

# Three Kings Renewal (Option 15H-1) – Contaminated Land Overview

· Prepared for

Fletcher Residential Limited

: July 2014



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#### **1.0** Introduction

Pattle Delamore Partners Limited (PDP) has been engaged by Fletcher to provide comment on the management of any contaminated land within the area of the private plan change for the Three Kings Renewal (Option 15H-1). The private plan change enables the comprehensive redevelopment of the former Fletcher and Mt Roskill borough quarry lands at Three Kings for between 1,200 and 1,500 residential dwellings.

This report summarises the actual and/or potential contaminated land issues at the site and how these issues will be managed in accordance with the relevant regional and national contaminated land regulations below.

- Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 (NES)
- Auckland Council Regional Plan: Air, Land and Water (ACRP:ALW, operative 30/09/13)
- Proposed Auckland Unitary Plan (PAUP, notified 30/09/13)

In our opinion any contaminated land within the plan change area will be appropriately addressed through the existing planning framework.

#### 2.0 Site Description and History

The proposed private plan change area includes the following land parcels and areas.

Table 1	Site Details and Owners	hip	
Option	Land Parcels	Owner	Area
15H-1	Lot 1 DP 37020	Fletcher Concrete and Infrastructure Ltd	15.2 ha
	Lot 268 DP 50169	Crown	6.4 ha
	Allotment 261 SECT 10 SBRS OF Auckland		
	Pt Allotment 85A SECT 10 SBRS OF Auckland		
	Pt Allotment 85B SECT 10 SBRS OF Auckland		

A brief history of the Three Kings Quarry, sourced from the Three Kings Quarry website<sup>1</sup> is given below.

<sup>&</sup>lt;sup>1</sup> http://www.threekingsquarry.co.nz/consenting-sites/three-kings-quarry/history/ accessed on 01/05/14.

According to the 1964 book "City of Volcanoes. A Geology of Auckland", the volcanic cone complex at Three Kings (which encompasses Winstone Aggregates land and adjoining properties) has been subject to quarrying from about the time the Winstone brothers started their horse and cart deliveries of coal from the Queen Street wharf in the mid-1800s.

Historical records show that Governor Fitzroy granted the land to Messrs Hallimore and Polack in 1845. Winstone Ltd purchased the site in 1922 from a William Connelly who had acquired the fee simple in May 1884.

Prior to the 1960s, quarrying occurred above the level of surrounding land and there were three quarries in the vicinity of the 15 hectare Winstone property. Today, none of the original topography remains and the entire site has been lowered to road level or below.

Quarry activity to the north of the current Winstone Aggregates site ceased about 25 years ago, and it was subsequently filled and rehabilitated and now houses a mix of light industrial and residential development.

To the south and southwest is previously quarried reserve land. Last quarried under the direction of the Mt Roskill Borough Council, it ceased in the mid-1970s and is now managed by Auckland Council.

In the north-eastern corner of the 15 hectare site are buildings and industrial yards originally established in the 1950s when Winstone's developed New Zealand's first concrete masonry manufacturing plant (Vibrapac). Its products were made largely from the scoria available on the site taking advantage of its relatively light weight. A builder's supply yard then operated from these premises until 1997.

The quarry's output grew steadily with the development of the surrounding community and reached its present capacity in the 1950s. Mines returns and company records show that annual production has exceeded 200,000 tonnes, but that demand currently averages 160,000 to 180,000 tonnes per year.

Quarrying at the site has now largely ceased, and the quarry pit is being backfilled with managed cleanfill under resource consents 36221, 36222, 37770 and R/LUC/2009/743.

#### 3.0 Potential Contaminated Land Issues

The proposed private plan change area under Option 15H-1 has been the subject of Preliminary Site Investigations (PSI) for the main quarry site (Lot 1 DP 37020) and for the reserve land vested in trust in Auckland Council to the south and southwest of the main quarry site (former Mt Roskill Borough quarry land). These PSIs have confirmed some historic and ongoing Hazardous Activities and Industries List (HAIL) land use. For example, diesel has been stored above and below ground (HAIL Item A 13 and 17), explosives have been stored and used (HAIL Item C), there have been commercial concrete manufacture and cement storage activities (HAIL Item E 4), and the main quarry is currently being used

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as a consented controlled fill site (HAIL Item G 5). There has also been historic filling on the former Mt Roskill Borough quarry land and in other parts of the Option 15H-1 area (HAIL Items G 5 and I).

An environmental report titled *Historical Contamination Assessment Three Kings Quarry*, by Domain Environmental Ltd (dated February 2009), submitted as a specialist report in support of the Three Kings Quarry Cleanfill consent application<sup>2</sup> has been reviewed. The report identified several HAIL land uses at the site, including fuel, oil and explosives storage and use, but concludes that 'there is no basis for classifying the Three Kings quarry site as contaminated or potentially contaminated'.

Filling of the main Three Kings quarry site commenced on 2 April 2012 under resource consents 36221, 36222, 37770 and R/LUC/2009/743. The consent specifies acceptance criteria for contaminant concentrations on a maximum and rolling average basis for surface (<2m from final ground level) and deeper fill (>2m from final ground level). The strict acceptance criteria set in the consent for contaminant concentrations are below NES SCS and ACRP:ALW/PAUP permitted activity criteria. A Fill Management Plan (FMP) has been prepared for the site in accordance with the conditions of consent. The latest Fill Management Plan - Annual Compliance Report (June 2013) confirms that the filling operation is being undertaken in general accordance with the conditions of consent and with the FMP<sup>3</sup>.

The reserve land to the south and southwest of the main quarry pit was reportedly used by Auckland Council parks department as a disposal area after quarrying ceased. A Council parks depot has operated from the former Mt Roskill Borough land for several years and some surface refuse is present on the site.

#### 4.0 Regulatory Context

The land within the proposed private plan change area is acknowledged as being subject to the NES due to historic HAIL land use. The requirements of the NES will need to be met due to the proposed changes in land use from quarrying, commercial and recreational, to residential and open space. It is understood that the applicable land use scenario under the NES will be residential (with access to lawn area) to high density residential (with no access to lawn area) due to the nature of the proposed development, along with some recreational land. Hence either residential (which assumes 10% produce consumption) or high density residential soil contaminant standards (SCS) and soil guideline values (SGV) will need to be complied with to ensure that requirements of the NES are met. A resource consent under NES Regulation 9, 10 or 11 will be required for the change of land use, subdivision and soil disturbance unless the requirements of the NES permitted activity Regulation 8 can be complied with.

<sup>&</sup>lt;sup>2</sup> <u>http://www.threekingsquarry.co.nz/wp-</u>

content/uploads/2011/09/Appendix HHistorical Contamination Assessment.pdf accessed on 01/05/14.

<sup>&</sup>lt;sup>3</sup> http://www.threekingsquarry.co.nz/wp-content/uploads/2011/08/June-20133.pdf accessed on 01/05/14.

The land within the proposed private plan change area is also subject to the contaminated land provisions of the ACRP:ALW and the PAUP. Specifically, potentially contaminated land will be investigated to confirm compliance with permitted activity rules 5.5.40 or 5.5.41 (ACRP:ALW) and Chapter H Section 4.5 Contaminated Land Part 2.1 (PAUP). Alternatively, if permitted activity rules are not met then a discharge consent will be required as a controlled activity (ACRP:ALW rules 5.5.43 or 5.5.44 and PAUP Chapter H Section 4.5 Contaminated Land Part 2.3) or a discretionary activity (ACRP:ALW rule 5.5.45 and PAUP Chapter H Section 4.5 Contaminated Land Part 2.3) or a discretionary activity (ACRP:ALW rule 5.5.45 and PAUP Chapter H Section 4.5 Contaminated Land Part 1).

The current filling activity in the main quarry pit is a consented activity under resource consents 36221, 36222, 37770 and R/LUC/2009/743. As noted above, the resource consent contains acceptance criteria that are equal to or more stringent than the NES SCS and ACRP:ALW/PAUP permitted activity criteria. Compliance with the consent conditions will ensure that there will be no contamination issues arising from the filling activity.

#### 5.0 Proposed Management of Contaminated Land

The following methodology, following standard contaminated land management practices, is considered to be appropriate for the management of actual and potential contaminated land issues within the subject private plan change area as identified by the PSIs undertaken.

- A Site Management Plan (SMP) will be prepared for the Option 15H-1 area. The SMP will specify how actual and/or potential land contamination issues on each 'piece of land' identified by the PSIs are to be managed during development of the site.
- Where appropriate a Detailed Site Investigation (DSI) will be undertaken to characterise individual actual and/or potential land contamination issues prior to development.

Actual land contamination issues characterised by a DSI, or identified by the PSIs and managed in accordance with a SMP during development of the site, will be remediated and validated as required. Alternatively, where appropriate, a long term monitoring and management plan shall be prepared along with the relevant resource consent applications.

All contaminated land investigation, management and reporting work will be undertaken in accordance with the relevant Auckland Council regulations, and in accordance with the Ministry for the Environment Contaminated Land Management Guidelines 1 and 5 as required under the NES. Based on the findings of the PSI reports, the actual and potential contamination issues identified within the Option 15H-1 area are able to be addressed using standard contaminated land management practices.

#### 6.0 Conclusions and Recommendations

The proposed Three Kings Renewal will be subject to the NES and the contaminated land rules in the ACRP:ALW and the PAUP due to historic and current HAIL land use as summarised below:

- : HAIL Item A 13 and 17 (fuel storage and dispensing)
- : HAIL Item C (explosives storage and use)
- : HAIL Item E 4 (concrete manufacture and cement storage)
- HAIL Item G (filling)
- : HAIL Item A 1 (chemical storage)
- HAIL Item G (filling)

The requirements of the NES, ACRP:ALW and PAUP will need to be met. It is anticipated that the proposed future development of the site will require a resource consents as a discretionary activity under NES Regulation 11 and a restricted discretionary activity under ACRP:ALW Rule 5.5.44A and PAUP Part 3 Chapter H Section 4.5 Item 2.3.1.

The actual and potential contamination issues identified by the PSI can be appropriately addressed by standard and accepted contaminated land management practices to ensure that contaminant concentrations at the site comply with relevant NES standards and guidelines for the proposed land use. The ACRP:ALW, operative Auckland District Plan (Isthmus Section) provisions, and the PAUP appropriately require that these matters be appropriately addressed as part of the assessment of future consents.

# Appendix A

Preliminary Site Investigation – Former Fletcher Quarry Lands at Three Kings



# Preliminary Site Investigation – Former Fletcher Quarry Lands at Three Kings

· Prepared for

Fletcher Residential Limited

: July 2014



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#### **1.0** Introduction

Pattle Delamore Partners Limited (PDP) has been engaged by Fletcher to prepare a Preliminary Site Investigation (PSI) for the Three Kings Quarry. The proposed Three Kings Renewal (Option 15H-2) involves the comprehensive redevelopment of the former Fletcher quarry lands at Three Kings for between 1,200 and 1,500 residential dwellings.

