which generally run in a north-south orientation.

A series of steep rounded hills rise to the east of the township including Union Hill (162 masl), Gladstone Hill (170 masl), Winner Hill (150 masl) and Black Hill (224 masl). The Ohinemuri River passes to the east of this series of hills and bisects the more rounded hills adjoining Waihi from a larger elevated landform which extends to the east that accommodates the existing tailings storage facilities along its south-western edge within the balance area of the Martha Mineral Zone.

2.4 Land Cover

The built-up area of Waihi covers approximately 425 hectares and surrounds the existing Martha Mine. This encompasses both residential and commercial development including Waihi's existing Town Centre located immediately to the south-east of Martha Mine along Seddon Street. The majority of Waihi extends to the south of Martha Mine, straddling State Highway 2 with part of the town also extending to the north-east of Union Hill.

In addition to mining activity, the Martha Mineral Zone accommodates established areas of open space and frequently forms a buffer to operational mining activity. Such areas accommodate bunding and associated planting with wider recreation opportunities including the pit rim walkway - which assists with the successful assimilation of an operational mine within the town.

Several existing water bodies also occur in association with riparian planting throughout this area including Mangatoetoe Stream and Eastern Stream, which form tributaries to the Ohinemuri River to the south and east of the Martha Mine. Further waterbodies also occur in association with the existing tailings storage facilities as well as a small recreation lake within Gilmour Reserve which was established by the then Waihi Gold Company as a replacement to Mine Lake at the time Martha Pit was developed. Recent native planting is also a key element along the margins of the Ohinemuri River, much of which has been established by OGNZL.

Surrounding rural land uses generally include pasture and horticulture. Small pockets of indigenous forest are also apparent in some surrounding areas, generally on steeper slopes and gullies east of Waihi and along the foothills of the Coromandel Ranges. Small pockets of exotic forestry and woodlots have also been established.

2.5 Landscape Character

The broader landscape character of the Hauraki District was considered as part of the Hauraki Landscape Assessment completed in 2006². Within this assessment, the existing Martha Mine and associated Martha Mineral Zone was identified as part of an urban area surrounded by broader landscape character units identified and described as the foothills of the Coromandel Range and the Primary Production Lowlands around Waihi.

2.5.1 Foothills of the Coromandel Range

The foothills of the Coromandel Range extend to the west and north-east of Waihi and include Black Hill following the alignment of the Ohinemuri River. This landscape character unit is described as a combination of moderate to steep landforms with pasture, sizable clumps of exotic forestry and native forest in gullies and on some higher slopes. The foothills are backed by higher landforms covered in native forest with pasture generally sited on the mid and higher slopes. The land-use is predominantly grazing with stream valleys draining into nearby rivers.

The landscape evaluation associated with the foothills of the Coromandel Range concluded that there are no outstanding natural features in this landscape whilst noting that there are a number of distinctive features including the small volcanic peaks in the foothills in the area to the east of Waihi, namely, Union Hill, Gladstone Hill, Winner Hill and Black Hill.

2.5.2 Primary production lowlands around Waihi

The primary production (pasture and horticulture) lowlands around Waihi extend from the south-east of the township. The landform of this landscape unit is flat to rolling with pasture, clumps of exotic trees and shelter belts, horticultural lots surrounded by hedges and glasshouses. Streams also meander throughout rural areas, some with scattered exotic and native vegetation along the banks. The land beyond stream margins is typically divided into rectangular field patterns which result in a high level of modification with very little natural character. No outstanding natural features or landscapes were identified within this landscape unit.

² LA4 Landscape Architects (2006) Hauraki District Landscape Assessment.

2.6 Townscape Character Areas

To assist with a more detailed understanding of the characteristics and values of Waihi's urban landscape which relates to this plan change, five separate townscape character areas have been identified, as illustrated on **Figure 5**. This expands on the existing site appraisal as described above and has been prepared in response to a request for additional information to further understand the existing landscape features and attributes that contribute to the existing landscape amenity and urban character of Waihi³. The location of each townscape character area is accompanied by a brief description of the key attributes of each area and further summarised below:

Townscape Character Area 1: Upper Seddon Street

This area encompasses the existing pit rim adjoining the northern end of Seddon Street and part of Gilmour Street. Here, the relocated Cornish Pumphouse (Category a Ref# HAU001) and Poppet Head Replica (Ref# HAU449) form prominent and iconic features which occupy prominent pit rim locations alongside eight Significant Trees (Ref# TR029, TR030, TR031, TR125) located on the residual eastern slopes of Martha Hill (Pukewa). All of these features occur within the existing Martha Mineral Zone or road reserve and remain subject to resource consent requirements under the Hauraki District Plan.

Along the existing Martha Mine edge, the Pit Rim Walkway affords elevated views into the open mine and the wider surrounding landscape. Opposite the established Martha Mineral Zone, an assortment of commercial, community and residential buildings including St John's Church (Category A Ref# HAU006) connect with the northern end of the existing town centre which culminates in carparking at the northern end of Seddon Street aligning with the main street axis. From adjoining areas within the town centre, the residual landform along the pit rim provides an established setting for the Pumphouse alongside existing vegetation which contributes to concealing views towards the mine and its backdrop of the Coromandel Range.

Townscape Character Area 2: Seddon and Haszard Streets

This area occupies a key part of the established main street with single- and two-story commercial and retail frontages along Seddon Street. To the north of this, an assortment of industrial, civic and residential buildings along Haszard Street and Martha Street characterises a fringe of the town centre occupying the residual toe slope of Martha Hill (Pukewa). Here, the existing landform reaches an elevation of 134 masl and slopes away from the operational mine along Seddon Street and Martha Street to the rear of buildings fronting the main street and conceals views towards the open pit from adjoining areas within the town centre and beyond.

Existing Listed Buildings in this area comprise the Pye Factory (Category B, Ref# HAU091) at the intersection of Moresby Avenue and Martha Street as well as a Victorian villa (Category C Ref# HAU123) and the former locations of the Forester's Hall (Category C ref # HAU094) and a c.1890s miner's cottage (Category Ref# HAU272) to the east of Haszard Street. The King's Theatre (Category B Ref# HAU093) also form part of the transition from the town centre along the axis of Haszard Street, beyond which the existing landform continues to rise towards the pit rim. The existing Pit Rim Walkway occupies an elevated pit rim location affording views into the mine as it passes adjacent to vegetation retained in former residential rear gardens and a listed kauri tree (Ref# 028) within the existing Martha Mineral Zone.

Townscape Character Area 3: Moresby Avenue

This area forms a mixed residential and open space context beyond the lower western edge of the existing Martha Mine which extends towards Mangatoetoe Stream. Bunding

³ Dave Mansergh and Michal Graham (8 June 2022) Martha Mineral Zone – Proposed Plan Change: Landscape and Urban Assessment Reporting – Request for Additional Information.

and established native and exotic planting beyond the existing pit rim provides containment of the Pit Rim Walkway along the pit edge and conceals potential views into the operational mine from adjoining and wider surrounding areas to the west of Waihi. Mining artefacts including the Mill Gear and Truck occupy part of the open space pit rim edge and adjoin the Oceana Gold Education Centre and associated car parking located at the intersection between Savage Road and Moresby Avenue.

Townscape Character Area 4: Cambridge Road

This area includes the elevated northern perimeter of Martha Mine and an adjoining low-density residential context which slopes west and away from the existing open mine. This forms part of the north-west residential periphery of Waihi with dwellings located on large, vegetated sections east of Mangatoetoe Stream along a local road network which generally responds to the underlying sloping topography. Views into the mine remain obscured beyond the north-west slopes of Martha Hill (Pukewa).

Townscape Character Area 5: Slevin Street

This area predominantly comprises of open space associated with former residential gardens to the east of Martha Mine and its associated operational areas. This area remains separated from Martha Mine through a planted noise bund along its western edge. A planted kauri grove and quasi parkland character adjoining the existing and diverted East Stream form key characteristics in this area experienced along the Pit Rim Walkway.

2.7 Viewing Areas and Representative Viewpoints

To assist with understanding the nature of available views from which potential effects on visual amenity may occur, thirteen viewing areas with potential views of the proposed expanded Martha Mineral Zone have been identified in the context of Waihi's surrounding townscape (**Viewing Areas A – M**). Potential worst case viewing areas have been identified as a result of an understanding of the theoretical visibility of the potential area of landform which may be subject to change; (i.e. the difference between the consented Phase 4 and the potential Phase 5 Martha Pit). Notwithstanding this, the extent of such potential views would remain subject to a future resource consent application.

When considering the nature of theoretical visibility, it must be emphasised that theoretical visibility has been based on the nature of existing underlying landform only and does not represent the actual extent of visibility which will be further reduced by intervening landcover and buildings. Such theoretical visibility has been considered in combination with 18 representative viewpoints from which the existing nature of potential views have been considered to determine the nature of potential effects on the existing landscape character and associated visual amenity values which occur.

Based on a combination of desktop information and associated fieldwork, identified viewing areas primarily encompass the perimeter of the existing mine alongside surrounding residential and rural lifestyle areas and a longer distance view obtained when approaching Waihi from the east along State Highway 2. The assessment of landscape effects on such viewing areas considers perceptual and associative landscape dimensions relating to these aspects of urban landscape character, including the specific attributes identified within the defined townscape character areas as outlined above.

Potential views which may be affected by the proposed expansion of the Martha Mineral Zone are typically limited to areas adjoining the existing mine. Such views occur across a range of contexts and sensitivities including from transport corridors, public tracks, places of work and dwellings, typically along the edge of the existing pit rim. Views typically dissipate as one moves from the pit rim becoming increasingly obstructed by intervening landform, development or vegetation and /or reduced by increasing viewing distances. In most instances the nature of

intervening landform prevents direct opportunities to observe below ground mining activity associated with any expanded mine, except for locations along the pit rim.

The resultant viewing areas and representative viewpoints from which landscape effects have been assessed are set out below and illustrated in **Figure 6**.

- A:** Seddon Street and Gilmour Street - Residential Zone (VPs 1 - 2)
- B:** Haszard Street and Martha Street – Town Centre Zone (VP 3 -6)
- C:** Moresby Avenue – Residential Zone (VPs 7 - 8)
- D:** Savage Road / Islington Terrace – Residential Zone (VP 9)
- E:** South Waihi
- F:** West Waihi Residential Area (VPs 10 - 12)
- G:** Cambridge Road / Bulltown Road – Low Density Residential Zone (VP 13)
- H:** Rural Lifestyle Area along Symonds Street (VP 14)
- I:** Northern highpoint of Martha Pit
- J:** Grey Street / Slevin Street – Residential Zone (VP 15 and 16)
- K:** Rugby Park / Kenny Street / Union Hill – Recreation Area (VP 17)
- L:** Residential Area to north-east of Waihi
- M:** SH2: Tauranga Road (VP18)

2.8 Summary of Context and Character

The township of Waihi occupies a transition from the foothills of the Coromandel Ranges into the productive lowlands which extend to the south of the Ohinemuri River. The resulting landscape in this area is characterised by both undulating and flattened topography and includes a distinctive sequence of rounded volcanic hill forms to the east of the township. No outstanding natural features or landscapes have been identified in this context.

The existing character of Waihi is influenced by established mining activity including the proximity of Martha Mine and its associated artefacts. Despite the physical proximity of mining, there are limited views of mining activity or the proposed expanded Martha Mineral Zone from surrounding areas. Most existing landscape elements with potential to be disrupted by an expanded mine occur within the existing Martha Mineral Zone. This includes the Pumphouse and established areas of vegetation along the pit rim in association with several Significant Trees. The proposed expansion of the Martha Mineral Zone occupies a relatively contained part of the town centre which includes the PYE Factory fronting Moresby Avenue and localised residential and low-density residential areas adjoining parts of the southern, western and north-eastern pit rim.

3.0 Proposed Plan Change

The proposed rezoning relates to 25 Residential zoned properties, 7 Low Density Residential properties and 15 Town Centre zoned properties all of which are to be rezoned to Martha Mineral Zone (see **Figure 4**). The extension to the Martha Mineral Zone is proposed to allow for a future resource consent application to be made (as a discretionary activity) for the expansion of surface mining and mining operations at the Martha Pit. In this regard, surface mining is currently prohibited in the Residential, Low Density Residential and Town Centre Zones under the Hauraki District Plan. In addition, the proposed plan change seeks to include clearer policy directive regarding the management of effects of activities associated with an expansion of the Martha Pit within the Martha Mineral Zone, including rehabilitation post-mining.

Whilst not part of this application, consent to expand the Martha Pit would likely incorporate the existing consent for Martha Phase 4 which predominantly relates to reinstating the north wall of the mine and realignment of part of Cambridge Road. In addition, this assessment has been prepared on the understanding that potential future expansion of Martha Mine may incorporate the relocation of existing pit rim elements including the Pumphouse, realignment of parts of Moresby Avenue and Savage Road, closure of Hazard Street and Martha Street, relocation and implementation of noise mitigation elements adjoining Moresby Avenue, Savage Road and Grey Street and the associated reinstatement of open space including sections of the Pit Rim Walkway.

From a landscape perspective impacts on affected areas should seek to ensure the existing townscape character is maintained and enhanced, including the visual amenity of adjoining residential areas. This includes the main street historic mining character and encouraging physical and visual linkages between local features such as the Cornish Pumphouse, Ohinemuri River, and hills of the Coromandel Range. Several Heritage Sites and Significant Trees listed in the District Plan for the purpose of preserving their intrinsic, historical, cultural and amenity values are also included in the existing Martha Mineral Zone for which effects will need to be considered consistent with existing rules of the Hauraki District Plan.

4.0 Statutory Planning Context

4.1 Resource Management Act

As identified above, the Site does not affect any areas identified as either outstanding natural landscapes or outstanding natural features at either the regional or district levels. The relevant sections identified with the RMA and addressed in this report therefore relate to the following:

Section 6(a) – *Recognise and provide for the preservation of natural character of... wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate, subdivision use and development*

Section 7(c) – *Have regard to the maintenance and enhancement of amenity values*

Section 7(f) – *Have regard to the maintenance and enhancement of the quality of the environment*

The existing objectives and policies relevant within the Martha Mineral Zone seek to ensure that ongoing mining activity is suitably integrated within its surrounding contexts in both the short and long term. The relevant objective and policies are set out below:

Objective 1

To provide for the utilisation of the mineral resource in a sustainable manner.

Policies

- (a)(i) *Recognise the development of the mine and its processing areas, its ongoing rehabilitation and its longer term likely uses.*
- (ii) *Provide for the social, economic and cultural well-being of the people of the District and for their health and safety.*
- (iii) *Ensure that the amenity values of Waihi and the wider community are protected.*
- (iv) *Recognise that the risks associated with the historic underground working areas require a mixture of approaches to*

avoid, remedy or mitigate those hazards and provide for appropriate longer-term land use activities.