This report, prepared in accordance with Ministry for the Environment (MfE) Contaminated Land Management Guideline No. 1 (CLMG No. 1) (MfE, 2011), summarises the actual and/or potential contaminated land issues at the site. This report has been prepared to satisfy the requirements of the following regional and national contaminated land regulations:

- Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 (NES)
- Auckland Council Regional Plan: Air, Land and Water (ACRP:ALW, operative 30/09/13) (AC, 2013a)
- Proposed Auckland Unitary Plan (PAUP, notified 30/09/13) (AC, 2013b)

#### 2.0 Objectives

The key objective of this work has been to identify any actual or potential soil contamination issues within the Three Kings Quarry site and to summarise the relevant information in a PSI report.

#### 3.0 Scope of Work

The scope of work undertaken by PDP, as instructed by Fletcher, has included:

- Desktop study including review of historic aerial photos, Land Information Memorandum (LIM), property file, and an Auckland Council contaminated site enquiry.
- Review of other relevant site history information held by Council and/or Three Kings Quarry/Winstone Aggregates.
- Site walkover and comparison of current landform and contours with historic and proposed future landform and contours, to assess if filling has taken place.
- : Identification of actual or potential contamination issues at the site.

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#### 4.0 Site Identification, History & Description

#### 4.1 Legal Description

The Three Kings Quarry is located near the corner of Mt Eden Road and Mt Albert Road, at 985 Mt Eden Road, Three Kings. The site is legally described as Lot 1 DP37020 and covers an area of approximately 15.2 ha. The certificate of titles for the Three Kings Quarry site (NA953/21 and NA332/100), confirm that the site has been owned by Fletcher Concrete and Infrastructure Ltd, and its predecessors Winstone Aggregates Ltd and Winstone Ltd since 1922. The site location and extent are shown on Figure 1 (see Appendix A).

Certificates of title are included in Appendix C.

#### 4.2 Site History

A brief history of the Three Kings Quarry, sourced from the Three Kings Quarry website (<u>http://www.threekingsquarry.co.nz/consenting-sites/three-kings-quarry/history/</u>), is given below.

According to the 1964 book "City of Volcanoes. A Geology of Auckland", the volcanic cone complex at Three Kings (which encompasses Winstone Aggregates land and adjoining properties) has been subject to quarrying from about the time the Winstone brothers started their horse and cart deliveries of coal from the Queen Street wharf in the mid-1800s.

Historical records show that Governor Fitzroy granted the land to Messrs Hallimore and Polack in 1845. Winstone Ltd purchased the site in 1922 from a William Connelly who had acquired the fee simple in May 1884.

Prior to the 1960s, quarrying occurred above the level of surrounding land and there were three quarries in the vicinity of the 15 hectare Winstone property. Today, none of the original topography remains and the entire site has been lowered to road level or below.

Quarry activity to the north of the current Winstone Aggregates site ceased about 25 years ago, and it was subsequently filled and rehabilitated and now houses a mix of light industrial and residential development.

To the south and southwest is previously quarried reserve land. Last quarried under the direction of the Mt Roskill Borough Council, it ceased in the mid-1970s and is now managed by Auckland Council.

In the north-eastern corner of the 15 hectare site are buildings and industrial yards originally established in the 1950s<sup>1</sup> when Winstones developed New Zealand's first concrete masonry manufacturing plant (Vibrapac). Its products were made largely

<sup>&</sup>lt;sup>1</sup> It is noted that during a review of the property file for the site (see Section 7.2) PDP has found consent applications for extensions to buildings in this area of the site which date from 1943.

from the scoria available on the site taking advantage of its relatively light weight. A builder's supply yard then operated from these premises until 1997.

The quarry's output grew steadily with the development of the surrounding community and reached its present capacity in the 1950s. Mines returns and company records show that annual production has exceeded 200,000 tonnes, but that demand currently averages 160,000 to 180,000 tonnes per year.

#### 4.3 Geology, Hydrogeology and Topography

The Geology of the Auckland Urban Area (Kermode, 1992) geologic map indicates that the site is underlain by basalt and basanite scoria of the Auckland volcanic field and construction fill. These are volcanic deposits characterised by red, grey and black, angular to subrounded, vesicular, pebble- to boulder-sized fragments, and fill characterised by compacted clay- to gravel-sized materials, including possible demolition debris. A geological map of the Three Kings area (Figure E1, see Appendix A), prepared by PDP for the application for a controlled fill resource consent in 2009, is attached in Appendix A. Machine boreholes drilled for soakage testing (April 2014) generally confirm the published geology, although fill was encountered to a depth of up to 2.0 m below ground level (bgl). Filling of the main quarry hole commenced in 2012 under resource consents 36221, 36222, 37770 and R/LUC/2009/743.

Groundwater flows towards the groundwater pump in the south eastern corner of the quarry which is used to lower the water table in order to facilitate the quarrying operation. The abstracted groundwater is then discharged into the reticulated stormwater network which ultimately discharges to the Manukau Harbour. Groundwater is also used for municipal water supply (via the Watercare Water Treatment Plant in the southeast corner of the main Three Kings Quarry site) and for site use at Three Kings Quarry (dust control and truck washes). Without dewatering groundwater within the quarry naturally ponds within the scoria and basalt until it fills up an underground reservoir and overflows to the north through a breach in the tuff ring surrounding the quarry. From here it flows towards Western Springs and ultimately to Meola Reef where it discharges into the Waitemata Harbour.

The topography of the site includes flat areas around the perimeter of the site (northeast and southeast parts). There are steep benched slopes down into the quarry pit. The access road into the quarry pit currently runs along the northern and western boundaries of the site. The main quarry pit is currently being filled as discussed above.

#### 5.0 Existing Environmental and Geotechnical Reports

#### 5.1 Domain Environmental Ltd (2009)

An environmental report titled *Historical Contamination Assessment Three Kings Quarry* by Domain Environmental Ltd (DEL, 2009), submitted as a specialist report in support of the Three Kings Quarry Cleanfill consent application, was reviewed. The key findings of this report are summarised below.

- The Three Kings quarry site has been quarried by Winstone since around 1922, with the prior land use being rural farming.
- There are no records of site contamination or spills on the Three Kings quarry site based on Auckland Regional Council (ARC) records.
- Fuel was historically stored at the site in a 4,500L underground storage tank (UST) until 1994 when the UST was decommissioned and removed. There are no tank removal reports or records, but the ground underneath the former UST location has subsequently been excavated to a depth of 10m.
- Between 1994 and 1999 fuel was stored in a 13,500L above ground storage tank (AST) with an integral steel bund. As with the UST, the AST location has subsequently been excavated to a depth of at least 10m.
- Since 1999 refuelling has been undertaken by a contractor using a mobile tanker and there are no records of fuel spills.
- An engineering workshop was formerly located within the quarry and included the storage of lubricating oil. The old engineering workshop was removed in 1995 and this location has subsequently been excavated to a depth of at least 10m.
- In 1995 the engineering workshop activity moved to its current location and has a bunded oil storage area and a wash down pad, and there are no records of oil spills to ground.
- A spill register for the site, operational from 2001 onwards, records a total of 10 minor oil spills and no fuel spills.
- Explosives were used for quarrying activities until the late 1980s or early 1990s, with residual explosive materials being removed from site soon after a 1995 audit report recommending this action. Former explosive storage areas have subsequently been excavated to a depth of at least 10m.
- The report concludes that 'there is no basis for classifying the Three Kings quarry site as contaminated or potentially contaminated'.

It is understood that the Domain Environmental review pertains to the main part of the quarry site (the quarry pit) and may not include currently developed areas around the perimeter of the quarry pit (the assessment area was not clearly defined in the Domain Environmental report). PDP have verified some of the information provided by Domain Environmental through our search of other site information sources, as detailed in Sections 5, 6, 7 and 8 below. However, PDP have been unable to independently verify all aspects of the information regarding potential contaminant sources provided in the Domain Environmental report. The conclusion of the Domain Environmental report that 'there is no basis for classifying the Three Kings quarry site as contaminated or potentially contaminated' may apply to the main quarry pit area, but, based on this PSI, does not apply to the whole site.

A copy of the Domain Environmental report is included in a separate electronic file with other supporting information.

#### 5.2 Property Works (2014)

A Background Property Report (dated 26/03/14) for the commercial premises in the northeast part of the Three Kings Quarry site was prepared by Property Works Ltd (PWL, 2014). The report compiled site plans, aerial photographs, current tenants and land use, geotechnical and other engineering information, and included a brief history of the Three Kings Quarry, HAIL land use and dangerous goods records, and available environmental/contamination reports.

The information reviewed to create the Background Property Report was primarily sourced from the Auckland Council property file CD, and therefore any information it contains which is relevant to the history and potential contamination issues at the site is discussed in Section 7.2.

The Property Works report also included an Asbestos Inspection Report by Consulting Environmental Demolition Asbestos (CEDA Ltd) (CEDA, 2014). CEDA undertook an inspection of the buildings within the commercial premises in March 2014, with the objective of identifying any asbestos containing materials (ACM) at the site. Further, the scope of CEDA's investigation included providing advice on the condition of the ACM found to be present, and any recommendations for control of any ACM found. The main findings of this assessment are summarised below.

The building aspects found to contain ACM were wall cladding and roofing materials. These materials were present across the site buildings. The types of asbestos identified in these materials were chrysotile (white asbestos) and amosite (brown asbestos) (confirmed by qualitative laboratory testing of one representative sample of roofing material). As part of their inspection, CEDA assessed the extent of deterioration, and the potential to release fibres if disturbed, of the ACM observed. With the exception of the materials observed on the north walls, which were painted and assessed as having a very low potential to release fibres, the remaining materials were assessed as having a medium to high risk of releasing fibres if disturbed. However, air testing carried out in two locations by CEDA during the inspection indicated that fibre release was not occurring above the detection limit of the monitoring equipment (<0.01 fibres/mL).

The CEDA report concluded that if left undisturbed, the ACM observed on site should not pose a risk of fibre release above Workplace Exposure Standards, and that the materials should remain stable until at least 2016. The report further stated that any work on the roof structure should be done by tradespersons with a suitable qualifications in dealing with ACM, and should conform to the guidelines set out in the Health and Safety in Employment (Asbestos) 1998 Act and the New Zealand Demolition and Asbestos Association New Zealand guidelines for the management and removal of asbestos (3<sup>rd</sup> Edition) (NZDAA, 2011).

A copy of the CEDA report is included in a separate electronic file with other supporting information.

#### 5.3 Geotechnical Information

In April 2014 PDP undertook soakage testing for stormwater disposal at several locations along Mt Eden Road. Fill was encountered to depths of between 0.5 and 2.0m in all 4 borehole locations drilled for the soakage testing. This fill material is of unknown origin and hence is considered to be potentially contaminated. Geology below the surficial fill material was basalt and/or scoria as per the published geology.

Borelogs are included in a separate electronic file with other supporting information. Borehole locations are shown on Figure 1 in Appendix A.

#### 6.0 Aerial Photographs

Aerial photographs from 1940, 1959, 1996, 2001, 2006, 2008 and 2010 were reviewed. The aerial photographs up to 2010 were accessed from the Auckland Council GIS website (<u>http://maps.aucklandcouncil.govt.nz/</u>). The 2012 aerial photograph was accessed from Google Maps (<u>https://www.google.co.nz/maps/</u>). The 2014 aerial photograph was supplied by Fletcher (flown by Precision Aerial Mapping, January 2014).