5.0 Assessment of Landscape, Natural Character and Visual Effects

Landscape, natural character and visual assessments are separate, although linked, procedures. The existing landscape and its existing natural character and visual context all contribute to the existing 'baseline' for these assessments and include an understanding of likely permitted development anticipated by the District Plan. The assessment of potential effects on landscape is carried out as an effect on an environmental resource, i.e. effects on physical landscape features and effects on landscape character. Effects on natural character in terms of RMA s.6(a) consider any changes in characteristics and qualities including existing condition specific to waterbodies and their margins. Visual effects are assessed as one of the interrelated effects on people.

The nature of effects can be summarised as follows:

Landscape effects:

Change in the physical landscape, which may change its character or values

Natural character effects

Change in characteristics or qualities (including level of modification) of lakes, rivers, wetlands and their margins

Visual effects:

Change to specific views which may change the visual amenity experienced by people

The landscape, natural character and visual assessments have been undertaken concurrently during the design of the plan change application. The findings from these assessments have influenced proposed provisions to be included in the Martha Mineral Zone to provide a framework for guiding the avoidance, remediation or mitigation of potential adverse effects. In short, this assessment considers the potential landscape effects of the proposed plan change in terms of the existing site characteristics and wider landscape and natural character context, together with visual effects that are likely to be experienced from people living, working or moving through surrounding areas.

5.1 Assessment of Effects

The findings of this assessment are set out in Sections 6- 8 with a full methodology describing the landscape and visual assessment process set out in **Appendix 1**. The findings of this assessment adopt the following seven-point scale to determine the overall level of effect:

Very Low	Low	Moderate - Low	Moderate	Moderate - High	High	Very High
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5.1.1 Landscape Effects

To assess the level and nature of potential physical effects associated with the expansion of the Martha Pit within an extended Martha Mineral Zone, the assessment has considered the sensitivity of the physical landscape features in areas where the proposed expanded Martha Mineral Zone is located together with the potential change which may occur. This may include changes to physical landscape elements with potential to be disrupted by expanded mining

activity, as well as changes to ancillary activities and land uses necessary to support an expanded open pit including necessary noise mitigation and subsequent rehabilitation.

Assessing landscape character effects involves judgement of the potential level and nature of changes to the existing landscape character. This includes consideration of the specific townscape character and urban landscape factors depending on the location of any subsequent potential expansion of Martha Pit. To inform an assessment of the magnitude of potential landscape change, it is also important that the size or scale and the geographical extent of the area influenced is defined where possible together with the duration of the effect and whether potential effects are reversible.

5.1.2 Natural Character Effects

The assessment of natural character considers any changes in levels of modification and the associated condition of lakes, rivers, wetlands and their margins. As this proposal is a plan change, no specific changes to existing water bodies are proposed. This assessment is therefore limited to considering the provisions necessary to ensure the abiotic, biotic and experiential attributes of existing waterbodies are appropriately managed to maintain natural character. This will also inform the assessment of terrestrial and aquatic ecological values at the time any specific change to water bodies and their margins is being considered in the context of a resource consent application.

5.1.3 Visual Effects

To assess the potential level and nature of visual effects resulting from the expanded Martha Mineral Zone, the potential visual sensitivity of the identified viewing areas has been considered together with the potential magnitude of change. It should be emphasised that views of a potential development or change do not necessarily equate to adverse visual effects. Visual impact may not always be negative and changes in view may not automatically be adverse.

The method used to identify and assess potential views towards the expanded Martha Mineral Zone, and any possible extension of the Martha Pit, has included a desktop analysis followed by fieldwork to identify the nature and sensitivity of potential viewing audiences alongside the collation of representative viewpoints to assist in determining the likely magnitude of change (see **Figure 5**). Whilst the visual assessment has not included potential effects from private properties, representative views have been obtained from the nearest available public locations to inform the likely 'worst-case scenario' in accordance with best practice.

A series of site photographs were taken at predetermined representative viewpoints. Site photographs were taken with a Canon digital SLR camera fitted with a 50mm focal length lens, mounted on a tripod and panoramic head. The viewpoints were situated on public land and the locations of each were fixed using the GPS unit built into the camera. Photographs have been presented as panoramic images representing a 90° horizontal field of view on a single A3 sheet.

5.1.4 Summary of Assessment of Landscape, Natural Character and Visual Effects

In summary, this assessment aims to:

- Identify and assess the sensitivity of the landscape resource and viewing audience for which changes in the Martha Mineral Zone may be apparent;
- Assess the potential magnitude of landscape, natural character and visual change which may result from the proposed expansion of the Martha Mineral Zone;
- Indicate any additional planning provisions necessary within the Martha Mineral Zone to avoid, remedy or mitigate those effects; and

- Provide an overall assessment and professional judgement as to the level of the anticipated landscape, natural character and visual effects, including potential effects following necessary mitigation.

6.0 Landscape Effects

Landscape effects are a consequence of changes in a landscape's physical attributes on that landscape's values. Change is not an effect: landscapes change constantly. It is the implications of change on landscape values that is relevant.

6.1.1 Physical Effects

In physical terms, the expansion of the Martha Mineral Zone will increase the size of the Zone by approximately 9.9 hectares to approximately 100.6 hectares overall. This encompasses the existing Martha Mine and properties around the edge of the pit that are currently zoned Town Centre, Residential and Low-Density Residential in the Hauraki District Plan.

Landform

The majority of the Martha Mineral Zone occurs within the context of an existing open pit mine. As a result, much of the original form of Martha Hill has been removed because of the existing mine with any potential additional modification limited to residual areas in the context of existing mining activity along an established pit rim. Expansion of the existing pit rim along the north wall has also previously been consented as part of Project Martha (Phase 4 Cutback), and this area will be included in the proposed expansion of the Martha Mineral Zone.

A key element of any potential mine expansion would likely entail lowering of part of the residual toe slopes of Martha Hill between Seddon Street adjoining the existing town centre, and Cambridge Road along the southern and western edges of the established mine. Given the presence of the existing mine, local areas where the proposed expanded Martha Mineral Zone may facilitate further landform modification typically include existing modified areas along an established pit rim.

Beyond a potential expansion of the existing mine, potential landform modification would also likely include changes to existing bunds - including those adjoining Moresby Avenue, Savage Road, Cambridge Road and Grey Street. Also, potential road diversions may have impacts on landform. This includes the potential diversion of Moresby Avenue at a lower elevation adjoining the margins of Mangatoetoe Stream and the potential closure of parts of Haszard Street and Martha Street adjoining the existing town centre.

Given the existing landform modification resulting from mining activity in affected areas, potential changes in landform will likely appear similar to the existing pattern of landform modification already apparent and characteristic within the urban area of Waihi. In the short term, such changes may introduce a 'raw' worked appearance in localised areas beyond the existing mine. Once established, any change would remain localised along the margins of an operational mine and include continued opportunities for open space established and maintained during operation. This change also enables long-term rehabilitation opportunities including enhanced connections with a future mine lake.

Vegetation

The proposed expansion of the Martha Mineral Zone generally extends into adjoining areas of development and beyond mixed native and exotic tree planting associated with areas providing a buffer of mine related activity along the existing pit rim. Accordingly, this planting typically

extends beyond the established pit rim walkway and includes planting associated with existing urban development. No Significant Trees listed in the Hauraki District Plan are identified within the expanded Martha Mineral Zone, with all Significant Trees within the existing Martha Mineral Zone remaining subject to resource consent to facilitate their relocation or removal.

Existing planting within the proposed expansion area of the Martha Mineral Zone adjoining Seddon Street and within the Town Centre includes areas of shrubs and trees with no formal protection and which could be removed or changed as a permitted activity. Along the margins of Moresby Avenue and Savage Road, vegetation includes buffer planting along the pit rim, riparian planting along the margins of the Mangatoetoe Stream and further planting in residential gardens. Any effect of removal of vegetation would typically be localised to the adjoining residential areas. To minimise adverse effects on these areas, opportunities to re-establish planting beyond the pit rim and in association with necessary noise mitigation are likely to exist in conjunction with any future pit expansion. Once established, this would likely appear as a different configuration of pit rim vegetation and is unlikely to result in any enduring adverse effects.

In the short term, changes in appearance resulting from the removal of vegetation may be apparent, particularly during preparatory works. These changes are not likely to result in longer term or permanent adverse physical or visual amenity effects. Some vegetation may also be considered for relocation or replacement along a new pit rim and would assist in 'knitting' an expanded mine within its established vegetated context. This mitigation should be identified within a Landscape Mitigation Plan (or equivalent) as part of any future resource consent application. This also includes opportunities to expand areas of planting, particularly along stream margins and residual garden areas along the western and north-eastern edges of the proposed expanded Martha Mineral Zone which would enhance open space benefits that endure beyond the closure of the mine.

In summary, the proposed extension of the Martha Mineral Zone encompasses additional areas of planted vegetation beyond the pit rim with no formal protection. The modification of such vegetation can continue to be configured to assist with containment of ongoing mining activity addressed as part of any subsequent resource consent. Where identified, planting introduced as mitigation also provides potential benefits as part of integrating the future mine closure within Waihi in the longer term.

6.1.2 Landscape Character Effects

Landscape character is an expression of the landscape's collective attributes and takes account of the combination of overlapping physical, sensory and associative landscape dimensions.

The nature of landscape change inherent in open pit mining almost inevitably results in adverse effects on landscape character. In the context of Martha Pit, such effects are already apparent, albeit relatively well established and contained within the context of Waihi's urban area. They are also recognised as being appropriate in their context via the P1 and P2 permitted activity rules in the Operative District Plan. This established mining context generally reduces the sensitivity of this landscape to further mining activity and influences the potential level to which adverse landscape character effects may occur within this area of landscape.

The proximity of Martha Mine to Waihi's town centre will continue a strong influence within the character of the town. Despite its close physical relationship with the township, the potential extended mining operation via the expansion of the Martha Mineral Zone will also have a limited direct visual presence. The most apparent change in landscape character would likely result from the reconfiguration of the intervening landform and established elements along the pit rim, which includes mounding and planting adjoining parts of the existing road network. Any potential landscape effects associated with the potential relocation, removal or modification of heritage artifacts, including the Cornish Pumphouse, two Category C Listed dwellings and the Category B Listed PYE Factory along Moresby Avenue would remain subject to a future resource consent application.

Beyond a potential expanded pit rim, the character of Waihi's Town Centre would remain associated with its adjoining mine and remain largely intact. From within the town centre, the potential extension of Martha Pit would remain localised, including remaining visually well contained from the immediately adjoining commercial frontage along Seddon Street. The expansion of the pit rim in the context of Haszard Street and Martha Street also has potential longer-term benefits in enabling an enhanced open space setting and northern aspect associated with future access into a rehabilitated mine lake. While a potential expanded pit rim would substantially modify some adjoining areas, there will be very limited potential wider landscape character effects beyond the site scale or immediate setting.

In the medium term as potential expanded mining activity continues below the pit rim and within an increased void of Martha Pit, impacts of the mine resulting from work along the pit rim would gradually dissipate. In this context most potential adverse landscape effects have an ability to be addressed in the short term at the commencement of the project and in association with the initial expansion of the pit rim. Once operational, the Martha Pit would retain a relatively high level of enclosure within an established urban context and which enables positive pit rim elements including the Pit Rim Walkway, planting and associated mining artifacts to be re-established. Accordingly, some adverse landscape character may be anticipated at the commencement of the operation which will gradually reduce during the extended life of the mine.

At completion, the extension of Martha Pit would continue to be supported by an appropriate Closure Plan which would seek to enhance landscape opportunities established during operation. This has the benefit of improving the context and character associated with connecting a future urban area with a rehabilitated mine including an inland recreational lake with potential long-term beneficial outcomes. Overall, the proposed extension to the Martha Mineral Zone is considered to have the ability to ensure future potential mining activity remains well integrated within Waihi's urban setting. Aspects of mitigation established during operation can also remain following closure with associated long-term landscape, open space, recreation, heritage, cultural and ecological opportunities.

6.2 Landscape Effects Assessment

Based on the above, an assessment of the level and nature of landscape effects associated with the expansion of Martha Mineral Zone is set out below:

	Contributing factors	At Implementation (Without Mitigation) ⁴		With Mitigation ⁵	
		Level of Effect ⁶	Nature of Effect ⁷	Level of Effect	Nature of Effect
Landscape Effects	<ul style="list-style-type: none"> Landscape has no formal protection The potential expansion of the mine has the ability to remain relatively well contained within the context of Waihi's established urban area during operation Continued potential for localised changes along the pit rim including relocation and removal of built development and 	Moderate	Adverse	Low	Neutral / Beneficial

⁴ Effects at Implementation enabled through planning provisions

⁵ Residual Effects enabled through planning provisions following mitigation (10+ years)

⁶ Level of Effect assessed as: Very High, High, Moderate-High, Moderate, Moderate-Low, Low, Very Low

⁷ Nature of Effect assessed as: Adverse, Neutral or Beneficial

	<p>vegetation, reconfiguration of heritage artefacts and introduction of temporary and permanent noise mitigation with associated planting</p> <ul style="list-style-type: none"> • Ongoing opportunities for rehabilitation to maintain a positive Pit Rim Walkway experience and integrate access to future mine lake within town centre 				
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7.0 Natural Character Effects

In natural character terms, the proposed expansion of the Martha Mineral Zone includes localised sections of the Mangatoetoe (180m) and Eastern Stream (100m). Both sections of stream include existing modified contexts associated with surrounding residential development with established vegetated margins. Several bridge crossings and areas of existing realignment are also apparent to reflect low to moderate levels of natural character overall.

As a plan change, the expanded Martha Mineral Zone will have no direct effects on any existing wetlands or streams, with any subsequent diversion or works adjacent to the waterbody requiring a resource consent. Within the expanded Martha Mineral Zone potential localised effects on such areas with lower existing levels of natural character have potential to be reduced or offset by more substantial wetland planting implemented within expanded areas of open space. This includes associated opportunities to restore natural character values in the longer term.

To ensure potential natural character effects are addressed through this plan change, specific policy provisions have been identified to remain applicable within the Martha Mineral Zone to ensure levels of natural character along the margins of existing waterbodies are maintained or enhanced.

8.0 Visual Effects

Despite its increase within Waihi's urban area, the proposed expanded Martha Mineral Zone maintains the ability to ensure any resultant mine expansion would remain relatively well contained. In some areas, the proposed expansion of the Martha Mineral Zone may facilitate changes to existing pit rim elements and associated planting which assists with containing views of ongoing mining activity. The potential introduction of noise mitigation in such contexts also has potential to result in adverse effects, alongside road diversions and closures with associated earthworks extending beyond the immediate extent of an expanded pit rim.