Historic aerial and site photographs are also available from The Fletcher Trust Archive (<u>http://www.fclarchives.co.nz/</u>). The quality of these photographs is variable and these photographs have not been formally reviewed as part of this PSI.

#### 6.1 1940 Aerial Photograph

The 1940 aerial photograph shows that quarrying activities have commenced within the main Three Kings quarry site. There also appears to be quarry activity to the north and south of the site. There are three buildings in the southeast corner of the site and one in the northeast corner. There appears to be one or more small sheds along Mt Eden Road near the northeast corner of the site. There appears to be a large building in the middle of the site next to the access road into the quarry pit.

#### 6.2 1959 Aerial Photograph

The 1959 aerial photograph shows that quarrying activities have expanded significantly since 1940, within the Three Kings Quarry site and to the north, south and southwest. The three buildings in the southeast corner of the site, and the building in the northeast corner, are still present. The northeast part of the site is now significantly developed with a large complex of industrial/commercial buildings present. There are also buildings to the west of the main building complex next to the access road into the quarry pit. There appears to be some storage areas in the northwest and northeast parts of the site.

#### 6.3 1996 Aerial Photograph

The 1996 aerial photograph is of poor quality but shows ongoing quarrying activities at the Three Kings Quarry site. Land to the north appears to be partially developed with quarrying finished and possibly some filling of the quarry pit occurring. Land to the south and southwest is no longer being quarried and appears to be vacant. The main building

complex in the northeast part of the site appears to be generally unchanged from the previous aerial photograph. The building to the north of the main building complex has been extended to the west and there is no longer any materials storage in this location. There is a building in the northeast corner of the site and there appears to be a flat materials/equipment storage, site access and parking area part way along the northern boundary of the site from Mt Eden Road. There appear to be two buildings immediately south of this flat area. In the southeast corner of the site there is only one building present which appears to correspond to one of the three buildings present in this vicinity in the previous aerial photograph. To the west of the main building complex there appears to be three buildings, two of which are different from those visible in the previous aerial photograph in the same vicinity.

#### 6.4 2001 Aerial Photograph

The 2001 aerial photograph clearly shows the extent of the quarry and site features at that point in time. The quarry pit appears to be in a very well organised state. The building coverage appears to be the same as in the previous aerial photograph. There are parking areas to the south and west of the main building complex in the northeast part of the site. There are three access ways from Mt Eden Road in the northeast part of the site. The main building complex appears to contain and mix of roofing materials with the darker grey roof areas potentially being 'Super 6' (asbestos roofing material). There appears to be a knoll extending into the quarry to the west of the main building complex with three buildings present and an access road down into the quarry pit. There appear to be two additional small buildings in the northeast corner of the site. The building in the southeast to the building. There is a small shed part way along the southern boundary of the site.

#### 6.5 2006 Aerial Photograph

The 2006 aerial photograph shows the Three Kings Quarry site as generally unchanged from the 2001 aerial photograph.

#### 6.6 2008 Aerial Photograph

The 2008 aerial photograph shows the Three Kings Quarry site as generally unchanged from the 2006 aerial photograph. The access road and buildings to the west of the main building complex have now been removed.

#### 6.7 2010 Aerial Photograph

The 2010 aerial photograph shows the Three Kings Quarry site as generally unchanged from the 2008 aerial photograph.

#### 6.8 2012 Aerial Photograph

The 2012 aerial photograph from Google Earth shows the Three Kings Quarry site as generally unchanged from the 2010 aerial photograph, although the weigh bridge and associated kiosk in the northeast corner of the site have been relocated.

#### 6.9 2014 Aerial Photograph

The 2014 aerial photograph (refer to Figure 1 in Appendix A) is of high quality and most of the current site features can be can be clearly seen. The site is generally unchanged from the 2012 aerial photograph.

#### 7.0 Auckland Council Information

#### 7.1 Land Information Memorandum

A Land Information Memorandum (LIM) for the property was obtained from the Auckland Council by PDP on 17 April 2014.

Resource consents and building consents issued for the property by the former Auckland City Council, former Auckland Regional Council and the Auckland Council are listed in the LIM. Of these consents, those which may be considered relevant to the site history and potential land contamination of the site are:

- 1944 building permits for erection of an addition and for a cement shed at the scoria pit;
- Building permits to extend or undertake alterations to the factory / block plant in 1945, 1952, 1954, 1956, 1957, 1960, 1963;
- A 1946 building permit to erect a roof over a concrete block yard;
- : A 1951 building permit to erect a hopper tower curing room and boiler house;
- A 1953 building permit for a caretakers cottage;
- 1956 building permits to install an underground petrol tank and erect a stand and box;
- A 1960 building permit to erect a transformer kiosk;
- A 1961 building permit for a storage concrete pit;
- Building permits to erect a covered area in 1961 and 1965;
- : 1971 building permits to erect cement storage silo and covers over storage bins;
- A 1973 building permit to erect a cement shed for storage;
- Building permits to build sand and aggregate bins and erect a store extension in 1982;
- A 1985 planning consent for Winstone Glass manufacturing/processing plant;
- : A 1986 building permit to convert the factory to office/warehouse;
- : A 1994 land use consent for joinery workshop / business 7 zone;
- A 1994 building permit for a joinery workshop;

- 1995 building permits to relocate workshop on site; undertake internal alterations and for drainage from wash down bay;
- A 1995 land use consent to operate a joinery workshop and bulk timber storage facility;
- A 1995 land use consent for a water purification plant (including a pump house and an electrical transformer);
- : A 2006 building permit for demolition of processing plant and structures;
- Land use consents in 2011 for the clean fill of the quarry and for change of site use from manufacturing to retail and warehouse.

The LIM also notes the following in relation to this site:

- Soil issues Soil issues recorded. The land may not be suitable for particular development of land use purposes. A soils report must be submitted with any building and/or resource consent application.
- Contamination Issues This site is identified within the council's register of contaminated sites due to the current or past land use activities commonly associated with hazardous substances that may have resulted in contamination. This site is potentially contaminated but not investigated yet. Changes in land use or redevelopment of this site may require a controlled resource consent application, which may require reports such as further site investigation, remediation action plan, management plan or contamination risk assessment. No reports are held about issues specific to this site.

Relevant information from the LIM is included in a separate electronic file with other supporting information.

#### 7.2 Property File

The site property file CD was obtained from Auckland Council and reviewed. Site features relevant to the site history or which have been identified as a potential contaminant source are shown on Figure 1 (see Appendix A).

From the 1940s to the 1970s, there are many consent applications on the property file which detail the use of fibrolite materials in site building construction. These materials were used for the construction of roofs, and / or walls. Many construction drawings show the use of fill to create appropriate building platforms. The source of this fill is unknown, but it is considered likely that it was sourced from the adjacent quarry.

The earliest documents on the property file which pertain to the commercial area (referred to as the 'main building complex' in Section 6) in the northeast part of the site are dated 1943, and are plans for an extension to a factory (addition of a machine room). Through the 1940s, there are several consent application documents which detail other extensions to this factory, described in one application as the 'block factory'. An application is made in 1946 to erect a roof over the concrete block yard.

Through the 1950s, documents on the property file detail the construction and extension of a concrete block plant within the commercial area. A set of drawings from 1951 show the proposed, amended layout of the 'Besser Concrete Block Plant'. These plans detail the presence of a boiler room and a coal hopper. The use (burning) of coal is a potential source of contaminants (polycyclic aromatic hydrocarbons (PAHs), boron and heavy metals) at the site. These plans also show that in 1951, the factory buildings and the adjacent Three Kings Road were on a lower topographical level than the quarry area to the southwest. Plans show that kilns were added to the rear of the concrete block plant in 1954.

In 1956 a consent application is recorded for the installation of an underground storage tank (UST) for petrol, and a pump. There are no details relating to the location of this tank on site, or its size. The application does detail that the walls of the UST were to be constructed of a 'concrete pit'.

A further consent application document from 1961 seeks permission for "storage of Class III in concrete pit". Class III dangerous goods are flammable liquids, such as petrol and diesel. It is therefore assumed that this application relates to the concrete-pit-lined UST which is the subject of the 1956 consent application. The 1961 application does not provide details as to the location or size of the concrete pit, however, a letter from the Vacuum Oil Company (NZ) Ltd, dated 1961, also seeks permission to install a UST and pump, and provides details as to the size and location of the tank. The Vacuum Oil Company letter states that the UST is to have a volume of 1,000 gallons (approximately 4,500L), is for the storage of automotive diesel oil, and includes a sketch drawing showing that the tank was to be located adjacent to a crusher and elevator, and a wood building which was to be removed. An examination of site layout plans (from 1976 and 1981), and historical aerial photographs (Section 6) shows that crushers and elevators were located to the west of the main building complex on land which has subsequently been quarried away. It can therefore be concluded that the historical 4,500L UST does not represent a potential contamination source for the current site.

A plan dated 1960 indicates that a transformer was to be situated at the rear (western end) of the block plant building. The transformer kiosk is shown on historical site plans in the same location as the current transformer – along the western wall of the former block plant. The transformer represents a potential source of contaminants to the site, as transformer oil historically contained polychlorinated biphenyls (PCBs) (in use until the mid-1980s in New Zealand). Any PCB contamination would be expected to be localised and restricted to the immediate vicinity of the transformer.

A site layout plan from 1970 shows an enlarged block plant, dry block store and office in the commercial area. A building is located to the west of the block plant, which is identified in a 1976 site layout plan as a scoria grading plant. The 1976 site plan also shows a white cement store to the west of the block plant, and crushers and elevators, and a workshop to the west of the scoria grading plant. The crushers, elevators and workshop are located on ground which has subsequently been quarried away – aerial photographs indicate by 2008. This information indicates that the workshop does not

represent a potential contamination source for the site. By 2008 the scoria grading plant has also been removed from site. A site plan from 1984 shows that the white cement store is on a lower topographical level than the commercial area, and has since been removed from site.

A site plan from 1974 indicates that a 'gas pump' was located at the eastern end of the block storage area. The plan shows that the pump was to be moved from the eastern end, to the southern side of the area. A survey plan from 1982 also shows a petrol pump in this location. There are no tanks or other fuel storage or dispensing equipment marked on these plans, or on any other plans that PDP has observed in the property file, in this location. However, the petrol pump may be considered a potential contaminant source at this location.

The site plan from 1984 also shows that the use of the buildings within the commercial area has changed. The large block plant building has been split into two, with the southern area labelled as a proposed glass showroom, and the northern area labelled as a P.V.C building materials storage area. The open store (block store) to the north of the main building complex is labelled as a showroom and sales area on the 1984 site plan. These building use changes mark the start of a change in land use within the commercial area, from industrial / processing activities related to the quarry only, to more general light industrial commercial and retail activities.

A site plan from 1994 shows that a joinery factory has been established in the centre of the former block plant building. The glass showroom continues to occupy the space to the south, while the northern area of the block plant is labelled as being utilised for storage of quarry equipment and a veterinary clinic, with a portion of the northern area labelled as unoccupied space. The 1994 site plan also shows that the block store on the northern part of the commercial area has been converted into a pet store.