In most contexts, the continued nature of mining below the resultant pit rim and implementation of necessary noise mitigation avoids any potential for exposing views towards an operational mine. The expanded Martha Mineral Zone itself also provides further potential visual amenity benefits as an open space buffer and recreation area located between the mine and adjoining areas. To assess the potential for visual effects associated with the expansion of the Martha Mineral Zone, the potential changes in the local landscape context are described with respect to each of the identified 18 representative viewpoints identified across 13 defined viewing areas (**A-M**).

The viewpoints selected represent locations from where the effects of proposed changes to the Martha Mineral Zone may appear most apparent and therefore provide a baseline understanding from which existing visual amenity values can be assessed. These views recognise that the existing mine is a major element in this area and increased sensitivity to change is most likely to occur from adjoining residential and recreational areas. Views from private house sites were not individually assessed however identified viewpoints provide a representative selection of views from areas where the effects will be similar to those from within residential properties.

A: Seddon Street (North) – Residential Zone (Viewpoints 1-2)

This viewing area primarily encompasses occupiers and visitors to commercial properties and facilities within Waihi's Town Centre along Seddon Street. Here the existing Martha Mineral Zone generally coincides with the northern edge of Seddon Street and accommodates an established open space buffer along the pit rim. In this part of Waihi, the greatest potential for visual effects would result from the potential lowering and reconfiguration of part of the existing pit rim and any consequential relocation of the Pumphouse and associated relocation / removal of Significant Trees - all of which already occur within the existing Martha Mineral Zone and remain subject to resource consent requirements under the Hauraki District Plan.

Beyond this, the proposed expansion to the Martha Mineral Zone is limited to a localised area of residential zoned land located at the intersection of Seddon and Gilmour Streets which accommodates an existing dwelling. In this context, such expansion of the Martha Mineral Zone would most likely result in an extended open space buffer as necessary to support an expanded mine. This includes the potential to accommodate relocation of the Pumphouse to a prominent location and opportunities to create a plaza space in line with the upper eastern end of Seddon Street which experiences higher viewing numbers associated with the Town Centre.

Two representative viewpoints have been identified to assess the potential for visual effects within this viewing area.

Viewpoint 1: Seddon Street (East)

This is a near distance view along the eastern end of Seddon Street at the intersection with Gilmour Street and adjoining the existing Poppet Head. From this viewpoint, the current pit rim and skyline contain several Significant Trees within the existing Martha Mineral Zone to the left of the photograph. The proposed extension to the Martha Mineral Zone occupies three existing residential zoned properties to the right of this view to the south of Seddon Street. In this context, the potential for visual effects would most likely result from changes within the existing Martha Mineral Zone such as the lowering of the pit rim, removal or relocation of existing vegetation alongside the introduction of noise mitigation as necessary to support any expanded mining activity.

To facilitate a possible expanded mine, this area of Seddon Street has potential to successfully relocate the Pumphouse to retain and enhance this elevated pit rim location as an iconic focal point within the town. A key aspect of such relocation would require maintaining the Pumphouse's relative prominence as a local landmark highly visible from the Town Centre, such as facilitated along the existing axis of Seddon Street. Whilst noise mitigation necessary to support an expanded mine adjoining this context may introduce potential impacts within the existing adjoining Martha Mineral Zone, such outcomes could be configured to maintain positive urban elements adjoining an enhanced urban context.

As people become accustomed to observing reconfigured elements within this elevated pit rim location, any change in pit rim elements would become increasingly integrated and characteristic of this elevated eastern end of the town. This also recognises that the current location of the Pumphouse is not its original location. If sited well, people would continue to appreciate it even though it is not in its original location. In this context, planting and associated open space should be established to reinforce an attractive

public setting and anchor the Pumphouse and related mining artifacts including the adjoining Poppet Head within a positive public realm. Once established this would maintain a highly recognisable and beneficial contribution to visual amenity along the pit rim which would endure in the longer term.

Viewpoint 2: Gilmour Street

From this viewpoint, views of the proposed expanded Martha Mineral Zone are limited to a contained residential area located beyond an adjoining residential property to the right of the view. Beyond this, vegetation established along the horizon including several Significant Trees viewed to the right of the Poppet Head are already contained within the Martha Mineral Zone. The Pumphouse is similarly visible within the existing Martha Mineral Zone beyond intervening residential dwellings to the left of the photograph. Relocating the Pumphouse and associated noise mitigation enabling a lowered pit rim would likely include planting to soften and assimilate built elements during mining activity and may facilitate longer term opportunities to observe distant views of the Coromandel Ranges along the skyline.

From this viewing area the proposed expansion of the Martha Mineral Zone will have limited visibility beyond the existing pit rim. Provided any expansion of mining and associated pit rim activity within the proposed extended Martha Mineral Zone is configured to maintain aspects of intervening landform and associated noise mitigation with planting in key areas to maintain effective screening of the operational mine from adjoining areas alongside enhancing a positive contribution within the urban realm, this would ensure the potential for any adverse visual effects would remain **moderate-low**. The potential relocation of the Pumphouse within an enhanced public realm has potential neutral or beneficial visual effects which would continue during operation and through project closure.

B: Haszard Street and Martha Street Town Centre Zone (Viewpoints 3 – 6)

This viewing area encompasses occupants of residential and commercial properties accessed along Seddon Street, Haszard Street, Martha Street and part of Moresby Avenue including students, parents and teachers attending Waihi Central School. It also includes visitors and commuters passing through the urban area of Waihi approaching the proposed extension of the Martha Mineral Zone along Moresby Avenue and traversing the residual toe slopes of Martha Hill as well as part of the Pit Rim Walkway. From here, the Proposed Martha Mineral Zone occupies Town Centre Zoned properties accessed along Haszard Street and Martha Street, typically perceived to the back of the existing town centre and adjoining the existing Martha Mineral Zone along the remaining toe slopes of Martha Hill.

Four representative views have been taken from within this viewing area:

Viewpoint 3: Seddon Street and Mueller Street Intersection

This viewpoint observes the proposed northern edge of the expanded Martha Mineral Zone within the Town Centre Zone from Seddon Street. Such views primarily relate to the rear of existing carparking and commercial properties including the Salvation Army Building visible along Seddon Street to the left of the photograph. From here, the proposed expansion of the Martha Mineral Zone includes a vegetated embankment beyond which existing pit rim development remains predominantly screened. Given this context any associated mining activity within the expanded Martha Mineral Zone has a similar ability to remain visually well contained.

Viewpoint 4: Haszard Street

This view is obtained from the southern end of Haszard Street, as the street continues to rise north towards the existing pit rim below the distant horizon of the Coromandel Range. From here the proposed Martha Mineral Zone extends beyond the King's Theatre visible in the left-hand side of the photograph and includes the listed cottage at 3 Haszard Street to the right. Here the intervening change in elevation along the

residual slopes of Martha Hill ensures any potential future mining activity within the proposed expanded Martha Mineral Zone would remain visually contained beyond the intervening pit rim landform in the foreground. In the short term some temporary noise mitigation or hoarding may be necessary to enable mining activity along an expanded pit rim which would require a sympathetic urban response. In the longer term, such expansion of the pit rim may also provide an opportunity to facilitate increased accessible open space adjoining the town centre including potential access along a northern aspect to a future mine lake as part of mine closure.

Viewpoint 5: Seddon Street (West)

This is the view looking north-east along Seddon Street east of the intersection with Moresby Avenue. From this viewpoint, any potential expansion of mining activity within the proposed Martha Mineral Zone is unlikely to be visible. Notwithstanding this, change associated with the expanded Martha Mineral Zone, including the potential relocation of the Pumphouse, may be observed retaining a prominent location associated with the Poppet Head along the alignment of Seddon Street generating potentially neutral or beneficial visual effects.

Viewpoint 6: Moresby Avenue and Martha Street Intersection

This view is obtained along Moresby Avenue opposite Waihi Central School in the vicinity of Martha Street visible in the centre of the photograph. Here the proposed expansion of the Martha Mineral Zone encompasses the existing PYE Factory to the north of Martha Street. Whilst the expanded Martha Mineral Zone may bring an expanded pit further south along Martha Street, this does not necessitate any increase in potential adverse visual effects. For instance, retaining this building frontage within the Martha Mineral Zone along the retained pit rim would ensure much of the existing townscape is retained and conceal most potential views of change along any expanded pit rim. Beyond this, part of the existing vegetated skyline may be removed, however the combination of the residual toe of Martha Hill and intervening development would continue to screen any potential expansion of mining activity, representing little material loss to the key elements of this view.

Based on the nature of intervening topography and built forms which have potential to remain, the potential for adverse visual effects during operation of an expanded mine from this viewing area is assessed as **moderate**. In the longer term an expanded open space context in this location has potential beneficial effects associated with the town and its future northern aspect enabling greater interaction with a future rehabilitated mine lake.

C: Moresby Avenue

This viewing area relates to commuters traveling along the south-western edge of the existing pit rim along Moresby Avenue. Here the existing Martha Mineral zone coincides with the eastern edge of Moresby Avenue, with the proposed extension of the Martha Mineral Zone extending to incorporate a section of the Mangatoetoe Stream.

Viewpoint 7: Moresby Avenue

This view is obtained looking north along Moresby Avenue in the north-eastern corner of Waihi Central School. From this viewpoint, mounding and established vegetation is visible along the south-west edge of Martha Pit within the existing Martha Mineral Zone. This intervening landform and planting extend north towards the OGNZL Education Centre and conceals any potential views along the existing pit rim. Beyond this, the proposed expansion of the Martha Mineral Zone encompasses the walkway on the left-hand side of the photograph and extends along the margins of the Mangatoetoe Stream to the west of Moresby Avenue. This extension would enable potential expansion of mining activity to occur through much of this area, realigning this section of Moresby Avenue and lowering part of the south-west pit rim. Such expansion would also result in

the removal of existing vegetation and its replacement with necessary noise mitigation which would also result in screening views of any resultant operational mine along an expanded pit rim.

In the short term, given the necessary change in elevation, noise mitigation may include a noise wall which replaces views of vegetation along the pit rim whilst continuing to screen available views of ongoing mining activity. Notwithstanding this, opportunities remain to introduce replacement planting to increasingly soften and assimilate modification of such existing pit rim elements along an expanded mine. In the longer term, potential temporary noise mitigation may also be removed providing potential benefits in opening long distance views, including the backdrop of the Coromandel Range and aspects of the rehabilitated mine and future lake.

Viewpoint 8: Moresby Avenue and Savage Street Intersection

This view is obtained further north along Moresby Avenue, beyond the existing junction with Savage Road. From this viewpoint, existing vegetation along the pit rim is visible along part of the skyline within the existing Martha Mineral Zone. In this area the proposed expansion of the Martha Mineral Zone has been identified to accommodate the potential relocation of the junction between Savage Road and Moresby Avenue, encompassing 29 and 31 Moresby Avenue visible in the left-hand side of this photograph and the frontage of 48 Moresby Avenue to the right. Beyond these dwellings, vegetation enclosing the pit rim may potentially be replaced by temporary or permanent noise mitigation introduced along the expanded pit rim. Such change would likely require mitigation to ensure any such change along the skyline can remain sympathetic within its residential context, including increasingly softening and assimilating necessary noise walls where required.

Given the removal of substantial areas of existing vegetation forming an established buffer along the pit rim and associated road realignment and addition of noise mitigation, this viewing area has potential to introduce some temporary **moderate-high** adverse effects. Notwithstanding this, In the longer term, removal of noise mitigation may also enhance long distance views and associated recreation opportunities along an expanded pit rim.

D: Savage Road - Residential Area (Viewpoints 8 – 9)

Viewers within this area encompass the occupants of residential dwellings and commuters to the west of Martha Pit along Savage Road and Islington Terrace. In this viewing area, people travelling along Savage Road have the potential to observe the greatest change within the expanded Martha Mineral Zone - with views from residential dwellings more typically orientated away from the pit rim and filtered through intervening vegetation and development.

One representative view has been taken from this area to assess the change in views, as follows:

Viewpoint 9: Islington Terrace

This viewpoint is obtained from Islington Terrace adjacent to Savage Road alongside the proposed south-western extension of the existing pit rim. From this area, planting along the pit rim occurs within the existing Martha Mineral Zone. Beyond this, the expansion of the Martha Mineral Zone would enable realignment of the intervening section of Savage Road and removal of much of the existing vegetation along the skyline to be replaced with noise mitigation and associated mitigation planting along an expanded pit rim. In this context, views of any expansion of the mine would remain concealed, however a sympathetic design outcome would be required to ensure views of necessary noise mitigation is effectively softened and integrated within its adjoining residential context.

From this area change along the pit rim would enable ongoing mining activity to remain concealed beyond intervening landform and noise mitigation. In the short term some **moderate**

adverse effects may result from the introduction of noise mitigation along a modified pit rim. Such effects could be readily reduced by effective mitigation including opportunities for replacement planting introduced to increasingly soften and assimilate change along an expanded pit rim.

E: South Waihi – Residential Zone

This viewing area comprises of occupiers of residential, industrial and commercial properties as well as local commuters and visitors travelling to the south of Waihi. The topography in this area gradually falls away from the existing Martha Mine and towards the Ohinemuri River with the vast majority of views screened by intervening landform and development. Beyond the properties adjoining the proposed expansion of the Martha Mineral Zone along Seddon Street, any changes in view along the pit rim become increasingly curtailed to glimpsed views. In such instances, most views relate to the tops of elements within the existing pit rim including the Pumphouse and Listed Trees within the existing Martha Mineral Zone - with any potential expansion of mining activity remaining visually contained by intervening topography and development. Provided any change associated with the prominence of the Pumphouse is retained within the proposed expansion of the Martha Mineral Zone this will generate no more than **Low** adverse effects. Once established this would likely approximate a no change situation.

F: North-West Waihi - Residential Area (Viewpoints 10 -12)

This viewing area is located on land which gradually rises to the west of the Mangatoetoe Stream and primarily relates to occupiers of residential dwellings to the north-west of Waihi and commuters traveling on local roads accessing these properties. Such views from this area are predominantly oblique where viewed from dwellings and orientated along roads aligned east towards Martha Pit. Some fringes of open space including the margins of the Mangatoetoe Stream also obtain views most typically filtered through intervening vegetation.