From 2000-2005, site plans show that the commercial area was occupied by businesses undertaking the following activities, within the former block plant buildings and block storage area:

- Bed / furniture sales;
- Commercial and light industrial activities, primarily utilising wood (joinery, design, moulding);
- · Veterinary practice;
- : Pet and pet supplies sales and stores.

A café / food retail business was established immediately to the south of the former block plant in 2004, and a telecommunications tower was erected at the eastern end of the former block plant in 2008.

The 2011 site plan shows that the area of the former block plant which was utilised as joinery and design factories has been taken over by one tenant, for retail furniture sales. Between 2011 and today, the site use remains the same except that the tenant

undertaking wood moulding in the western area of the former block plant has vacated the site.

A dangerous goods licence renewal document was found on the property file, which states that a 1,200L mobile diesel tank was to be installed. The document is in the name of Winstone Aggregates Ltd, but is not dated. Documents on the property file do not indicate from when, or where on site, this mobile diesel tank was used.

Relevant information from the property file is included in a separate electronic file with other supporting information.

#### 7.3 Contaminated Site Enquiry

A Site Contamination Enquiry was submitted to Auckland Council who confirmed that there are 2 pollution incidents for the Three Kings Quarry site based on information available from the former Auckland Regional Council records system and information currently held by the Natural Resources and Specialist Input Unit. The 2008 incident relates to air pollution from teak oil (incident # 08/1357) and the 2011 incident relates to open burning (incident # 11/1279).

A search of consents and environmental assessments within 200m of the subject site identified the following:

- Discharge consent 37770 for land use, earthworks and discharges associated with the development of a controlled fill at 985 Mt Eden Rd.
- Contaminated site discharge consent 36222 for land use, earthworks and discharges associated with the development of a controlled fill at 985 Mt Eden Rd.
- Discharge to air consent 40041 for the extraction, crushing, screening, transport storage and processing of aggregate at 987-1021 Mt Eden Rd.
- Bore consent 15588 for the construction of a bore for groundwater level and/or chemistry investigations at 987-1021 Mt Eden Rd.
- Bore consent 21583 for the construction of a bore for the extraction of groundwater for municipal supply at 985 Mt Eden Rd.
- Bore consent 13346 for the construction of a bore for the extraction of groundwater for municipal supply at 987-1021 Mt Eden Rd.
- Bore consent 24160 for the construction of a bore for groundwater quality monitoring at 1011 Mt Eden Rd.
- Bore consent 24234 for the construction of a bore for groundwater level monitoring at Big King Reserve, Duke St.
- Bore consent 15417 for the construction of a bore for groundwater level and/or chemistry investigations at the corner of Kingsway and Queensway.
- Bore consent 15418 for the construction of a bore for groundwater level and/or chemistry investigations on the corner of Gorrie Rd and St Andrews Rd.
- : Bore consent 21803 for the construction of a soakhole at 37 Landscape Rd.

- Bore consent 9818 for the construction of one pumped test bore and up to 7 observation wells for groundwater level and/or flow investigations along Mt Eden Rd.
- Bore consent 16095 for the construction of a bore for groundwater level and/or chemistry investigations at Fyvie Rd Reserve.

The Site Contamination Enquiry response is included in a separate electronic file with other supporting information.

#### 8.0 Site Walkover

The site walkover for the commercial area in the northeast part of the site was completed by PDP on 2 April 2014 in fine weather conditions. The extent of this site walkover was limited to the following: outdoor areas around the existing buildings; and, inside the vacant building on the western side of the main block of buildings (the former block plant). Inspections were not carried out inside the tenanted buildings of the commercial area currently used for a range of commercial activities (see below). Refer to Appendix B for representative site photographs.

The commercial area in the northeast part of the site is largely covered by two blocks of existing buildings. At the northern end of the commercial area is the smaller block of buildings leased by Animates (pet shop). The main block of buildings are leased (north to south) by Pet Doctors (veterinary clinic), The Design Store (furniture and homeware retail), Rest (bedroom furniture retail) and Eiffel En Eden café. The building on the western side of the main block of buildings is currently vacant. In the southwest part of the main block of buildings is a tower which is currently used by 2 Degrees Mobile for mounting telecommunications equipment. Some of the cladding and roofing on the main block of buildings appears to be 'Super 6' ACM.

There is a paved car parking area at the southern end of the commercial area next to the Eiffel café and Rest. There is a paved access way between the two blocks of buildings which loops around the western and northern sides of the Animates buildings. There are parking and loading areas around all of the buildings. There are soak holes in the parking areas adjacent to Eiffel café and Animates, and various underground services along Mt Eden Road.

The western part of the commercial area is not paved and the surface is mainly scoria and hardfill. There is an old dangerous goods store on the northwest corner of the main block of buildings. A new concrete pad has been laid to the west of the dangerous goods store. This was constructed as a storage area for shipping containers. There is an electrical transformer shed on the western side of the main block of buildings. Midway along the western boundary of the commercial area there is a steel pipe coming out of the ground, possibly an old water filling point. In the southern part of the vacant building there is a concrete floor with grated floor drains, downpipes and soak holes. In the northern part of the vacant building, near the roller door access, is a section of concrete floor that may have previously been a vehicle service pit or some other feature. In the southwest part of the commercial area, next to the vacant building is a large concrete pad where dust extraction equipment was formerly located. 2 Degrees have recently relocated their electrical cabinet to this concrete pad from a small concrete plinth on the western boundary of the commercial area. In the southwest part of the commercial area, adjacent to the vacant building and old tower, there are fragments of suspected ACM which appears to have fallen from the degrading cladding on these structures. In the same area is an underground concrete chamber of unknown use that appears to be holding water. There is a manhole opening in the concrete lid and a thin steel cover that is badly rusted and unsecured. In the southwest corner of the commercial area there is a 210L drum (contents unknown).

A second site walkover covering the balance of the site was completed by PDP on 21 May 2014 in fine weather conditions. The extent of this site walkover was limited to the vicinity of the main site entrance in the northeast corner of the site. The Watercare Water Treatment Plant area in the southeast corner of the site was locked and hence only observed from Mt Eden Road. The main quarry pit was not accessed but was viewed from the main site entrance area. It was noted that there was a truck wash, and a portacom in the quarry pit. Refer to Appendix B for representative site photographs.

The current infrastructure at the main entrance area consists of a permanent building in the northeast corner of the site and three relocatable portacoms nearby. The permanent building houses the former engineering workshop and administration offices above. The area also includes a lunch room and toilet. The former engineering workshop is no longer used as a workshop because quarrying no longer occurs at the site; it is used primarily for storage. Both new and used/waste hydraulic oils are stored in drums within the workshop. Actively used drums are bunded (see photos) and new drums are not. The area is also used for storage of spare parts for a mobile-crusher unit, and engineering and hand tools. The workshop area is sealed with concrete.

There are three portacom/relocatable buildings in the main entrance area; the quarry manager's office; the former weigh bridge kiosk (currently vacant); and, the current weigh bridge kiosk situated in the weigh bridge area on the northern property boundary. The main access to the quarry pit is via the weigh bridge and the access road that runs along the northern and western boundary of the quarry. The weigh bridge area has a wheel wash for trucks exiting the quarry. Wash water is captured into an onsite interceptor and then discharges to ground. The remaining area around the entrance and gate is asphalt-sealed and comprises staff and visitor parking, rubbish skip bin storage, and water tanks for storage of water for the truck wash and dust management (see Figure 1 in Appendix A).

There are two dust monitoring locations along the northern site boundary. Quarrying activities appear to have ceased and there is evidence of filling in the quarry pit. There is a wheel wash in the base of the quarry pit and a portacom building. A power conduit is visible on the western wall of the quarry pit which is understood to supply power to the quarry floor from Fyvie Ave. The pump shed in the southeast part of the quarry was visible.

#### 9.0 Summary

This PSI into the current and historical use of the Three Kings Quarry has shown that the site was originally part of a larger quarry that extended to the north, south and southwest. Quarrying has recently ceased and filling of the quarry pit commenced in 2012 under resource consents 36221, 36222, 37770 and R/LUC/2009/743. The stringent acceptance criteria for contaminant concentrations set in the filling consent comply with the criteria set out in the NES, and the ACRP:ALW/PAUP permitted activity criteria. Hence, subject to ongoing compliance with the consent conditions, there are not anticipated to be any land contamination issues associated with the filling operation.

Quarrying activity appears to have been limited in the northeast part of the site where the commercial area and main building complex are located. The main building complex was constructed in the 1940s and 1950s as part of the concrete block plant. The buildings of the former block plant have been extended and altered, both internally and externally, since the original buildings were constructed. The buildings have been utilised and leased by a variety of tenants and used for:

- : Construction and storage of concrete blocks;
- : Machining and moulding of timber products;
- · Veterinary practice;
- : Retail sales (furniture, building supplies, pets and pet supplies);
- Telecommunications equipment.

Table 1 below summarises the potential sources of contamination, which have been identified through a search of historical and current documents relating to the Three Kings Quarry site, and from the site walkovers. The location of these potential contaminant sources are marked on Figure 1 in Appendix A:

Table 1: Potential Sou			
Contaminant Source	Location	Contaminant(s) of Concern	Potential Contamination Mechanism
Asbestos containing building materials	Wall and roofing materials of former block plant and store	Asbestos fibres	Degradation / destruction of building materials allowing release of asbestos fibres to air and to ground
Fill materials	Beneath existing buildings and across the commercial area	Unknown	Leaching of contaminants to ground
Coal fired boiler	Southern end of former block plant	PAHs, boron and heavy metals in ash	Settling of particulate material; ash dumped or reused as fill
Electrical transformer	Western side of former block plant	PCBs – in insulating oil	Spills or leaks of oil during general operation or when refilled.
Gas pump	South eastern corner of former block store area	Petroleum hydrocarbons	Spills during vehicle refilling; leaks from storage tanks
Mobile diesel refuelling tank	Site wide	Petroleum hydrocarbons	Spills during vehicle refilling
Commercial industrial activities	Inside western factory space of former block plant (utilised for moulding of wood products)	Suspected; incomplete Petroleum hydrocarbons (e.g. from lube oils) Volatile Organic Compounds (e.g. from adhesives)	Discharge to ground via soakage inside factory

#### **10.0 Conclusions and Recommendations**

With respect to the potential contaminant sources identified in this PSI, the following conclusions and recommendations can be made.