Three representative viewpoints have been identified in this area:

Viewpoint 10: Walker Street (East)

From here, the proposed extension of the Martha Mineral Zone will extend below Moresby Avenue and occupy much of the intervening area of pasture and riparian planting traversed by the Walker Street Walkway (the “goat track”) along the margins of the Mangatoetoe Stream. In this context, any expansion of the operational mine would likely remain contained beyond intervening landform with potential change relating to earthworks necessary to realign Moresby Avenue and the associated removal of established vegetation along the pit rim within the existing Martha Mineral Zone visible along the horizon. Consequently, necessary noise mitigation may appear visible along the skyline and would require replacement planting to soften such change observed along the pit rim during mining operation. Where possible, any change adjoining the margins of the Mangatoetoe Stream should ensure existing planted riparian margins are retained and enhanced.

Viewpoint 11: Moresby Avenue (North)

From this viewpoint, the proposed expansion of the Martha Mineral Zone extends below existing middle-distance views of vegetation along the south-western edge of the pit rim within the existing Martha Mineral Zone. In this context, the proposed zone expansion extends lower along the residential slopes of Martha Hill. Here the potential expansion of mining would remain concealed beyond the expanded pit rim and below a more distant vegetated backdrop of Union Hill. Notwithstanding this, some potential adverse effects may result from the potential replacement of pit rim vegetation with necessary noise mitigation along the resultant pit rim. This outcome should ensure such views of noise mitigation can be assimilated or gradually reduced by replacement planting or an

equivalent alternative form of mitigation. Over the longer term there are also opportunities to remove noise mitigation to enable beneficial longer distance views of aspects of a rehabilitated mine.

Viewpoint 12: Walker Street (West)

From here, the proposed extension of the Martha Mineral Zone extends below existing vegetation retained within the existing Martha Mineral Zone along the skyline. In this context a potential expansion of the Martha Mine would replace existing pit rim vegetation with necessary noise mitigation which would also conceal potential views into an operational mine along the expanded pit rim and include earthworks to realign Moresby Avenue below the resultant pit rim. Beyond this, additional noise mitigation on the opposite side of the pit may also be visible in long distance views and below a longer distance landform backdrop. Where visible, such noise mitigation should include planting or alternative equivalent mitigation to ensure this becomes increasingly softened and integrated along an expanded pit rim.

Overall, the potential for middle-distance partial and glimpse views of vegetation removed along any expansion of the pit rim, construction of a new noise wall or any associated road alignment above the margins of Mangatoetoe Stream is likely to have **moderate** adverse effects. Such effects maintain opportunities for planting in the Martha Mineral Zone to integrate views along this expanded pit within a wider vegetated urban edge setting.

G: Cambridge Road / Bulltown Road - Low Density Residential Area (Viewpoint 13)

This viewing area extends immediately to the north-west of Martha Pit and predominately includes low density residential dwellings established on part of the residual slopes of Martha Hill. In this area the landform slopes away from the existing pit rim towards the Mangatoetoe Stream. Views from this area are generally focussed to the north-west and away from the operational pit and towards the Coromandel Ranges. This area was previously assessed as part of Project Martha (Phase 4 Cutback), from which no further visual change is likely to be apparent within the context of the expanded Martha Mineral Zone.

One representative view has been taken from this area.

Viewpoint 13: Cambridge Road

From here, the proposed expansion of the Martha Mineral Zone encompasses adjoining low-density residential properties at 11 and 12 Cambridge Road in association with a realigned section of Cambridge Road. Any change visible from this area is likely to include relocation or removal of existing vegetation and mounding along the skyline. As with Project Martha, any such change should ensure necessary noise mitigation will become assimilated within its adjoining residential context. In addition, the pit rim walkway will be realigned along the pit rim beyond adjoining residential dwellings and include planting designed to increasingly soften and assimilate recreation use along this area.

From this viewing area, any potential mining activity will remain concealed beyond intervening landform and noise mitigation consistent with Martha Phase 4. Accordingly, this represents a no change situation with **very low** neutral effects.

H: Symonds Street Rural Lifestyle Area (Viewpoint 14)

This viewing area represents an area of rural lifestyle development to the north-west of Waihi along the toe of the Coromandel Ranges. From this area, the landform slopes east towards Mangatoetoe Stream and affords the potential for long distance views which may encompass the proposed extension to areas of Martha Mineral Zone in long distance filtered views.

One representative view has been prepared from this viewing area.

Viewpoint 14: Symonds Street

This view is taken over a distance of approximately 600m from the nearest part of the proposed extension of the Martha Mineral Zone. Any views occur through intervening deciduous and evergreen vegetation through which any change in the Martha Mineral Zone will remain below the horizon and represent a localised area of a broader rolling and vegetated landscape associated with an operational mine. Any expansion of the mine in this context will likely be difficult to see and can maintain existing provisions to include planting on any expanded pit rim.

Any potential adverse effects from this viewing area will likely have no more than **low** adverse effects with potential to be further reduced through planting along residual garden areas adjoining the pit rim.

I: North Martha Pit

This viewing area includes people passing through the Martha Mineral Zone along the Pit Rim Walkway south of William Street. This area remains entirely contained beyond intervening areas of land subject to the existing Martha Mineral Zone beyond which no change is proposed generating **very low** neutral effects.

J: Grey Street / Slevin Street - Residential Area (Viewpoints 15 and 16)

This viewing area encompasses residential dwellings and open space which adjoins the north-eastern edge of Martha Pit. A section of the Pit Rim Walkway also extends through this area within the Martha Mineral Zone and passes through sections of native planting and residual garden areas within which former residential dwellings have been relocated or removed. The proposed expansion of the Martha Mineral Zone occupies five adjoining residential properties in this area.

From this viewing area, any views of the potential expansion of mining operations will remain contained beyond an intervening noise bund which will initially be visible to varying degrees depending on viewing distance and the nature of intervening vegetation and/or development. Representative viewpoints have been identified in the vicinity of the proposed expansion of the Martha Mineral Zone along Grey Street and from Slevin Street to assess the potential for visual effects in this context in this area. From most residential dwellings including dwellings along Roycroft Street and Dobson Street there will be no apparent change in views from the existing Martha Mineral Zone.

Viewpoint 15: Grey Street

This viewpoint adjoins the proposed expansion of the Martha Mineral Zone along Grey Street. From here, any ongoing mining operation will remain concealed beyond an intervening noise bund brought closer to the margins of Grey Street. Initially this is likely be clearly visible to the west of Grey Street. Given the potential proximity of noise mitigation to adjoining dwellings, the design of this element should ensure it remains softened through intervening planting including native species along its toe and resultant slopes to become assimilated within a reinforced vegetated setting.

Viewpoint 16: Slevin Street

This viewpoint adjoins the proposed expansion of the Martha Mineral Zone along Slevin Street crossing Eastern Stream. From here, mining activity would also remain concealed within the Martha Mineral Zone – however the need for potential noise mitigation may also become more visible in this area. Such views can remain softened through intervening vegetation and become increasingly assimilated within an open space setting through additional planting, enhancing a future entrance to adjoining open

space areas. In the longer term there is an opportunity for part of any intervening noise bund to be removed and extend views across an open park setting and rehabilitated mine lake against a backdrop of the Coromandel Range.

Given the ongoing noise mitigation, which is likely to be required in this area, views of an expanded mining operation would remain visually well contained. Notwithstanding this, potential views of relocated noise migration measures may have some localised **moderate** adverse effects and require suitable mitigation to ensure this becomes assimilated within a positive open space setting during operation and in the longer term.

K: North-East Waihi - Residential Area

This viewing area represents occupants of residential dwellings and road users passing through an established residential area which extends to the north-east of Waihi beyond Walmsley Road. Residents in this area remain separated from the pit rim and the proposed expansion of the Martha Mineral Zone. In this context the potential relocation of the existing noise bund along Grey Street will likely remain visually contained beyond intervening development and vegetation, however opportunities to observe the north wall may remain through gaps in the intervening urban area. Such change would appear similar to activity consented during Martha Phase 4 against a long-distance backdrop of the Coromandel Range generating **low** neutral effects.

L: Kenny Street / Rugby Park/ Union Hill – Recreation Area

This viewing area extends along the vicinity of the pit rim to north of Seddon Street along the eastern edge of the pit rim and includes users of adjoining sports grounds and commuters travelling along Kenny Street (SH25) approaching Waihi's Town Centre. Occupiers of Kenny Street Dairy and four adjoining residential dwellings will also obtain similar views. Further to the east, users of the sports facilities within Morgan Park and Union Hill are typically screened by intervening vegetation.

A representative view has been obtained along Kenny Street near the Kenny Street Dairy to assess visual effects in this viewing area.

Viewpoint 17: Kenny Street

From this location, the only potential change associated with the proposed expansion of the Martha Mineral Zone relates to the possible relocation of the Pumphouse to form a prominent feature on the north-eastern approach into Waihi along SH25. This would also replace several trees observed along the skyline and become increasingly integrated within its new prominent pit rim location with potential beneficial effects.

Given the beneficial change of observing a more prominent Pumphouse on this main access into Waihi no potential adverse effects are identified from this area.

M: SH2: Tauranga Road

From here, transient views are obtained from vehicles approaching Waihi to the south-east along SH2: Tauranga Road. One long distance representative viewpoint has been identified from this area.

Viewpoint 18: SH2

In this view, glimpsed views of the north wall of Martha Pit are visible over long-distances. In this context expansion of the mine may have a slight increase in visibility associated with the removal of existing trees along the margins of Seddon Street within the existing Martha Mineral Zone. Long distance views of any change associated with

Martha Pit would most typically remain filtered through roadside vegetation and seen below a more distant backdrop of the Coromandel Range. Within the Proposed Martha Mineral Zone glimpsed views of the relocated Pumphouse may also occur and continue to pass in and out of view relative to intervening vegetation.

Based on the potential availability of long-distance glimpsed views of the potential relocated pumphouse against slight increased visibility of north wall, any visual effects from this viewing area are assessed as **low** neutral.

8.1 Summary of Visual Effects Assessment

Overall, the potential effects on visual amenity are modest given the urban context of the Martha Mineral Zone. Primarily this is due to the existing situation and context of an established mine which includes intervening topography, buildings and vegetation and which continues to have an ability to limit potential views into an operational mine. For a small number of people, the proposed expansion of the Martha Mineral Zone has potential to result in some adverse visual effects, particularly when views of mining activity and/or associated noise mitigation are introduced as a consequence of expanding and lowering the existing pit rim. Such effects would likely be more apparent in the short term with an ability to be reduced in the longer term by appropriate mitigation.

For most people living in and visiting Waihi, the proposed expansion of the Martha Mineral Zone would remain well visually contained, resulting in no material change to current views or potential additional adverse visual effects. From Waihi's Town Centre, the greatest potential changes associated with an expanded mine occur within the existing Martha Mineral Zone and include the potential relocation of the Pumphouse and reconfiguring of existing vegetation and artifacts established along this associated area of the pit rim. Whilst this transformation would be immediately obvious from adjoining areas, particularly in the short term, such modification would not automatically detract from existing visual amenity values. In many respects visual effects would likely be different rather than adverse and would continue to be supported by opportunities to expand planting and associated open space in key areas to promote longer term rehabilitation.

Based on the above, a summary of the level and nature of visual effects including contributing factors summarising the likely sensitivity and potential magnitude of change from identified viewing areas at implementation and with mitigation is set out below.

Viewing Area	Contributing factors	At Implementation (Without Mitigation) ⁸		During Operation (With Mitigation) ⁹	
		Level of Effect ¹⁰	Nature of Effect ¹¹	Level of Effect ¹²	Nature of Effect ¹³
A: Seddon Street and Gilmour Street	<ul style="list-style-type: none"> Occupiers and visitors to town centre and adjoining residential dwellings with higher sensitivity Existing pit rim includes part of Pit Rim Walkway adjoining the relocated Cornish pumphouse and Significant Trees within the existing Martha Mineral Zone 	Moderate - Low	Adverse	Moderate	Beneficial

⁸ Effects at Implementation enabled through proposed planning provisions

⁹ Residual Effects enabled through planning provisions following potential mitigation (10+ years)

¹⁰ Level of Effect assessed as: Very High, High, Moderate-High, Moderate, Moderate-Low, Low, Very Low

¹¹ Nature of Effect assessed as: Adverse, Neutral or Beneficial

¹² Level of Effect assessed as: Very High, High, Moderate-High, Moderate, Moderate-Low, Low, Very Low

¹³ Nature of Effect assessed as: Adverse, Neutral or Beneficial

Viewing Area	Contributing factors	At Implementation (Without Mitigation) ⁸		During Operation (With Mitigation) ⁹	
		Level of Effect ¹⁰	Nature of Effect ¹¹	Level of Effect ¹²	Nature of Effect ¹³
	<ul style="list-style-type: none"> Potential expansion and lowering of pit rim would require relocation of heritage artefacts including Pumphouse, removing or relocating existing vegetation and introducing temporary noise mitigation Expanded Martha Mineral Zone, primarily enables potential expansion of pit rim to be reconfigured to maintain and enhance a positive contribution within the urban realm 				
B: Haszard Street and Martha Street	<ul style="list-style-type: none"> Occupants of adjoining residential dwellings with higher sensitivity and commercial properties and commuters with lower sensitivity Potential expansion of pit rim would reduce residual slopes of Martha Hill above adjoining areas of town centre and conceal views into the operational mine Retaining the frontage of the PYE Factory to maintain a key part of the existing townscape and contain potential views along the pit rim Some temporary noise mitigation or hoarding may be necessary to enable mining activity along an expanded pit edge Opportunity for increased interaction and continued recreation access along a modified pit rim and northern aspect of a future rehabilitated mine lake 	Moderate	Adverse	Moderate	Beneficial
C: Moresby Avenue	<ul style="list-style-type: none"> Commuters along Moresby Avenue with lower sensitivity and existing users of Pit Rim Walkway Existing Pit Rim Walkway and adjoining pit rim vegetation are located within the existing Martha Mineral Zone Potential realignment of Moresby Avenue and associated lowering part of the south-west pit rim may remove part of the existing intervening landform and vegetation to expand the pit rim Potential changes in views may include replacement of noise mitigation and associated screens that require planting or other measures to soften and assimilate such change along a modified pit rim during operation Necessary noise mitigation would screen any potential views into an operational mine 	Moderate - High	Adverse	Moderate - Low	Adverse
D: Savage Road / Islington Terrace	<ul style="list-style-type: none"> Occupants of adjoining residential dwellings with higher sensitivity and commuters and existing users of the established Pit Rim Walkway with lower sensitivity Potential realignment of Savage Road and removal of existing vegetation and intervening landform to expand the pit rim 	Moderate	Adverse	Moderate - Low	Adverse