- The presence of ACM cladding and roofing will require appropriate management during building demolition and disturbance of surface soils in areas where ACM fragments and fibres may have been deposited;
- While it is considered likely that any fill materials used beneath building platforms in the commercial area were sourced from the adjacent quarry, there is potential that contaminated fill has been deposited on site. Sampling of fill material during site development is recommended to confirm contaminant concentrations;
- Coal ash can contain elevated concentrations of PAHs, boron and heavy metals. While there is no evidence that ash from the coal fired boiler was dumped or reused as fill on site, there is potential for localised contamination associated with coal ash containing fill if present on site. The burning of coal and the associated air discharge (fly ash and particulates) may also have resulted in a wider distribution of contaminants across the site. Further investigation of this potential issue is recommended;
- A 4,500L UST was historically located to the west of the commercial area, on ground that has since been quarried away. Therefore this facility does not represent a contaminant source for the site;
- A fuel pump is marked on various site plans at the eastern end of the former block store area, but none of the information reviewed has shown the location of tanks or lines related to this pump;
- The Domain Environmental report (DEL, 2009) states that a 13,500L AST was located on site in an area which has since been quarried away, however, no record of this facility was found during the information review undertaken for this PSI. Further information review and / or discussion with sources familiar with the historical operation of the site is required in order to confirm the location of historical petroleum storage and dispensing facilities on site. Sampling of soils is recommended in areas of the site where fuel storage and dispensing equipment is confirmed as having been located;
- Sampling of site soils in the immediate vicinity of the transformer kiosk is recommended to determine whether any actual contamination occurred from this equipment. Transformer oil should be tested for PCBs as part of the decommissioning of this equipment unless there is existing documentation to confirm that the transformer oil is free of PCBs;
- The nature of the materials used as part of their wood moulding processes by the former occupants of the western factory space in the main building complex is

unknown, however, it is considered likely that lubricating oils were required for machinery and that adhesive materials may have been required. Other hazardous materials may also have been required as part of their manufacturing processes. Any spills or leaks of such materials would have had the potential to migrate directly into the ground via the soak holes located inside this factory space. A discussion with the previous occupants of this factory space is recommended, in order to accurately determine the nature of their industrial processes, the materials that were used, and whether any spills or leaks were recorded as occurring. If these discussions indicate that discharges of contaminants to the soak holes occurred during historical factory use, then further investigation and/or assessment may be required.

The location where the mobile refuelling tanker, reported to have been in use at the site, was stored and used has not been ascertained during this review. Further, the information sources reviewed have not contained details regarding the procedures around the use of such a tanker (e.g. did refuelling take place on unsealed ground, whether drip trays were used, etc.), or whether any spills or leaks occurred. Discussion with sources familiar with the historical operation of the site is required in order to confirm the areas of the site where the mobile tanker was stored and used, whether any spills or leaks occurred, and what, if any procedures were in place to avoid or mitigate any spills or leaks that occurred.

In summary, the Three Kings Quarry site has been subject to HAIL land use based on this PSI and hence the NES applies to this piece of land. The proposed change of land use, subdivision and soil disturbance trigger the NES.

This PSI, undertaken in accordance with MfE CLMG No 1 (MfE, 2011), has identified several actual or potential contaminated land issues within the site. Completion of a Detailed Site Investigation (DSI) of the developed areas of the site is not possible at this stage due to the current building coverage and use of the site. It is proposed that actual and/or potential contaminated land issues be addressed through a Site Management Plan (SMP) to be prepared as a condition of consent prior to development of the site. The SMP should include a requirement for a report summarising compliance of the fill operation with resource consents 36221, 36222, 37770 and R/LUC/2009/743.

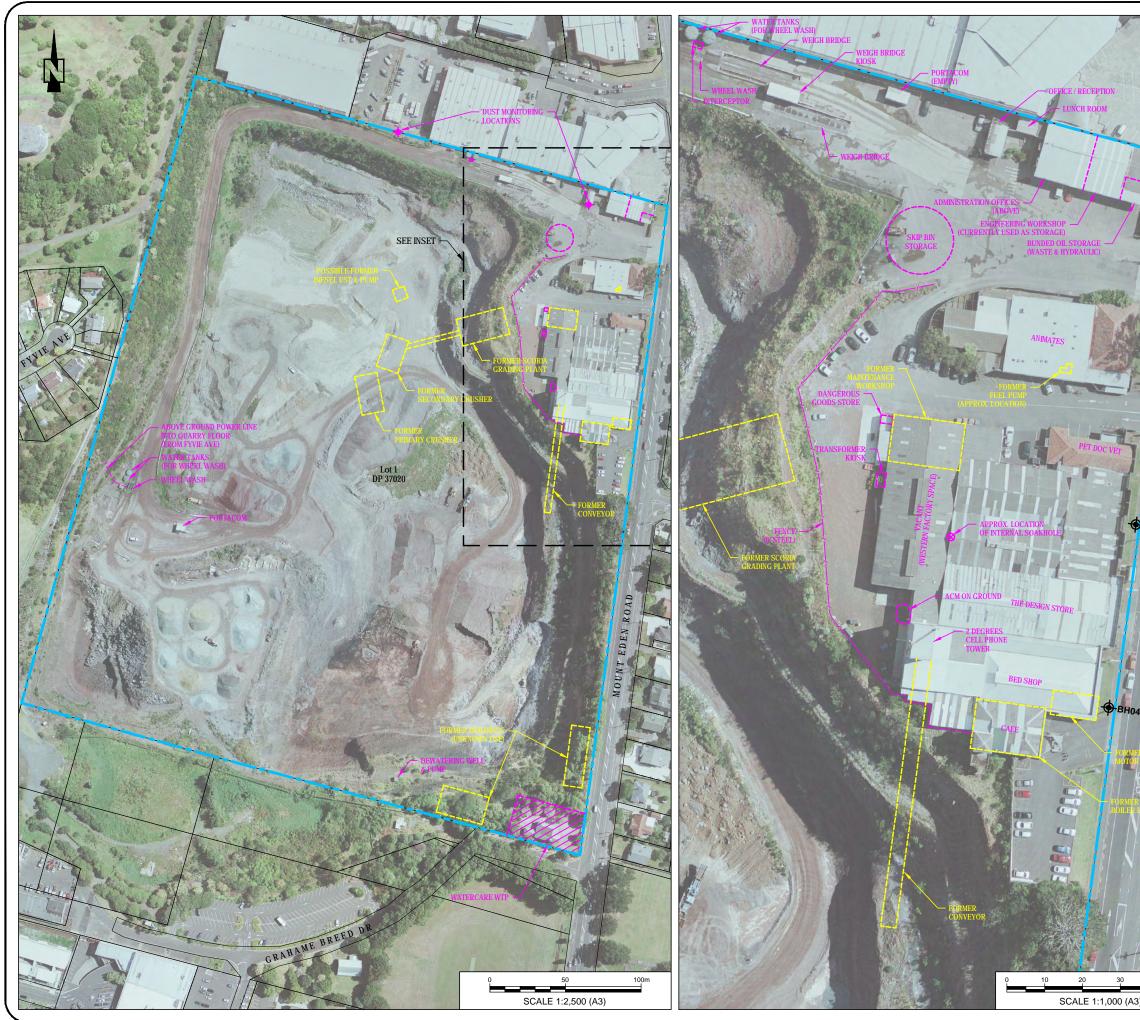
The actual and potential contamination issues identified by this PSI are able to be addressed using standard contaminated land management practices. It is understood that the proposed development will require a resource consent as a discretionary activity under NES Regulation 11.

#### **11.0 References**

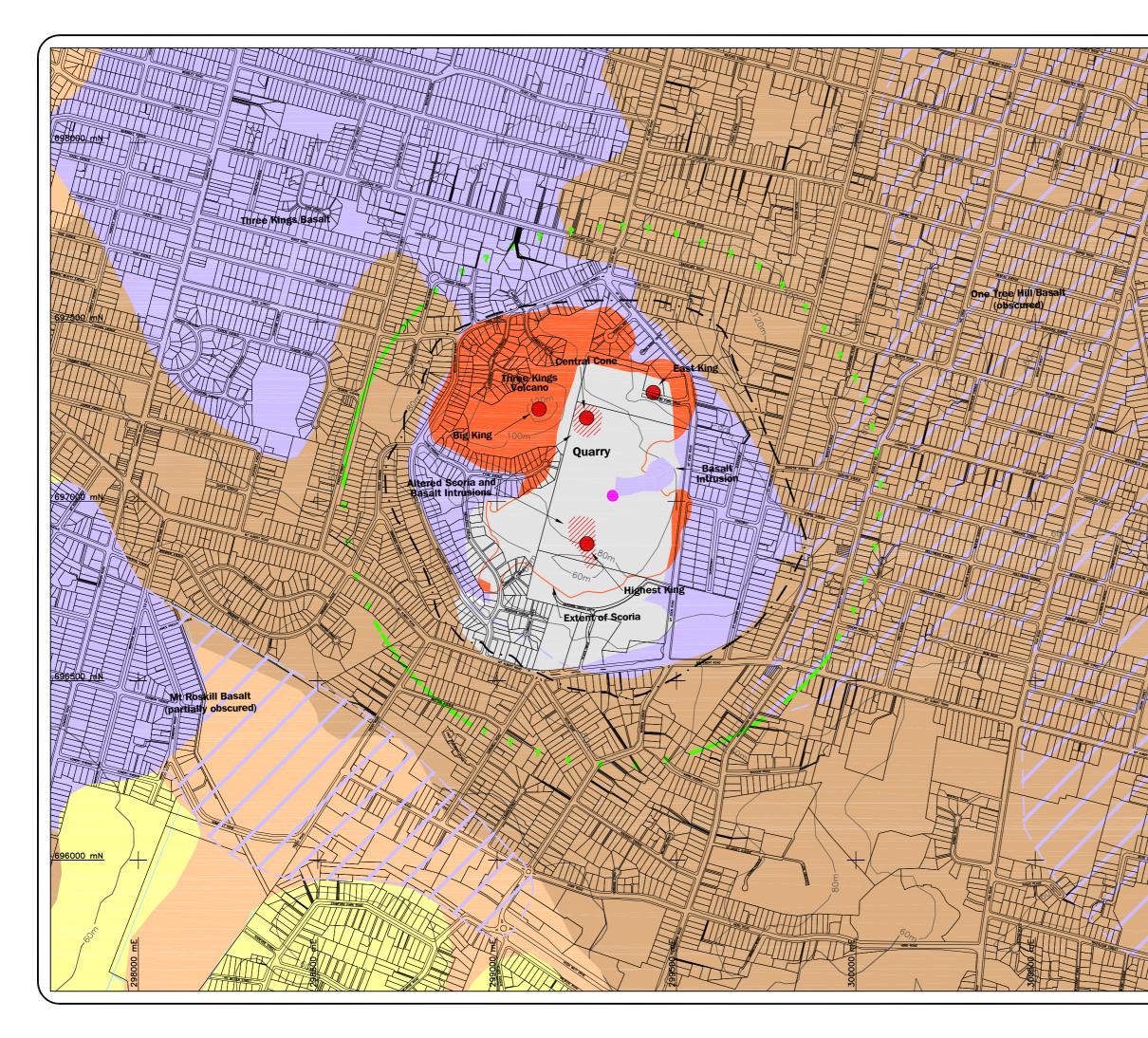
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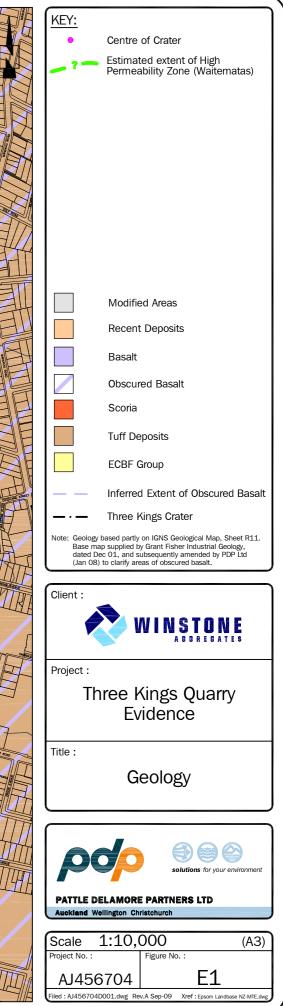
# Appendix A

Figure 1: Preliminary Site Investigation Plan Figure E1: Geology (prepared by PDP in 2009 for Winstone Aggregates Ltd)



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Appendix B Site Photographs



Photograph 1: Car parking, café and bed shop on the southern part of the commercial area viewed from the eastern side of Mt Eden Road.