Viewing Area	Contributing factors	At Implementation (Without Mitigation) ⁸		During Operation (With Mitigation) ⁹	
		Level of Effect ¹⁰	Nature of Effect ¹¹	Level of Effect ¹²	Nature of Effect ¹³
	<ul style="list-style-type: none"> Potential changes in views may include replacement of noise mitigation and associated screens that require planting or other measures to soften and assimilate such change along a modified pit rim 				
E: South Waihi	<ul style="list-style-type: none"> Occupants of distant residential dwellings and commercial properties and commuters with lower sensitivity Potential expansion of mining activity would remain visually well contained by intervening topography and development 	Low	Adverse	Very Low	Neutral
F: West Waihi	<ul style="list-style-type: none"> Occupants of middle-distance residential dwellings with some moderate and higher sensitivity Existing pit rim includes planting within the existing Martha Mineral Zone with a potential expanded mine extending beyond and below the realignment of Moresby Avenue along a modified pit rim Potential for lowering part of the south-west pit rim and realigning part of Moresby Avenue may remove some existing landform and vegetation along the pit rim and enable longer distance views which include part of Union Hill seen beyond the opposite side of the mine Potential changes in views may also require replacement noise mitigation to screen the mine that requires planting or other measures to soften and assimilate such change along a modified pit rim 	Moderate	Adverse	Low	Adverse
G: Cambridge Road / Bulltown Road	<ul style="list-style-type: none"> Occupants of adjoining residential dwellings with higher sensitivity Potential expanded mining activity would remain concealed beyond intervening landform and noise mitigation consistent with Martha Phase 4 	Very Low	Neutral	Very Low	Neutral
H: Symonds Street	<ul style="list-style-type: none"> Occupants of rural lifestyle properties with moderate sensitivity to proposed expanded mineral zone Any expansion of the mine in this context will likely be difficult to see and can maintain existing provisions to include planting on any expanded pit rim. 	Low	Adverse	Very Low	Neutral
I: North Martha Pit	<ul style="list-style-type: none"> No change to Martha Mineral Zone proposed 	Very Low	Neutral	Very Low	Neutral
J: Grey Street / Slevin Street	<ul style="list-style-type: none"> Existing open space accommodating Pit Rim Walkway with planted and residual vegetation bordered by dispersed residential dwellings with some higher sensitivity Potential views of reconfigured noise migration along an expanded pit rim would 	Moderate	Adverse	Low	Adverse

Viewing Area	Contributing factors	At Implementation (Without Mitigation) ⁸		During Operation (With Mitigation) ⁹	
		Level of Effect ¹⁰	Nature of Effect ¹¹	Level of Effect ¹²	Nature of Effect ¹³
	require replacement planting and other measures to soften and assimilate change along an expanded pit rim <ul style="list-style-type: none"> Opportunity to extend views across an open park setting and rehabilitated mine lake against a backdrop of the Coromandel Range 				
K: Rugby Park / Kenny Street / Union Hill	<ul style="list-style-type: none"> No change to Martha Mineral Zone proposed 	Low	Neutral	Low	Neutral
L: North-East Waihi	<ul style="list-style-type: none"> No apparent change to configuration of existing Martha Mineral Zone proposed. Potential relocation of the Pumphouse would form a prominent feature on the north-eastern approach into Waihi along SH25 	Low	Neutral	Low	Neutral
M: SH2: Tauranga Road	<ul style="list-style-type: none"> No apparent change to configuration of existing Martha Mineral Zone proposed Potential ability to retain distant glimpse views the relocated Pumphouse along the pit rim 	Low	Neutral	Low	Neutral

9.0 Cumulative Effects

9.1 Cumulative Landscape Effects

Despite the scale of the Martha Mineral Zone, its potential response to its local setting and proximity to established mining activity alongside its high degree of visual enclosure ensures there are limited potential adverse cumulative landscape effects. In landscape character terms any potential expansion of the Martha Pit with an extended Martha Mineral Zone has an ability to remain relatively well contained and responsive within the established urban area of Waihi. Given the established mining context within which such effects occur, any cumulative landscape effects will remain limited generating **low** level effects which retain opportunities for positive outcomes at project closure.

9.2 Cumulative Visual Effects

Cumulative visual effects can occur in combination (seen together in the same view), in succession (where the observer needs to turn their head) or sequentially (with a time lapse between instances where different views are experienced when moving through a landscape).

The potential introduction and relocation of noise mitigation along the expanded pit rim, including additional potential noise walls along Seddon Street and Moresby Avenue has potential to cause successional visual effects along the future southern and western edge of the expansion of Martha Pit. In the short term, such cumulative introduction of noise mitigation has the potential to appear visible from adjoining areas along the pit rim and replace the existing comparatively softening effect of established pit rim vegetation. Similarly, modification along the

Pit Rim Walkway will introduce sequential visual effects as much of the existing pit rim walkway is relocated to a different pit edge location.

To mitigate this potential cumulative effect, specific landscape provisions are recommended to ensure noise mitigation responds to its specific urban context or otherwise incorporates planting to increasingly soften and reduce potential views over the life of any expanded mine. Views from the new alignment of the Pit Rim Walkway will remain strongly associated with an operational mine accessed from Waihi's Town Centre. Once established this has ability to maintain a diverse and positive recreation experience and offering continued opportunities to overlook distant activity within the confines of the mine.

Given the above any adverse cumulative visual effects are considered to be **moderate-low** with potential to be reduced in the long term.

10.0 Statutory Provisions

In terms of RMA matters of national importance relevant to this assessment (Section 6(a)) the proposed expansion of the Martha Mineral Zone ensures any potential future activities in the zone are likely to have no more than localised and limited effects on natural character resulting from changing localised sections of modified streams which can be readily addressed by suitable landscape mitigation.

In terms of maintaining and enhancing visual amenity (Section 7(c)), and the quality of the environment (Section 7(e)), the proposed expansion of the Martha Mineral Zone has the potential to modify some existing characteristics currently apparent including established relationships between the pit rim and Town Centre associated with the margins of an operational mine. In such instances the proposed zoning enables expanded mining activity to be carefully considered as part of any resource consent application to ensure any change in this context can remain sympathetic to and well-integrated within its receiving environment and effectively rehabilitated in the long term.

This landscape assessment has been prepared concurrently with and informed proposed provisions with the Plan Change Request to be included in the District Plan. Such provisions have therefore been relied upon when assessing anticipated effects with mitigation. This includes policies which ensure any potential adverse visual effects resulting from a potential expansion of Martha Mine are avoided or mitigated, including through the use of intervening topography, screens and planting in key locations, including the PYE Factory. A detailed assessment of the implications of such provisions in response to policies and objectives of the Hauraki District Plan have been included in the AEE.

Whilst some adverse landscape and visual effects will be inevitable because of expanded mining activity, the Martha Mineral Zone can continue to ensure comprehensive mitigation is developed in response to the established mining context and promote long term neutral or beneficial landscape outcomes.

10.1 Recommended Landscape Provisions

Landscape issues necessarily require a degree of case-by-case consideration and judgement. Consequently, the use of discretionary activity status to manage activities that could affect landscape values is recommended as it enables proposals to be managed via consent conditions, or turned down if conditions cannot be imposed to ensure adverse landscape and visual effects are appropriately addressed.

To support this plan change, the following measures are recommended to ensure the effective management of landscape and visual effects and have informed relevant planning provisions

included as part of this plan change application. Such measures should ultimately inform design outcomes, including mitigation implemented during the active mining phase of any subsequent resource consent application, and promote longer term natural character, landscape and visual amenity benefits where practicable.

- Ensure any changes to the margins of watercourses maintain or enhance their natural character;
- Avoid or mitigate the adverse visual effects of any expansion of the Martha Pit including reliance on topography, screens and planting in key locations. In some contexts, this may include modulated 'feature walls' where necessary noise mitigation remains visible from adjoining townscape areas during mine operation. This should also include representative heritage aspects of the PYE Factory as part of retaining a suitable built interface in this area;
- Manage the interface of any expansion of the Martha Pit with adjacent residential, commercial and open space areas, such that the amenity of the urban areas of Waihi is maintained or enhanced during and at the completion of mining activities within the context of a rehabilitated mine;
- Facilitate progressive opportunities during operation to enhance open space and associated visual amenity outcomes along the perimeter of the mine that are no longer required for ongoing mining operations; and
- Maintain an enduring Pit Rim Walkway around the perimeter of the operational mine to provide a range of recreation experiences including elevated lookout opportunities, and extended access to heritage artefacts.

As part of ensuring beneficial landscape outcomes will result, landscape mitigation plans should be developed in conjunction with any proposed mine expansion and be submitted and approved as part of any future resource consent application. Where relevant this should also identify how post closure opportunities can be implemented progressively during operation to enable longer term benefits as part of any associated Closure Plan.

11.0 Summary and Conclusion

Overall, the potential for landscape and visual effects as part of any future expansion of mining activities in an extension of the Martha Mineral Zone are modest given the existing primarily urban context of the Martha Mineral zone. Primarily this is due to the existing situation and established mining context combined with the continued potential retention of intervening topography and landcover in response to sensitive views. Where necessary, important elements have an ability to be retained (in whole or in part) or relocated and remain sympathetic to their existing setting.

During operation, potential views of expanded mining activity are likely to be limited. Notwithstanding this, the potential removal of buffer areas and addition of necessary noise mitigation would result in some additional landscape and visual effects which would need to be carefully considered as part of any future resource consent application. For most people living in Waihi, the enlarged Martha Mineral Zone will remain visually contained, resulting in no material change in potential adverse landscape or visual effects from any possible expansion of the Martha Pit within the underlying zone. Effective landscape mitigation can also ensure the project remains well integrated within its local landscape setting and facilitates positive outcomes during ongoing mining operations and in the longer term.

In the longer term, the proposed expansion of the Martha Mineral Zone retains an ability to rehabilitate any resultant mine expansion to maintain a contained and more integrated part of

the established town and promote positive landscape outcomes for Waihi's future following closure of the mine.

12.0 References

LA4 Landscape Architects (2006) Hauraki District Landscape Assessment.

Appendix 1: Landscape, Natural Character and Visual Effects Methodology

Introduction

The Natural Character, Landscape and Visual Effects Assessment process provides a framework for assessing and identifying the nature and level of likely effects that may result from a plan change or proposed development. Such effects can occur in relation to changes to physical elements, changes in the existing character or condition of the landscape and the associated experiences of such change. In addition, the landscape assessment method includes an iterative design development processes, which seeks to avoid, remedy or mitigate adverse effects (see **Figure 1**).

This outline of the landscape and visual effects assessment methodology has been undertaken with reference to the **Draft Te Tangi A Te Manu: Aotearoa New Zealand Landscape Assessment Guidelines** and its signposts to examples of best practice, which include the **Quality Planning Landscape Guidance Note**¹⁴ and the **UK guidelines for landscape and visual impact assessment**¹⁵.

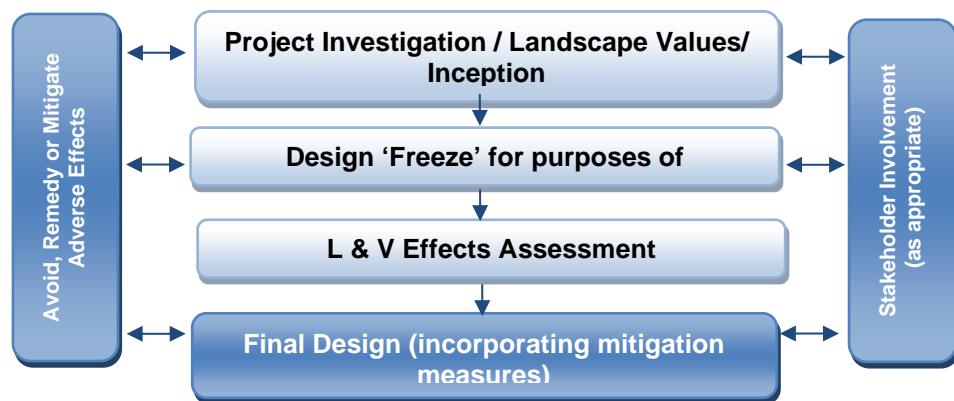


Figure 1: Design feedback loop

When undertaking any landscape assessment, it is important that a **structured and consistent approach** is used to ensure that **findings are clear and objective**. Judgement should be based on skills and experience and be supported by explicit evidence and reasoned argument.

While natural character, landscape and visual effects assessments are closely related, they form separate procedures. Natural character effects consider the characteristics and qualities and associated degree of modification relating specifically to waterbodies and their margins. The assessment of the potential effects on landscape considers effects on landscape character and values. The assessment of visual effects considers how changes to the physical landscape affect the viewing audience. The types of effects can be summarised as follows:

Natural Character effects: *Change in the characteristics or qualities including the level of naturalness.*

Landscape effects: *Change in the physical landscape, which may affect its characteristics or values*

Visual effects: *Change to views which may affect the visual amenity experienced by people*

¹⁴ <http://www.qualityplanning.org.nz/index.php/planning-tools/land/landscape>

¹⁵ Landscape Institute and Institute of Environmental Management and Assessment (2013) Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (GLVIA3)

The policy context, existing landscape resource and locations from which a development or change is visible, all inform the 'baseline' for landscape and visual effects assessments. To assess effects, the first step requires identification of the landscape's **character** and **values** including the **attributes** on which such values depend. This requires that the landscape is first **described**, including an understanding of relevant physical, sensory and associative landscape dimensions. This process, known as landscape characterisation, is the basic tool for understanding landscape character and may involve subdividing the landscape into character areas or types. The condition of the landscape (i.e. the state of an individual area of landscape or landscape feature) should also be described together with, a judgement made on the value or importance of the potentially affected landscape.

Natural Character Effects

In terms of the RMA, natural character specifically relates to the coastal environment, freshwater bodies and their margins however no definition of natural character is provided. RMA, section 6(a) considers natural character as a matter of national importance:

...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.

In this context, natural character is understood as comprising of the natural elements, patterns and processes of the coastal environment, waterbodies and their margins, and how they are perceived and experienced. This assessment interprets natural character as being the degree of naturalness consistent with the following definition:

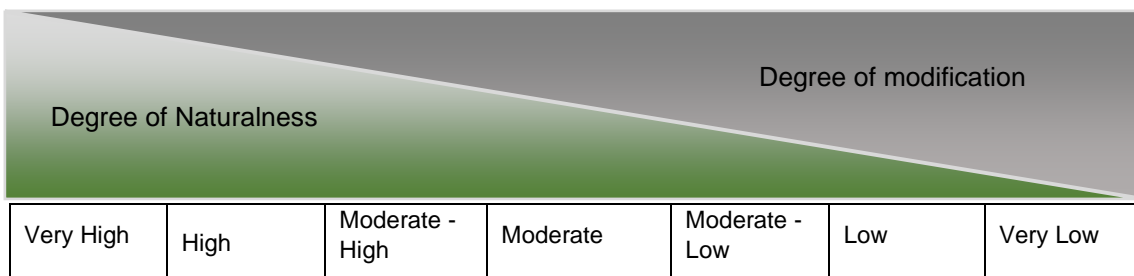
Natural character is a term used to describe the naturalness of waterbodies and their margins. The degree or level of natural character depends on:

- *The extent to which natural elements, patterns and processes occur;*
- *The nature and extent of modifications to the ecosystems and landscape/seascape;*
- *The highest degree of natural character (greatest naturalness) occurs where there is least modification; and*
- *The effect of different types of modification upon the natural character of an area varies with the context and may be perceived differently by different parts of the community.*

The process to assess natural character involves an understanding of the many systems and attributes that contribute to waterbodies and their margins, including biophysical and experiential factors. This can be supported through the input of technical disciplines such as marine, aquatic and terrestrial ecology, and landscape architecture.

Defining the level of natural character

The level of natural character is assessed in relation to a seven-point scale. The diagram below illustrates the relationship between the degree of naturalness and degree of modification. A high level of natural character means the waterbody is less modified and vice versa.



Landscape Effects

Assessing landscape effects requires an understanding of the landscape resource and the magnitude of change which results from a proposed activity to determine the overall level of landscape effects.

Landscape Resource

Assessing the sensitivity of the landscape resource considers the key characteristics and qualities. This involves an understanding of both the ability of an area of landscape to absorb change and the value of the landscape.

Ability of an area to absorb change

This will vary upon the following factors:

- Physical elements such as topography / hydrology / soils / vegetation;
- Existing land use;
- The pattern and scale of the landscape;
- Visual enclosure / openness of views and distribution of the viewing audience;
- The zoning of the land and its associated anticipated level of development;
- The scope for mitigation, appropriate to the existing landscape.

The ability of an area of landscape to absorb change takes account of both the attributes of the receiving environment and the characteristics of the proposed development. It considers the ability of a specific type of change occurring without generating adverse effects and/or achievement of landscape planning policies and strategies.

The value of the Landscape

Landscape value derives from the importance that people and communities, including tangata whenua, attach to particular landscapes and landscape attributes. This may include the classification of Outstanding Natural Feature or Landscape (ONFL) (RMA s.6(b)) based on important physical, sensory and associative landscape attributes, which have potential to be affected by a proposed development. A landscape can have value even if it is not recognised as being an ONFL.

Magnitude of Landscape Change

The magnitude of landscape change judges the amount of change that is likely to occur to areas of landscape, landscape features, or key landscape attributes. In undertaking this assessment, it is important that the size or scale of the change is considered within the geographical extent of the area influenced and the duration of change, including whether the change is reversible. In some situations, the loss /change or enhancement to existing landscape elements such as vegetation or earthworks should also be quantified.

When assessing the level of landscape effects, it is important to be clear about what factors have been considered when making professional judgements. This can include consideration of any benefits which result from a proposed development. **Table 1** below helps to explain this process. The tabulating of effects is only intended to inform overall judgements.

Contributing Factors		Higher	Lower
Landscape (sensitivity)	Ability to absorb change	The landscape context has limited existing landscape detractors which make it highly vulnerable to the type of change resulting from the proposed development.	The landscape context has many detractors and can easily accommodate the proposed development without undue consequences to landscape character.
	The value of the landscape	The landscape includes important biophysical, sensory and shared and recognised attributes. The landscape requires protection as a matter of national importance (ONFL).	The landscape lacks any important biophysical, sensory or shared and recognised attributes. The landscape is of low or local importance.
Magnitude of Change	Size or scale	Total loss or addition of key features or elements. Major changes in the key characteristics of the landscape, including significant aesthetic or perceptual elements.	The majority of key features or elements are retained. Key characteristics of the landscape remain intact with limited aesthetic or perceptual change apparent.
	Geographical extent	Wider landscape scale.	Site scale, immediate setting.
	Duration and reversibility	Permanent. Long term (over 10 years).	Reversible. Short Term (0-5 years).

Table 1: Determining the level of landscape effects

Visual Effects

To assess the visual effects of a proposed development on a landscape, a visual baseline must first be defined. The visual 'baseline' forms a technical exercise which identifies the area where the development may be visible, the potential viewing audience, and the key representative public viewpoints from which visual effects are assessed.

Following a desktop analysis, field work is used to determine the actual extent of visibility of the site, including the selection of representative viewpoints from public areas. This stage is also used to identify the potential 'viewing audience' e.g. residential, visitors, recreation users, and other groups of viewers who can see the site. During fieldwork, photographs are taken to represent views from available viewing audiences.

The viewing audience comprises the individuals or groups of people occupying or using the properties, roads, footpaths and public open spaces that lie within the visual envelope of the site and proposal. Where possible, computer modelling can assist to determine the theoretical extent of visibility together with field work to confirm this.

The Sensitivity of the viewing audience

The sensitivity of the viewing audience is assessed in terms of assessing the likely response of the viewing audience to change and understanding the value attached to views.

Likely response of the viewing audience to change

Appraising the likely response of the viewing audience to change is determined by assessing the occupation or activity of people experiencing the view at particular locations and the extent to which their interest or activity may be focussed on views of the surrounding landscape. This relies on a landscape architect's judgement in respect of visual amenity and the reaction of people who may be affected by a proposal. This should also recognise that people more susceptible to change generally include: residents at home, people engaged in outdoor recreation whose attention or interest is likely to be focussed on the landscape and on particular views; visitors to heritage assets or other important visitor attractions; and communities where views contribute to the wider landscape setting.

Value attached to views

The value or importance attached to particular views may be determined with respect to its popularity or numbers of people affected or reference to planning instruments such as viewshafts or view corridors. Important viewpoints are also likely to appear in guide books or tourist maps and may include facilities provided for its enjoyment. There may also be references to this in literature or art, which also acknowledge a level of recognition and importance.

Magnitude of Visual Change

The assessment of visual effects also considers the potential magnitude of change which will result from views of a proposed development. This takes account of the size or scale of the effect, the geographical extent of views and the duration of visual change, which may distinguish between temporary (often associated with construction) and permanent effects where relevant.

When determining the overall level of visual effect, the nature of the viewing audience is considered together with the magnitude of change resulting from the proposed development. **Table 2** has been prepared to help guide this process:

Contributing Factors		Higher	Lower	Examples
The Viewing Audience (sensitivity)	Ability to absorb change	Views from dwellings and recreation areas where attention is typically focussed on the landscape.	Views from places of employment and other places where the focus is typically incidental to its landscape context. Views from transport corridors.	Dwellings, places of work, transport corridors, public tracks
	Value attached to views	Viewpoint is recognised by the community such as an important view shaft, identification on tourist maps or in art and literature. High visitor numbers.	Viewpoint is not typically recognised or valued by the community. Infrequent visitor numbers.	Acknowledged viewshafts, Lookouts

Contributing Factors		Higher	Lower	Examples
Magnitude of Change	Size or scale	Loss or addition of key features in the view. High degree of contrast with existing landscape elements (i.e. in terms of form scale, mass, line, height, colour and texture). Full view of the proposed development.	Most key features of views retained. Low degree of contrast with existing landscape elements (i.e. in terms of form scale, mass, line, height, colour and texture). Glimpse / no view of the proposed development.	- Higher contrast/ Lower contrast. - Open views, Partial views, Glimpse views (or filtered); No views (or obscured)
	Geographical extent	Front on views. Near distance views; Change visible across a wide area.	Oblique views. Long distance views. Small portion of change visible.	- Front or Oblique views. - Near distant, Middle distant and Long distant views
	Duration and reversibility	Permanent. Long term (over 15 years).	Transient / temporary. Short Term (0-5 years).	- Permanent (fixed), Transitory (moving)

Table 2: Determining the level of visual effects

Nature of Effects

In combination with assessing the level of effects, the landscape and visual effects assessment also considers the nature of effects in terms of whether this will be positive (beneficial) or negative (adverse) in the context within which it occurs. Neutral effects can also occur where landscape or visual change is benign.

It should also be noted that a change in a landscape does not, of itself, necessarily constitute an adverse landscape or visual effect. Landscape is dynamic and is constantly changing over time in both subtle and more dramatic transformational ways; these changes are both natural and human induced. What is important in managing landscape change is that adverse effects are avoided or sufficiently mitigated to ameliorate the effects of the change in land use. The aim is to provide a high amenity environment through appropriate design outcomes.

This assessment of the nature effects can be further guided by **Table 3** set out below:

Nature of effect	Use and Definition
Adverse (negative):	The activity would be out of scale with the landscape or at odds with the local pattern and landform which results in a reduction in landscape and / or visual amenity values
Neutral (benign):	The activity would be consistent with (or blend in with) the scale, landform and pattern of the landscape maintaining existing landscape and / or visual amenity values
Beneficial (positive):	The activity would enhance the landscape and / or visual amenity through removal or restoration of existing degraded landscape activities and / or addition of positive elements or features

Table 3: Determining the Nature of Effects

Cumulative Effects

This can include effects of the same type of development (e.g. bridges) or the combined effect of all past, present and approved future development¹⁶ of varying types, taking account of both the permitted baseline and receiving environment. Cumulative effects can also be positive, negative or benign.

Cumulative Landscape Effects

Cumulative landscape effects can include additional or combined changes in components of the landscape and changes in the overall landscape character. The extent within which cumulative landscape effects are assessed can cover the entire landscape character area within which the proposal is located, or alternatively, the zone of visual influence from which the proposal can be observed.

Cumulative Visual Effects

Cumulative visual effects can occur in combination (seen together in the same view), in succession (where the observer needs to turn their head) or sequentially (with a time lapse between instances where

¹⁶ The life of the statutory planning document or unimplemented resource consents.

proposals are visible when moving through a landscape). Further visualisations may be required to indicate the change in view compared with the appearance of the project on its own.

Determining the nature and level of cumulative landscape and visual effects should adopt the same approach as the project assessment in describing both the nature of the viewing audience and magnitude of change leading to a final judgement. Mitigation may require broader consideration which may extend beyond the geographical extent of the project being assessed.

Determining the Overall Level of Effects

The landscape and visual effects assessment conclude with an overall assessment of the likely level of landscape and visual effects. This step also takes account of the nature of effects and the effectiveness of any proposed mitigation. The process can be illustrated in Figure 2:



Figure 2: Assessment process

This step informs an overall judgement identifying what level of effects are likely to be generated as indicated in **Table 4** below. This table which can be used to guide the level of natural character, landscape and visual effects uses an adapted seven-point scale derived from Te Tangi A Te Manu.

Effect Rating	Use and Definition
Very High:	Total loss of key elements / features / characteristics, i.e. amounts to a complete change of landscape character and in views.
High:	Major modification or loss of most key elements / features / characteristics, i.e. little of the pre-development landscape character remains and a major change in views. <u>Concise Oxford English Dictionary Definition</u> <i>High: adjective- Great in amount, value, size, or intensity.</i>
Moderate- High:	Modifications of several key elements / features / characteristics of the baseline, i.e. the pre-development landscape character remains evident but materially changed and prominent in views.
Moderate:	Partial loss of or modification to key elements / features / characteristics of the baseline, i.e. new elements may be prominent in views but not necessarily uncharacteristic within the receiving landscape. <u>Concise Oxford English Dictionary Definition</u> <i>Moderate: adjective- average in amount, intensity, quality or degree</i>
Moderate - Low:	Minor loss of or modification to one or more key elements / features / characteristics, i.e. new elements are not prominent within views or uncharacteristic within the receiving landscape.
Low:	Little material loss of or modification to key elements / features / characteristics. i.e. modification or change is not uncharacteristic or prominent in views and absorbed within the receiving landscape. <u>Concise Oxford English Dictionary Definition</u> <i>Low: adjective- 1. Below average in amount, extent, or intensity.</i>
Very Low:	Negligible loss of or modification to key elements/ features/ characteristics of the baseline, i.e. approximating a 'no change' situation and a negligible change in views.

Table 4: Determining the overall level of landscape and visual effects

MARTHA MINERAL ZONE PLAN CHANGE GRAPHIC SUPPLEMENT

JULY 2021



Martha Mineral Zone

Plan Change



Contents

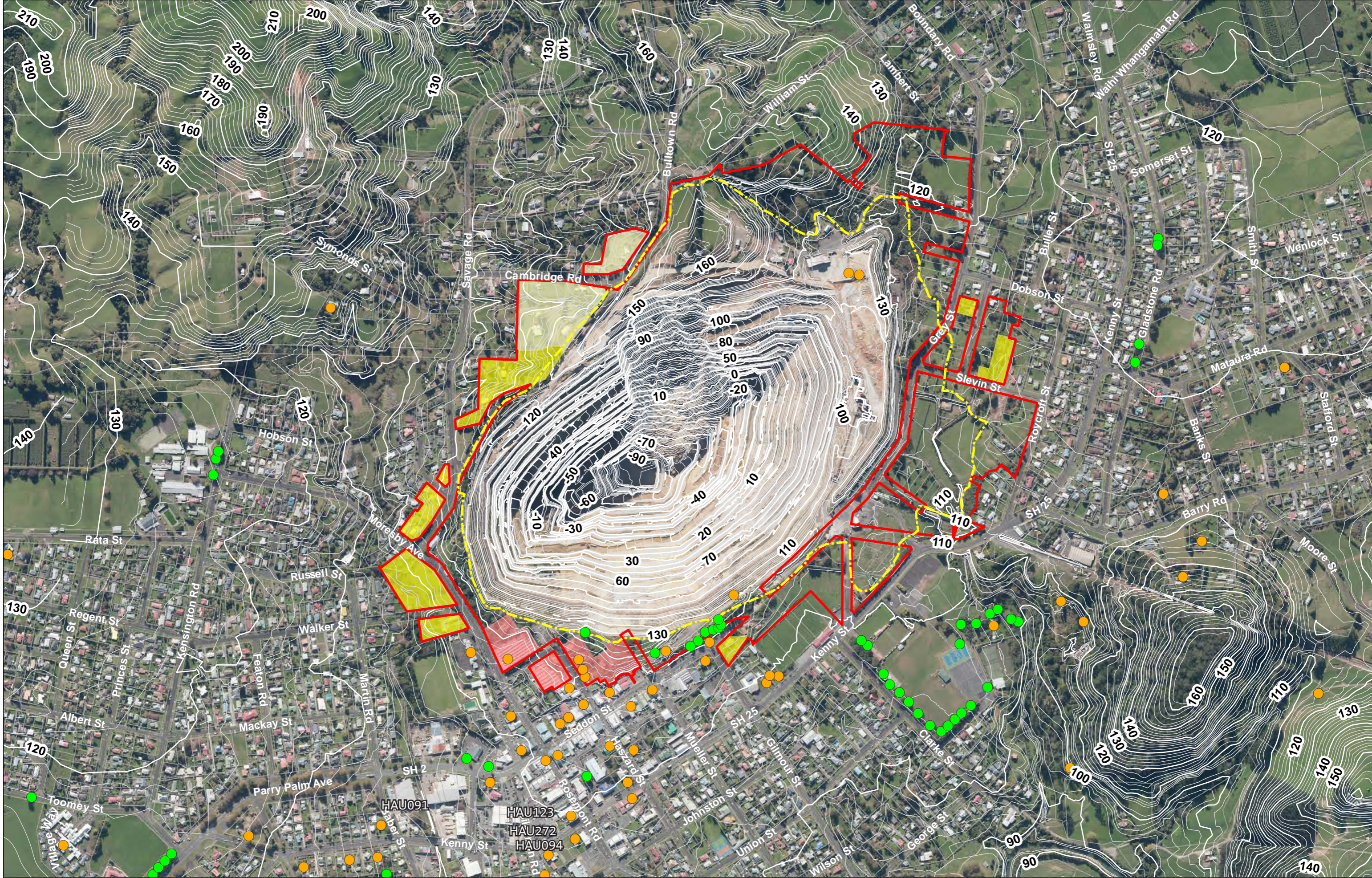
FIGURES

- FIGURE 1: Site Location
- FIGURE 2: Site Appraisal
- FIGURE 3: Topography
- FIGURE 4: Statutory Context
- FIGURE 5: Visual Appraisal