Photograph 2: Bed shop and furniture shop on the southern part of the commercial area viewed from the eastern side of Mt Eden Road.

- PRELIMINARY SITE INVESTIGATION – FORMER FLETCHER QUARRY LANDS AT THREE KINGS -– FLETCHER RESIDENTIAL



Photograph 3: View north along Mt Eden Road.



Photograph 4: Veterinary clinic and Animates pet shop with access way in between.

- PRELIMINARY SITE INVESTIGATION – FORMER FLETCHER QUARRY LANDS AT THREE KINGS -– FLETCHER RESIDENTIAL



Photograph 5: Veterinary clinic adjacent to access way.



Photograph 6: View east along access way to Mt Eden Road with veterinary clinic on the right.





Photograph 7: Delivery access to the furniture store from the access way.



Photograph 8: View east along access way to Mt Eden Road with the Animates pet shop on the left.



Photograph 9: Possible former dangerous goods store on the northwest corner of the main block of buildings.



Photograph 10: Recently laid concrete pad on the northwest corner of the main block of buildings.

- PRELIMINARY SITE INVESTIGATION – FORMER FLETCHER QUARRY LANDS AT THREE KINGS -– FLETCHER RESIDENTIAL



Photograph 11: Parking area along the western side of the commercial area behind the main building complex.



Photograph 12: Access way on the northern side of the Animates building looking northeast towards Mt Eden Road.

- PRELIMINARY SITE INVESTIGATION - FORMER FLETCHER QUARRY LANDS AT THREE KINGS - FLETCHER RESIDENTIAL



Photograph 13: Electrical transformer shed on the western side of the main block of buildings.



Photograph 14: Fill point (water?) on the western side of the main building complex.



Photograph 15: View north inside the western building currently vacant.



Photograph 16: Former vehicle service pit near the northern end of the western building currently vacant.

. PRELIMINARY SITE INVESTIGATION – FORMER FLETCHER QUARRY LANDS AT THREE KINGS -– FLETCHER RESIDENTIAL



Photograph 17: Floor drains and metal covers over



Photograph 18: Soakage pit inside the western building currently vacant.

<sup>.</sup> PRELIMINARY SITE INVESTIGATION – FORMER FLETCHER QUARRY LANDS AT THREE KINGS <sup>.</sup> – FLETCHER RESIDENTIAL



Photograph 19: Recently relocated 2 Degrees electrical cabinet and cell phone tower on the existing tower building in the southwest part of the main building complex.



Photograph 20: Concrete pad for former dust extraction equipment.

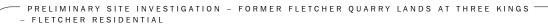




Photograph 21: Suspected ACM fragments from degrading building cladding in southwest part of the commercial area next to the 2 Degrees electrical cabinet.



Photograph 22: Suspected ACM cladding on the southwest part of the main building complex.





Photograph 23: Former location of 2 Degrees electrical cabinet.



Photograph 24: Underground chamber in the southwest part of the commercial area to the west of the main building complex.



Photograph 25: View west along the access way between the two blocks of buildings.



Photograph 26: Service chamber cover adjacent to Mt Eden Road.



Photograph 27: Drum behind the Eiffel café in the southwest part of the commercial area.



Photograph 28: Former block plant tower in the southwest part of the main building complex.



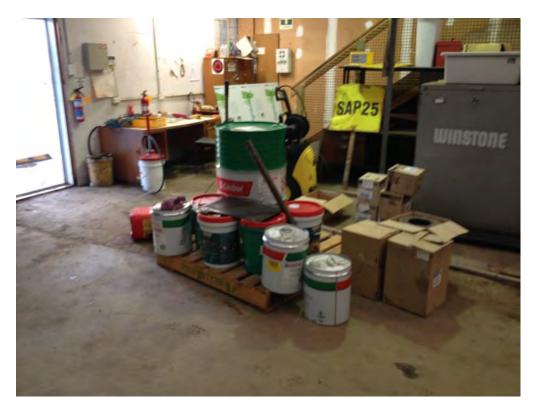
Photograph 29: Main asphalt-sealed entrance area to the quarry site from Mount Eden Road.



Photograph 30: From the main entrance area facing northeast showing the permanent site building with boardroom below (ground floor) and administration offices above.



Photograph 31: As above showing the engineering workshop area (behind roller doors).



Photograph 32: Inside the engineering workshop showing new hydraulic oil storage. Note: concrete floor.



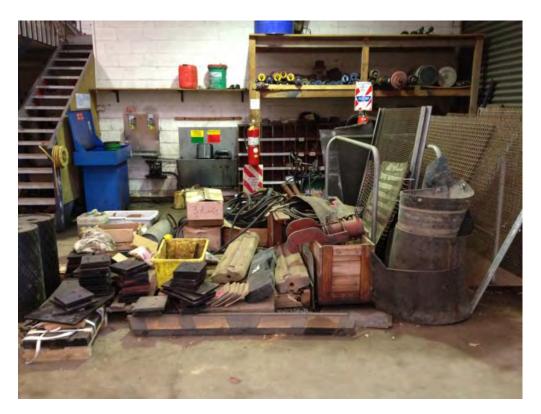
Photograph 33: Inside engineering workshop showing hand and power tools. Note: concrete floor.



Photograph 34: Inside the engineering workshop showing bunded oil storage area – both new and used hydraulic oils. Note: concrete floor.



Photograph 35: Inside the engineering workshop showing new hydraulic oil storage. Note: concrete floor.



Photograph 36: Inside engineering workshop showing storage of parts of mobile crusher unit. Note: concrete floor.



Photograph 37: Main entrance area showing Quarry Managers Portacom office and site boundary beyond (concrete block wall). Note: air/dust monitoring apparatus on top of the office.



Photograph 38: Main entrance area facing west showing the concrete-sealed quarry reception Portacom and weighbridge / wheel wash area.



Photograph 39: Quarry reception area facing west showing weighbridge / wheel wash area.



Photograph 40: Wheel wash area facing east showing water storage tanks for wheel wash water (left) and weighbridge / wheel wash (centre).



Photograph 41: Adjacent to the wheel wash and weighbridge area showing cesspit and interceptor; northern site boundary is indicated by the building on the left.



Photograph 42: Air/dust monitoring apparatus part-way along the northern site boundary.



Photograph 43: Large-scale panoramic of the quarry as it is at the time of the site visit; photograph taken from the bund wall to the south of the main entrance area.

Features in this image include: the Watercare WTP (1); the quarry pump-shed (2); former extent of quarry in adjacent southern parcel (3); former extent of quarry in south-west parcel (4); portacom in the quarry floor (5); lower wheel wash area (6); and, power into the quarry floor from Fyvie Avenue (7)

Appendix C Certificates of Title (current and historic)



### COMPUTER FREEHOLD REGISTER UNDER LAND TRANSFER ACT 1952

**Historical Search Copy** 



IdentifierNA953/21Land Registration DistrictNorth AucklandDate Issued22 February 1950

<b>Prior References</b> NA332/100	NA753/154
Estate	Fee Simple
Area	15.1841 hectares more or less
Legal Description	Lot 1 Deposited Plan 37020

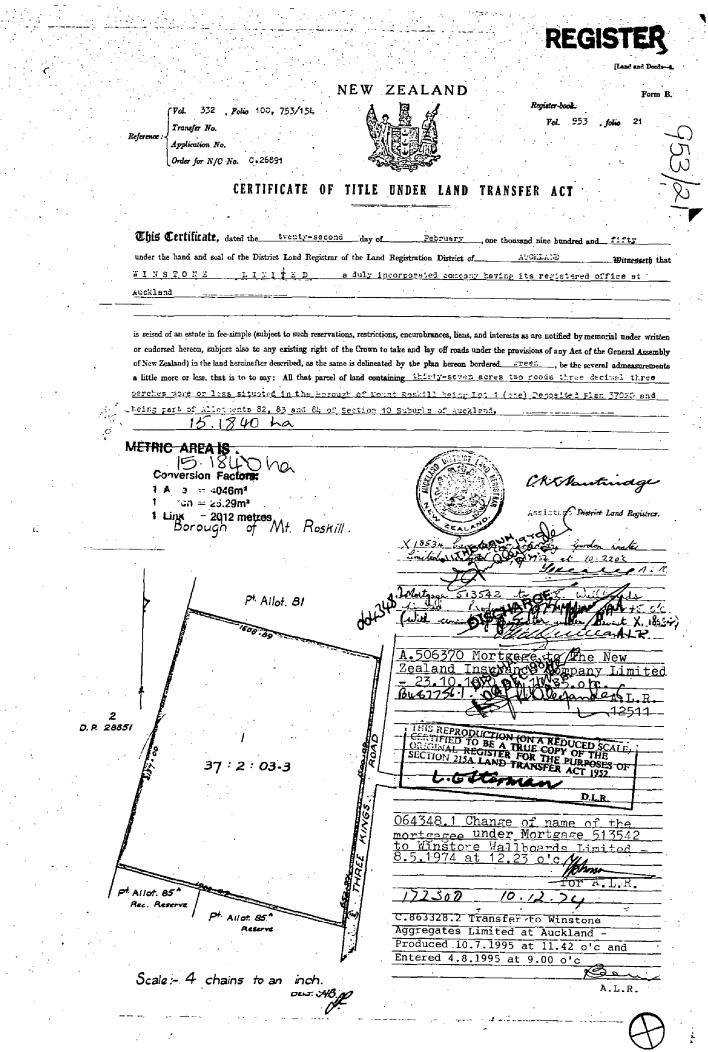
#### **Original Proprietors**

Winstone Aggregates Limited

#### Interests

7433818.1 Change of Name of Winstone Aggregates Limited to Fletcher Concrete and Infrastructure Limited - 25.6.2007 at 9:00 am

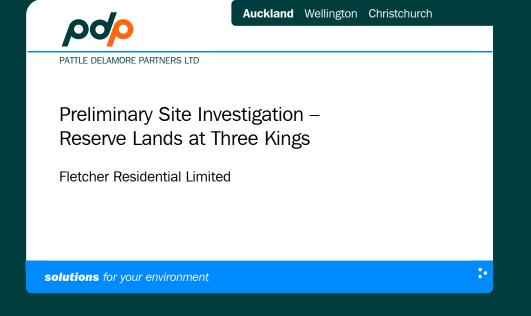
7433818.2 Bond pursuant to Section 108(2)(b) Resource Management Act 1991 - 25.6.2007 at 9:00 am