VIEWPOINT PHOTOGRAPHY

- VP 1: View from Seddon Street (East)
- VP 2: View from Gilmour Street
- VP 3: View from Seddon Street and Mueller Street Intersection
- VP 4: View from Haszard Street
- VP 5: View from Seddon Street (West)
- VP 6: View from Moresby Avenue and Martha Street Intersection
- VP 7: View from Moresby Avenue
- VP 8: View from Moresby Avenue and Savage Street Intersection
- VP 9: View from Islington Terrace
- VP 10: View from Walker Street (East)
- VP 11: View from Moresby Avenue (North)
- VP 12: View from Walker Street (West)
- VP 13: View from Cambridge Road
- VP 14: View from Symonds Street
- VP 15: View from Grey Street
- VP 16: View from Slevin Street
- VP 17: View from Kenny Street
- VP 18: View from State Highway 2





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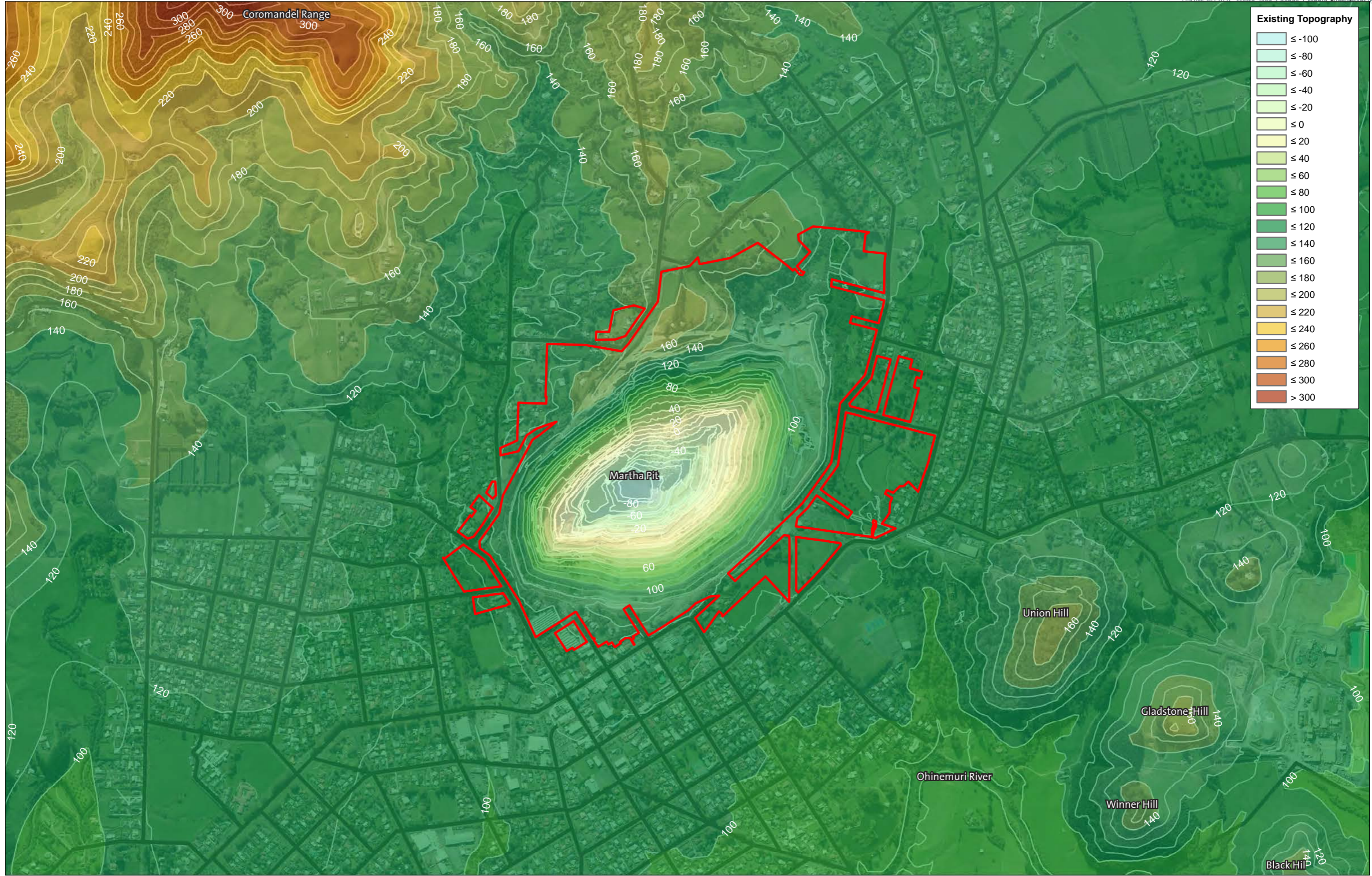
0 200 m
1:7,500 @ A3
Data Sources:
Zoning sourced from HDC REST service
Projection: NZGD 2000 New Zealand Transverse Mercator

LEGEND

- Significant Tree
- Heritage Site
- Pit Rim Walkway
- Existing Contours (2m)
- Proposed Martha Mineral Zone
- Rezoned from Town Centre
- Rezoned from Residential
- Rezoned from Low Density Residential

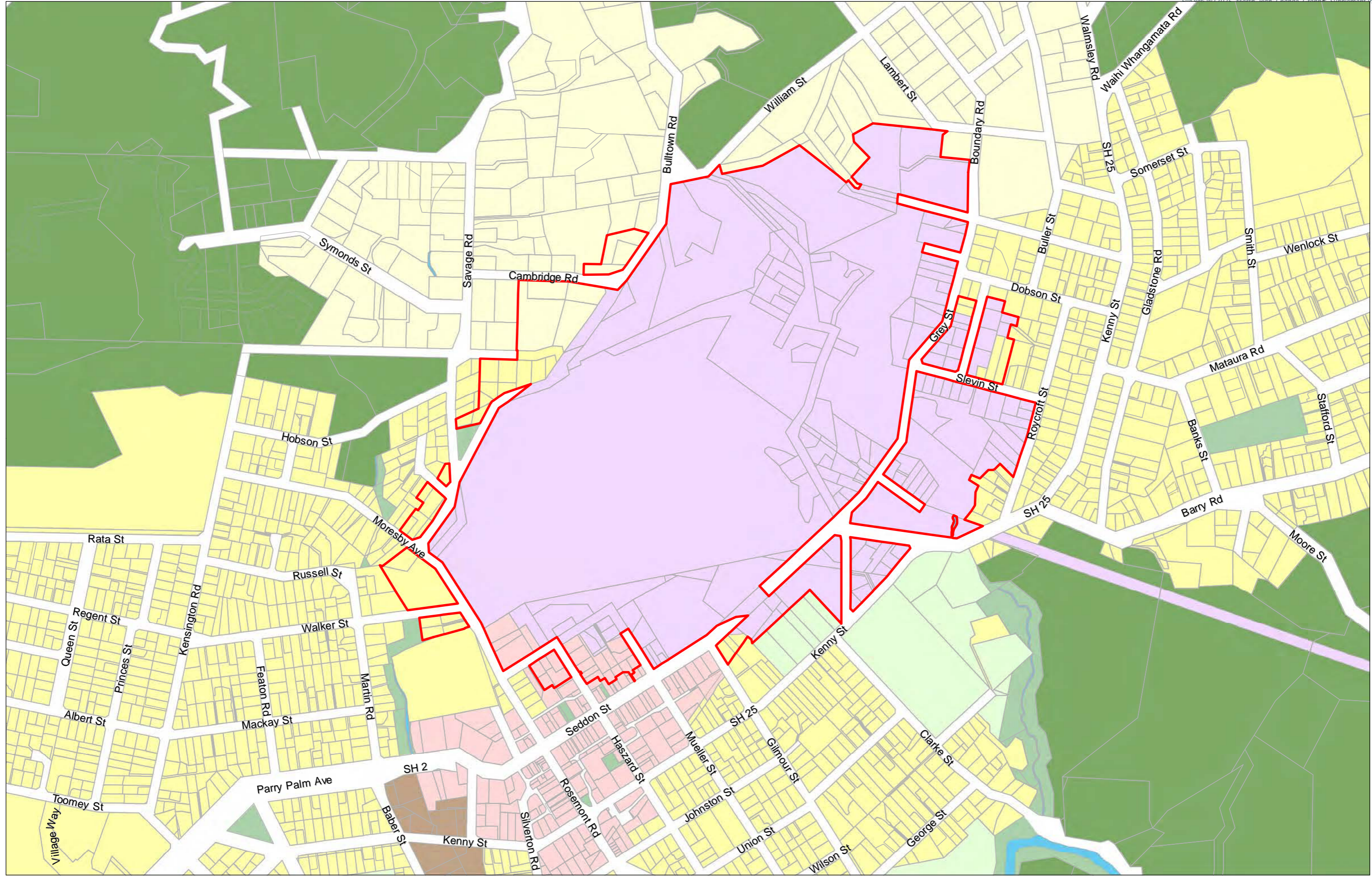
MARTHA MINERAL ZONE PRIVATE PLAN CHANGE
Site Appraisal
Date: 02 September 2021 | Revision: 0
Plan prepared for Oceana Gold by Boffa Miskell Limited
Project Manager: rhy.s.girvan@boffamiskell.co.nz | Drawn: BMC | Checked: RGI

Figure 2




Existing Topography

≤ -100
≤ -80
≤ -60
≤ -40
≤ -20
≤ 0
≤ 20
≤ 40
≤ 60
≤ 80
≤ 100
≤ 120
≤ 140
≤ 160
≤ 180
≤ 200
≤ 220
≤ 240
≤ 260
≤ 280
≤ 300
> 300













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 Data Sources:
Zoning sourced from HDC REST service

0 200 m
1:7,500 @ A3

Projection: NZGD 2000 New Zealand Transverse Mercator

LEGEND

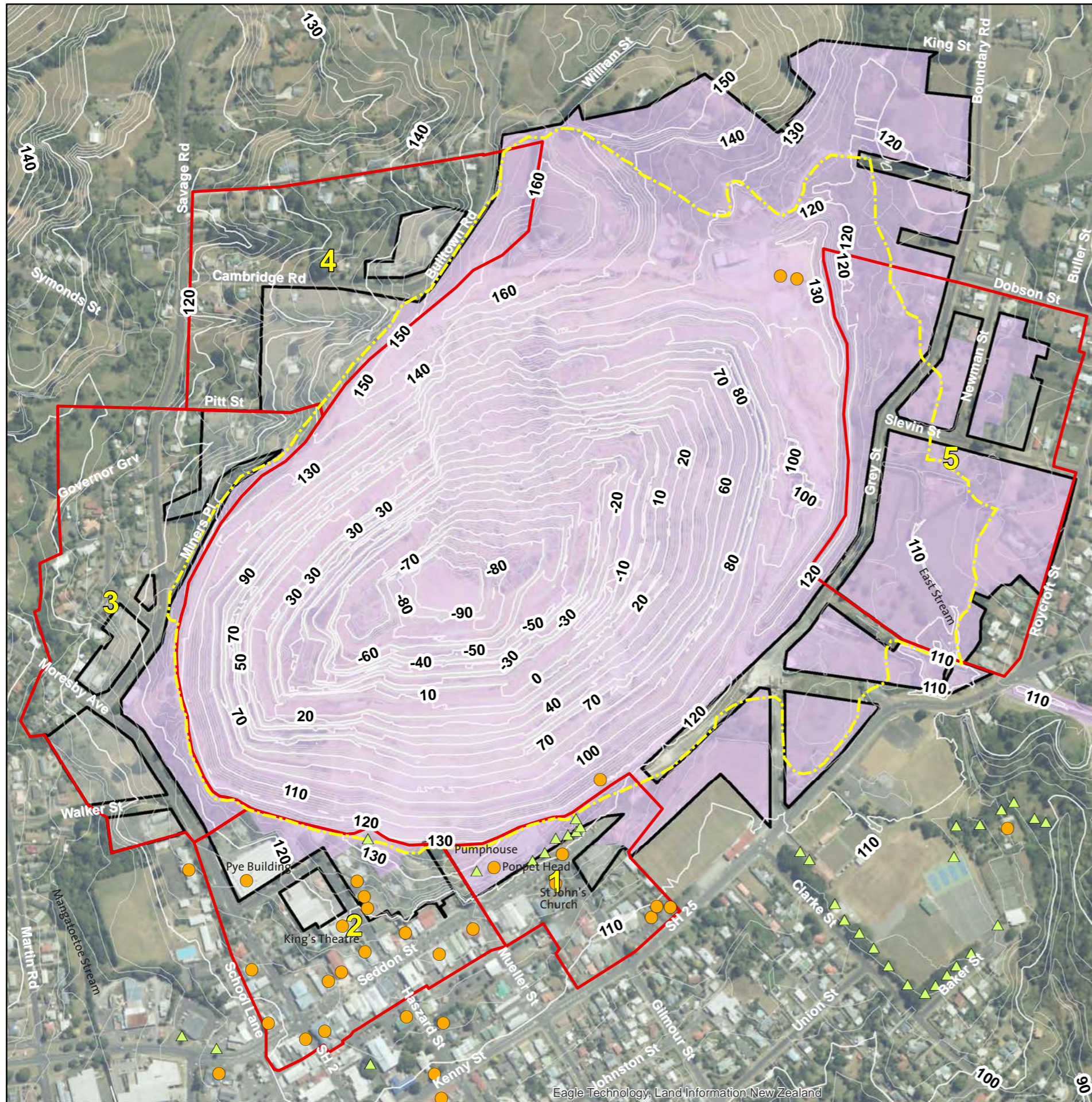
 Proposed Martha Mineral Zone	 Industrial
 Martha Mineral	 Reserve (Active)
 Town Centre	 Reserve (Passive)
 Residential	 Rural
 Low Density	 Hydro

MARTHA MINERAL ZONE PRIVATE PLAN CHANGE
 Statutory Context

Date: 02 September 2021 | Revision: 0
 Plan prepared for Oceana Gold by Boffa Miskell Limited
 Project Manager: rhy.girvan@boffamiskell.co.nz | Drawn: BMC | Checked: RGI

Figure 4

TOWNSCAPE CHARACTER AREAS



Character Area 1: Upper Seddon Street

- Northern more elevated end of main street and town centre
- Prominent pit rim location for relocated Cornish Pumphouse and Poppet Head
- Residual toe slopes of Martha Hill (Pukewa) and established vegetation screens views from main street into open mine
- Mix of independent retail / commercial premises and St John's Anglican Church located along southern side of the road
- Grid street arrangement accessed and orientated with main street
- Several significant trees including Liquidambar, English Oak, Totara, Kauri, and Rhododendron along pit rim
- Pit Rim Walkway overlooks the open mine and includes viewing opportunities across the surrounding landscape



Character Area 2: Seddon and Haszard Streets

- Residual slopes of Martha Hill (Pukewa) gently slope south from high point (134 masl) and conceal surrounding views into open mine
- Fragmented assortment of industrial, civic and residential dwellings
- Heritage buildings define transition from town centre towards the periphery of the existing mine (King's Theatre and Pye Building)
- Grid street arrangement on fringe/side streets accessed and orientated from main street
- Coherent retail strip along Seddon Street with nodal points at key intersections is physically and visually separated from open mine
- Pit Rim Walkway accommodates viewing opportunities of open mine adjacent vegetation in residual gardens and listed kauri tree
- Rangatira Statue located within planting on elevated pit rim context



Character Area 3: Moresby Avenue and Savage Street

- Residential and open space setting located within lower lying areas adjoining Mangatoetoe Stream
- Bunding with substantial planting separates and contains western edge of Martha Mine from surrounding areas
- Commuter road connections respond to underlying topography
- Single and double storied detached houses / stand-alone garages
- Generous lawn areas, boundary shrubs and small tree planting
- Pit Rim Walkway contained along and overlooks the open mine
- Mining artefacts (haul truck and mill girth gear) configured in open space beyond the pit rim



Character Area 4: Cambridge Road

- North-west slopes of Martha Hill (Pukewa) reach its highest remaining elevation of 168 masl east of Bulltown Road
- Undulating landform generally slopes west towards Mangatoetoe Stream with views separated from existing open mine
- Low density residential character accessed along informal road network which responds to underlying topography
- Single and double storied dwellings typically set within established garden planting and/or small paddocks
- Open garden settings, vegetable gardens and small domestic animals
- Relocated Pit Rim Walkway re-established along pit rim with opportunities to overlook the open mine



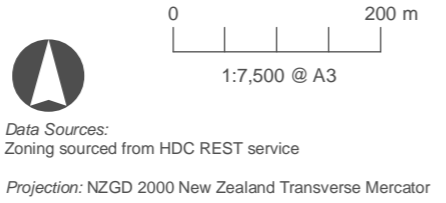
Character Area 5: Slevin Street

- Flat to gently sloping topography east of an established planted noise bund enclosing the operational mine
- Landform accommodates existing and relocated sections of East Stream
- Fragmented street pattern with several road closures responding to underlying hazards
- Quasi parkland setting established through residual residential garden planting
- Low rise, detached houses / stand-alone garages around periphery of open space
- Pit Rim Walkway extends through open parkland setting and grove of planted kauri separated from the operational mine

- ### A Viewing Areas
- A: Seddon Street and Gilmour Street
 - B: Hazard Street and Martha Street
 - C: Moresby Avenue
 - D: Savage Road / Islington Terrace
 - E: South Waihi
 - F: West Waihi
 - G: Cambridge Road / Bulltown Road
 - H: Rural Lifestyle Area along Symonds Street
 - I: Northern highpoint of Martha Pit
 - J: Grey Street / Slevin Street
 - K: Rugby Park / Kenny Street / Union Hill
 - L: Residential Area to north-east of Waihi



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LEGEND

- Representative Viewpoints
- Martha Mineral Zone
- Rezoned from Town Centre
- Rezoned from Residential
- Rezoned from Low Density Residential

Figure 6

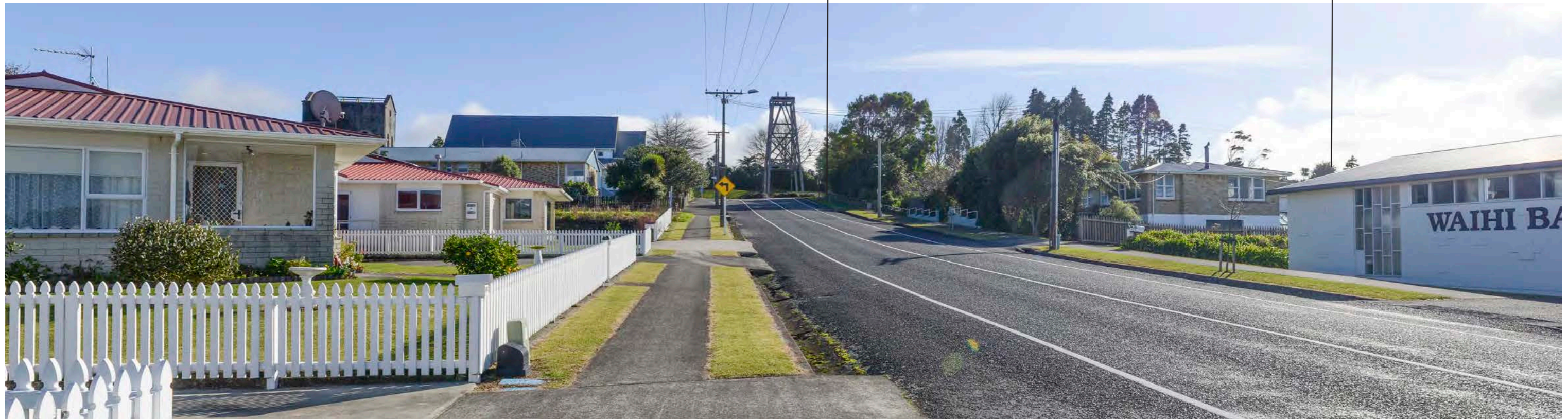
Vegetation within existing Martha Mineral Zone

Proposed Expanded Martha Mineral Zone



Proposed Expanded Martha Mineral Zone

Viewpoint 1: Seddon Street (North)



Viewpoint 2: Gilmour Street

Seddon Street

Salvation Army Building

Proposed Expanded Martha Mineral Zone



Proposed Expanded Martha Mineral Zone

Viewpoint 3: Seddon Street and Mueller Street

Kings Theatre

3 Haszard Street



Viewpoint 4: Haszard Street

Seddon Street



Proposed Expanded Martha Mineral Zone

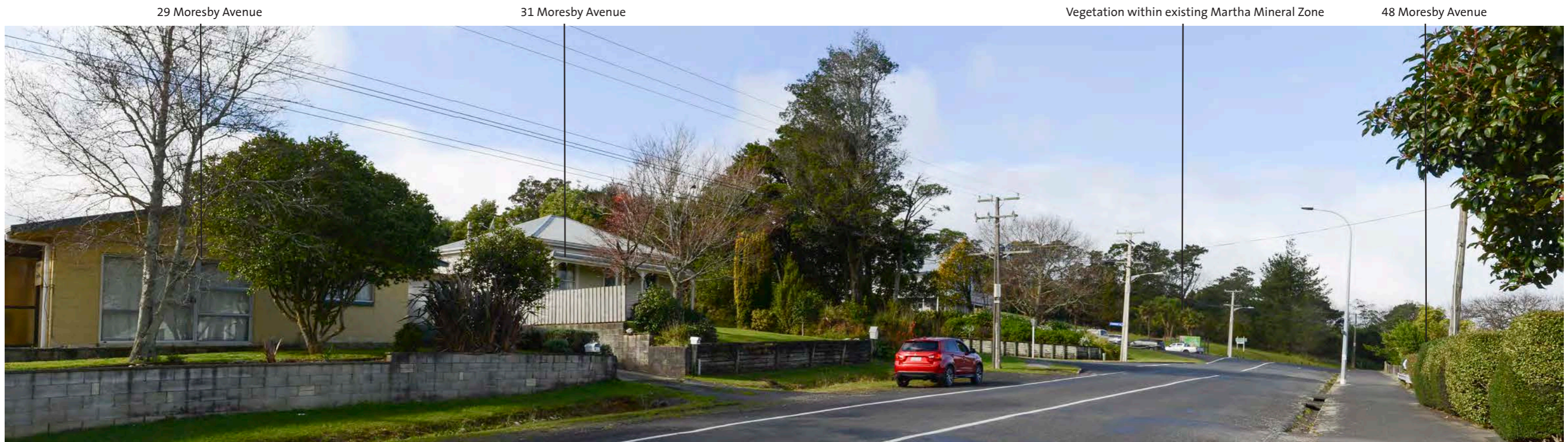
Viewpoint 5: Seddon Street (South)



Viewpoint 6: Moresby Avenue and Martha Street



Viewpoint 7: Moresby Avenue



Viewpoint 8: Moresby Avenue and Savage Street

Islington Terrace

Vegetation within existing Martha Mineral Zone



Viewpoint 9: Islington Terrace

Vegetation within existing Martha Mineral Zone

Moresby Avenue

Walker Street Walkway



Viewpoint 10: Walker Street (East)

Vegetation within existing Martha Mineral Zone

Union Hill

Moresby Avenue



Viewpoint 11: Moresby Avenue (West)

Vegetation within existing Martha Mineral Zone Walker Street



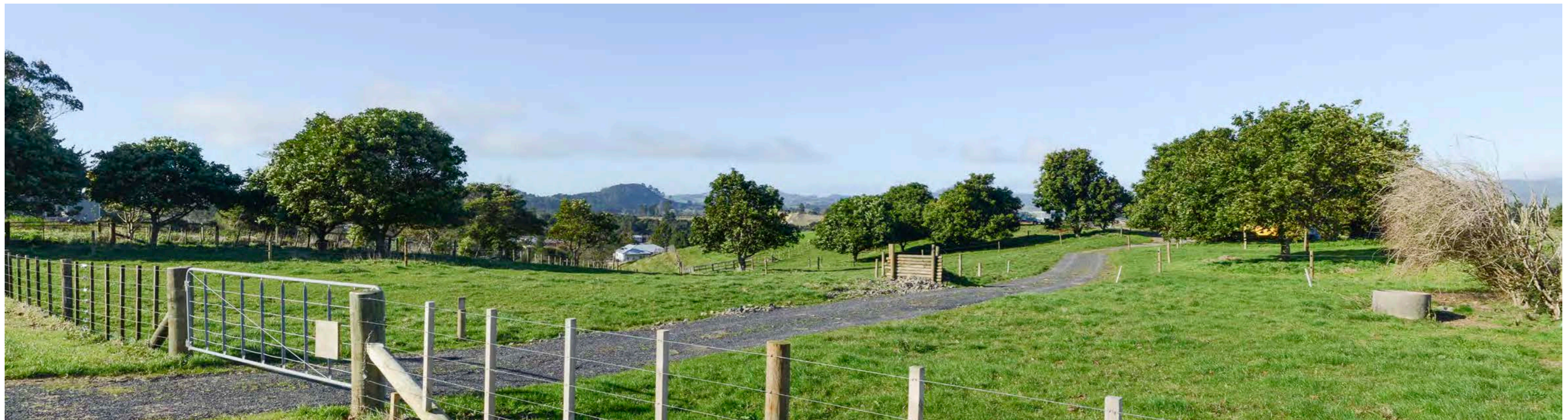
Viewpoint 12: Walker Street (West)

12 Cambridge Road

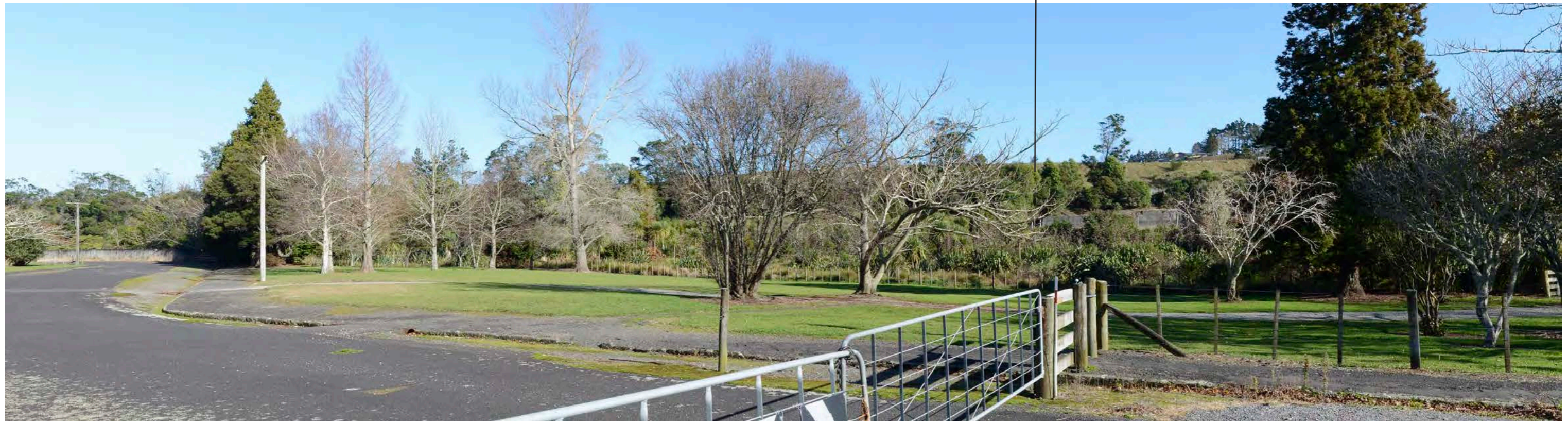
11 Cambridge Road



Viewpoint 13: Cambridge Road



Viewpoint 14: Symonds Street



Existing noise bund

Viewpoint 15: Grey Street



Eastern Stream

Viewpoint 16: Slevin Street



Viewpoint 17: Kenny Street



Viewpoint 18: State Highway 2