LAND RECISIONand and Deeds-4. [FORM B. ANCELLE ZEALAND. NEW Vol. 35 , Folio 49. Vol.332 rolic 100 Transfer No. 1444 9 5 5. Application No. Order for N/C No. CERTIFICATE OF TITLE UNDER LAND TRANSFER ACT. This Certificate, dated the <u>coven the</u> <u>day of <u>were</u>, one thousand nine hundred and <u>wen type ne</u> under the hand and seal of the District Land Registrar of the Land Registration District of <u>Jeur Kland</u> Witnesself that</u> orge Thomson Marriner and William Troydon Middlemore mor of an estate in fee-simple (subject to such reservations, restrictions, encumbrances, liens, and interests as are notified by memorial under written or endorsed hereon, subject also to any existing right of the Grown to take and lay off roads under the provisions of any Act of the General Assembly of New Zealand) in the land hereinafter described, as the same is delineated by the plan hereon bordered and the same is delineated by the plan hereon bordered a little more or less, that is to say: All that parcel of land containing twen ty seven (27) aches one (1) hood sove teen (1) of the land on a klan under cto 5251 which said being, part more or less land is perches Parcel. and Registry Office at here filand P3 (ughtythree) and SIt inghity four nento cton 82 pighty two), portion Kland Juhurko Athhhm 0AR Wiskict Land. Registrar. Mostgage c to 111614 Scorge attenis on mariner and William . Rey 10 Said tombre Thomson ander the Produced to Herbert Conelly · Par the yth June 1921 Jaansfer 11º 161489 Roydo P, 82 at 10 2 fam. 1al-Dian Attitutu anica tog 88 2 Scale 5 Ch. to an Inch. CANCELLED.

# Appendix **B**

Preliminary Site Investigation – Reserve Lands at Three Kings



# Preliminary Site Investigation – Reserve Lands at Three Kings

Prepared for

Fletcher Residential Limited

: July 2014



PATTLE DELAMORE PARTNERS LTD Level 4, PDP House 235 Broadway, Newmarket, Auckland 1023 PO Box 9528, Auckland 1149, New Zealand

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## **Quality Control Sheet**

TITLE	Preliminary Site Investigation – Reserve Lands at Three Kings
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CLIENT	Fletcher Residential Ltd

VERSION	Final_Version 1

- ISSUE DATE 24 July 2014
- JOB REFERENCE AJ456103R001\_PSI\_Version 1.docx
- SOURCE FILE(S) AJ456101R001.doc

#### DOCUMENT CONTRIBUTORS

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Reviewed by

SIGNATURE

Tristan Bellingham

i

Alan Pattle

#### Limitations:

This report has been prepared on the basis of information provided by Fletcher Residential Ltd and others (not directly contracted by PDP for the work). PDP has not independently verified the provided information and has relied upon it being accurate and sufficient for use by PDP in preparing the report. PDP accepts no responsibility for errors or omissions in, or the currency or sufficiency of, the provided information. This report has been prepared by PDP on the specific instructions of Fletcher Residential Ltd for the limited purposes described in the report. PDP accepts no liability if the report is used for a different purpose or if it is used or relied on by any other person. Any such use or reliance will be solely at their own risk.

AJ456103R001\_PSI\_VERSION 1.DOCX

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#### **1.0** Introduction

Pattle Delamore Partners Limited (PDP) has been engaged by Fletcher to prepare a Preliminary Site Investigation (PSI) for the reserve areas immediately adjacent to the south and south-west of the Three Kings Quarry (the Sites).

The Sites were formerly quarried between 1959 and the mid-1970s, prior to being converted into recreational parkland areas. The areas are being assessed as part of the Three Kings Renewal (Option 15H-1) currently being considered by Fletcher Residential Ltd.

This report, prepared in accordance with Ministry for the Environment (MfE) Contaminated Land Management Guideline No. 1 (CLMG No. 1), summarises the actual and/or potential contaminated land issues at the site. This report has been prepared in accordance with requirements of the following regional and national contaminated land regulations:

- Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 (NES)
- Auckland Council Regional Plan: Air, Land and Water (ACRP:ALW, operative 30/09/13)
- Proposed Auckland Unitary Plan (PAUP, notified 30/09/13)

#### 2.0 Objectives

The key objective of this work has been to identify any actual or potential soil contamination issues within the Sites and to summarise the relevant information in a PSI report.

#### 3.0 Scope of Work

The scope of work undertaken by PDP, as instructed by Fletcher, has included:

- Desktop study including review of historic aerial photos, Land Information Memorandums (LIMs), property file(s), and an Auckland Council site contamination enquiry.
- Review of other relevant site history information held by Council and/or Three Kings Quarry/Winstone Aggregates.
- Site walkover and comparison of current landform and contours with historic and proposed future landform and contours, to assess if filling has taken place.
- : Identification of actual or potential contamination issues at the Sites.

#### 4.0 Site Identification, History & Description

#### 4.1 Site Description

The area of investigation is the land to the south and southwest of the Main Three Kings Quarry. The investigation area is split into two properties bounded by the Quarry to the north, Mount Eden Road to the east; Grahame Breed Drive, the Three Kings Plaza and residential properties to the south; residential properties of Smallfield Avenue to the west; and, residential properties of Fyvie Avenue and the Big King Reserve recreation area to the north-west.

The two areas covered by this PSI are located to the south and southwest of the Three Kings Quarry. The two areas are 1011 Mount Eden Road and 23-25 Fyvie Avenue. PDP has been advised that the Sites are reserve land vested in trust in Auckland Council in respect of which the Crown has underlying ownership. The current and historic Certificates of Title are included in Appendix C. The extent of the Sites is shown on Figure 1 (see Appendix A).

It should be noted that the 1011 Mount Eden Road property covers a larger area than the proposed development. The property continues to the south-east of Grahame Breed Drive into an area also considered part of the Three Kings Reserve; Part Allotment 85c – which is not being assessed as part of this PSI.

#### 4.2 General Site History

A brief history of the Three Kings Quarry, sourced from the Three Kings Quarry website (<u>http://www.threekingsquarry.co.nz/consenting-sites/three-kings-quarry/history/</u>), is given below. Information relevant to this PSI for the proposed areas are highlighted in bold.

According to the 1964 book "City of Volcanoes. A Geology of Auckland", the volcanic cone complex at Three Kings (which encompasses Winstone Aggregates land and adjoining properties) has been subject to quarrying from about the time the Winstone brothers started their horse and cart deliveries of coal from the Queen Street wharf in the mid-1800s.

Historical records show that Governor Fitzroy granted the land to Messrs Hallimore and Polack in 1845. Winstone Ltd purchased the site in 1922 from a William Connelly who had acquired the fee simple in May 1884.

Prior to the 1960s, quarrying occurred above the level of surrounding land and there were three quarries in the vicinity of the 15 hectare Winstone property. **Today, none** of the original topography remains and the entire site has been lowered to road level or below.

Quarry activity to the north of the current Winstone Aggregates site ceased about 25 years ago, and it was subsequently filled and rehabilitated and now houses a mix of light industrial and residential development.

To the south and southwest is previously quarried reserve land. Last quarried under the direction of the Mt Roskill Borough Council, it ceased in the mid-1970s and is now managed by Auckland Council.

In the north-eastern corner of the 15 hectare site are buildings and industrial yards originally established in the 1950s when Winstones developed New Zealand's first concrete masonry manufacturing plant (Vibrapac). Its products were made largely from the scoria available on the site taking advantage of its relatively light weight. A builder's supply yard then operated from these premises until 1997.

The quarry's output grew steadily with the development of the surrounding community and reached its present capacity in the 1950s. Mines returns and company records show that annual production has exceeded 200,000 tonnes, but that demand currently averages 160,000 to 180,000 tonnes per year.

(Emphasis added).

Anecdotal evidence suggests that the land to the south of the Main Three Kings Quarry Site has been used as a dump for the (Auckland) Parks excess material and has also suffered from illegal dumping since the cessation of quarrying activities.

#### 4.3 Geology, Hydrogeology and Topography

The Geology of the Auckland Urban Area (Kermode, 1992) geologic map indicates that the Sites are underlain by basalt and basanite scoria of the Auckland volcanic field and construction fill. These are volcanic deposits characterised by red, grey and black, angular to subrounded, vesicular, pebble- to boulder-sized fragments, and fill characterised by compacted clay- to gravel-sized materials, including possible demolition debris. A geological map of the Three Kings area (Figure E1, see Appendix A), prepared by PDP for the application for a controlled fill resource consent in 2009, is attached in Appendix A.

Groundwater flows towards the groundwater pump in the south eastern corner of the quarry which is used to lower the water table in order to facilitate the quarrying operation. The abstracted groundwater is then discharged into the reticulated stormwater network which ultimately discharges to the Manukau Harbour. Groundwater is also used for municipal water supply (via the Watercare Water Treatment Plant in the southeast corner of the main Three Kings Quarry site) and for site use at Three Kings Quarry (dust control and truck washes). Without dewatering, groundwater within the quarry naturally ponds within the scoria and basalt until it fills up an underground reservoir and overflows to the north through a breach in the tuff ring surrounding the quarry. From here it flows towards Western Springs and ultimately to Meola Reef where it discharges into the Waitemata Harbour.

Ground level at the Three Kings Reserve sportsfield (23-25 Fyvie Ave parcel) is approximately 10-12m below the bordering roads (from AC GIS contours); Fyvie and Smallfield Avenues. The sportsfield area is relatively flat across its length and then drops steeply at the eastern parcel boundary to the quarry floor.

To the south of the quarry, the sportsfield drops a few metres to meet the western edge of the 1011 Mount Eden Road parcel. Steep basalt bluffs border the parcel to the south standing 20m above the flat ground platform at the south-western corner of the quarry. A walking track follows the base of the bluffs to the carpark. To the south of the track, at 77m RL, is the works depot; and to the north another steep bluff drops down to a relatively flat area to the south of the quarry and then the quarry boundary (at about 60m RL). The carpark extends east toward Grahame Breed Drive and the site boundary. At the eastern edge of the carpark is a moderate rise to 82m RL – the approximate level of Mount Eden Road.

#### 5.0 Aerial Photographs

Aerial photographs from 1940, 1959, 1996, 2001, 2006, 2008 and 2012 were reviewed. The historic aerial photographs were all accessed from the Auckland Council GIS website (<u>http://maps.aucklandcouncil.govt.nz/</u>); the most recent aerial photograph was accessed from Google (<u>https://www.google.co.nz/maps/</u>). The 2014 aerial photograph was supplied by Fletcher (flown by Precision Aerial Mapping, January 2014).

#### 5.1 1940 Aerial Photograph

The 1940 aerial photograph shows that the investigation areas are vacant/reserve areas at this time. The surface expression of the present-day Grahame Breed Drive is shown as an access road to the south of the quarry area.

To the immediate north of the 1011 Mt Eden Road property, quarrying activities have commenced within the main Three Kings quarry site. To the east of the area is Mount Eden Road with established residential properties on the eastern side and a sports field/school to the south-east. To the south are commercial/industrial land-use sites and then Mount Albert Road (as per present-day). The south-west of the investigation area appears to be farmland/agricultural land-use area. To the west is residential/recreation land-use. Land-use to the northwest appears to be recreational parkland of the present-day Big King Reserve volcanic cone.

#### 5.2 1959 Aerial Photograph

The 1959 aerial photograph shows that the quarrying activities of Three Kings Quarry have expanded significantly since 1940 – in the parcel to the north of the quarry and into the two investigation areas. Evidence of quarry plant, roads and buildings exists in the southern investigation area; and roads and excavations in the south-west area. To the south of the quarry parcel, the present-day Grahame Breed Drive appears as a metal road, providing an access point to the quarry and to the 1011 Mt Eden Road site. At the western end of the Grahame Breed Drive access road is a parking and storage area (also metal), where the present-day works depot is situated.

Outside the investigation areas, the present-day roads and layout is now established. Land-use to the east remains the same as previously identified (residential). Land-use to the south-west is recreational; the present-day Three Kings Reserve. Land-use to the

south has been developed and the building coverage has increased; land-use remains commercial/industrial. Major development has occurred to the west and northwest of the 23-25 Fyvie Ave site, with the construction Smallfield Ave and Fyvie Ave (as per their present-day layout). Land-use in this area is residential. Beyond Fyvie Ave in a northwest direction is Big King Reserve.

#### 5.3 1996 Aerial Photograph

The 1996 aerial photograph is of poor quality. It shows the investigation areas still included in the quarry operations, with deep benches and exposed soil/rock material evident in the image. The investigation areas are both overgrown with grass/tussock indicating that quarrying in these areas has likely been stopped for some time. Grahame Breed Drive is now asphalt-sealed and the adjacent carpark has been constructed. The works depot area looks as it does now, and the area outside this is also asphalt-sealed.

The surrounding area is shown much as it is today. The present-day Three Kings Plaza is now the main commercial premise to the south of the investigation areas.

#### 5.4 2001 - 2008 Aerial Photographs

The 2001 aerial photograph shows the investigation areas both as recreation areas – with no quarry activities being undertaken on the land at this time.

- : 23-25 Fyvie Avenue has walking tracks and grassland; and,
- 1011 Mt Eden Road is heavily planted with bush and also has roads/tracks dissecting it.
- The carpark area is shown much as it was in the 1996 aerial image, and much as it stands today.
- The works depot/community centre area building remains as it did in 1996 with diagonal carparking to the immediate north.
- : The Telecom cellular tower has been constructed.

The surrounding area is shown much as it is today. This trend continues through the 2000's aerial photographs available for viewing on the Auckland Council GIS viewer. Relevant events of note from other aerial images include:

- The 2006 aerial image shows the 23-25 Fyvie Ave sportsfield are has been filled to its present-day level, although no sportsfield is identifiable at this time;
- The 2006 image shows the works depot still shows the area with diagonal parking, but the compound has now been fenced. No maintenance/care equipment and/or trucks are identifiable at this time;
- : The 2008 image shows the sportsfield has been completed;
- The 2008 aerial image shows the works depot fenced and storage of equipment is identified outside the depot building.

#### 5.5 2012 Aerial Photograph (Google Earth)

The 2012 aerial photograph shows the investigation and surrounding areas much as they are today. The sportsfield is clearly evident in the 23-25 Fyvie Ave parcel. As are the area to the immediate south of the quarry parcel, the works depot, carpark and former dog pound area.

#### 5.6 2014 Aerial Photograph

The 2014 aerial photograph covers most of the site apart from the western area adjacent to Fyvie Ave (refer to Figure 1 in Appendix A). The high quality of this aerial photograph means that many of the relevant site features, such as the works depot area, the former dog pound and waste disposal areas, can be clearly seen.

### 6.0 Auckland Council Information

#### 6.1 Land Information Memorandum

Land Information Memorandums (LIMs) for the two sites were obtained from the Auckland Council by PDP on 14 May 2014. Resource consent and building consents issued by the former Auckland City Council, former Auckland Regional Council and the Auckland Council are detailed in the LIM; there are none listed or considered relevant to the PSI. The information for the Sites has been combined for ease of identification below. Relevant information from the LIM is included in a separate electronic file with other supporting information.

A LIM note for the adjacent site (the Main Three Kings Quarry) states that 'Parts of the original quarry have already been reclaimed, most notably to the north and southwest of the site. The land to the north is now used for business purposes with some residential activity and remains in the ownership of the applicant whilst the land to the south and southwest was vested to the council and is used as a public reserve'.

No building, planning, subdivision or resource consents are provided.

The LIMs also note the following in relation to the Sites:

- Soil issues Soil issues recorded. The land may not be suitable for particular development of land use purposes. A soils report must be submitted with any building and/or resource consent application.
- Contamination Issues This site is identified within the council's register of contaminated sites due to the current or past land use activities commonly associated with hazardous substances that may have resulted in contamination. This site is potentially contaminated but not investigated yet. Changes in land use or redevelopment of this site may require a controlled resource consent application, which may require reports such as further site investigation, remediation action plan, management plan or contamination risk assessment. No reports are held about issues specific to this site.

## 6.2 Property File

Property file information was requested from Auckland Council for the investigation areas. While a significant amount of information was contained in the 1011 Mount Eden Road property file, there was no information for the 23-25 Fyvie Avenue property (hence it was not requested).

The 1011 Mount Eden Road file was obtained and reviewed, and any documents relevant to the site history, or contamination issues were extracted. The relevant documents from the property file are included in a separate electronic file with other supporting information.

Site features relevant to the site history or which have been identified as a potential contaminant source are shown on Figure 1 in Appendix A.

# Mount Roskill Borough Council – Three Kings Reserve Management Plan (MBRC, 1987)

One important document contained in the property file is the Mount Roskill Borough Council Management Plan (MP) for the Three Kings Reserve. The MP describes Three Kings Reserve as both of the 1011 Mount Eden Road and 23-25 Fyvie Avenue properties.

The MP outlines the reserve as including the quarry areas behind Smallfield Avenue, the playing field and the areas fronting onto Mount Albert Road. It describes that in 1987, the reserve is approximately 'L-shaped' and fell into four distinct areas:

- quarry area to the north assumed to be 23-25 Fyvie Ave and the area of 1011 Mount Eden Road of interest based on the plan included in the MP;
- central recreation area identified as the park with athletic field and tennis courts that is not included in the PSI;
- Council Depot and Workshops identified as the area containing the present-day works depot; and,
- areas occupied by civic buildings identified to the south of the 1011 Mount Eden Road parcel.

The MP describes the quarry area 'in the north-western corner of the reserve is a scoria pit covering an area of approximately 15,000m<sup>2</sup>. The [scoria pit] walls are approximately 8 metres high and the area is bounded to the north-east by Winstone's quarry. To the east is a second quarry, the floor of which is approximately 15 metres lower than the western quarry and covers 6,000m<sup>2</sup>. The north side of the quarry rises steeply to the boundary with Winstone's quarry'.

At the time of the management plan (c.1987), the following site users are identified:

- Winstone's quarry;
- · Works Depot;
- Three Kings Tennis Cub onsite since 1945;
- : Municipal Band Pumphouse headquarters since 1958;

- : Athletic track;
- : Dog pound;
- : Relocatable Building.

These users largely fall outside the part of the 1011 Mount Eden Road parcel that is of interest for this PSI, and hence there is no further discussion of these areas. The users that do fall within the area of interest are the quarry activities, the works depot and the dog pound.

Under the control of the Mount Roskill Highway Board (later the MRBC) the metal reserve was used to provide scoria for roading purposes until major quarrying finished in the early 1970's.

- Between 1930 and 1957 the metal reserve was gradually added to the Mt Roskill Domain;
- In 1962 all public domains in the Borough were united to form the Mt Roskill Domain;
- In 1964 the Council acquired the 2 lots comprising the second quarry (Lot 261 and Lot 268) this area had been previously quarried, the scoria being used to build the north-western motorway; and,
- In 1969 the Council permitted Winstone's to excavate for 10 years in return for forming the area into one suitable for a playing field – as it is at the time of the management plan.

#### **General Property File Information**

Many of the documents in the property file are building warrants of fitness and building consent related documents. There are four main building projects that the information relates to, however only two fall in the area of interest:

- : Mount Roskill Community Hall / Mount Roskill Parks Depot
  - Built before 1987 (but not 1959 based on aerial images)
    - Upgrade works September 2008
    - Conversion from Community Hall to Parks Depot 2005
- : Telecom Mast / GPS Upgrade
  - Built 2000
  - Upgrade works 2008

In each case, where prior documentation plans the construction management, the documents all contain some reference to contamination that reads 'if evidence of contamination is discovered during the proposed works, the consent holder shall immediately cease all work and notify the Resource Consent Monitoring Leader, and provide a site contamination and remediation report to the satisfaction of the Council'.

Further information on the nature of the soils contamination was sought from AC but no information is held.

#### **Three Kings Quarry Property File Information**

The property file for the main Three Kings Quarry, reviewed by PDP for a PSI for that site, contains a preliminary report by Fraser Thomas Partners (FTP) for the Mt Roskill Borough Council. The report, and accompanying cover letter dated 8 July 1987, presents an engineering assessment of the feasibility of quarrying the remaining scoria reserves in and around the Three Kings area.

The focus of the FTP report is on the former Mt Roskill Borough quarry lands that are the subject of this investigation, and the report contains some information on the history of the site. The former quarry area at 23-25 Fyvie Ave was reportedly excavated down to RL56m, although the report also refers to the excavation being down to RL70m not as deep as the other quarry area immediately south of the main Three Kings Quarry site. The FTP report states that, according to the Winstone Quarry Manager, waste basalt rock (1,500m<sup>3</sup>) has been dumped in a trench in the floor of the Fyvie Ave quarry area.

The quarry area immediately south of the main Three Kings Quarry site at 1011 Mt Eden Road was reportedly quarried down to RL56m, the possible natural groundwater level. The FTP report states that 'a lot of waste has been dumped on the floor', but does not give any further detail on the nature of the 'waste' material.

The FTP report also discusses the future backfilling of the quarry areas after extraction of the scoria with refuse (municipal/household) and/or fill (hardfill/clay/organics).

#### 6.3 Contaminated Site Enquiry

A Site Contamination Enquiry was submitted to Auckland Council on 15 May 2014. The council operator searched the records of landfill, bore, air discharge, industrial and trade process consents, contaminated site discharge consents and environmental assessments within approximately 200m of the Sites. Due to the close proximity of the Sites that comprise the investigation area, this 200m radius provides some overlap in the search area – as such, all of the results returned from the site contamination enquiry have been combined in the summary. The results of the enquiries are summarised below, and the complete enquiry response(s) are included in a separate electronic file with other supporting information.

A search of consents and environmental assessments within 200m of the subject site identified the following:

Active Consents:

- Discharge consent 37770 for land use, earthworks and discharges associated with the development of a controlled fill at 985 Mt Eden Rd.
- Contaminated site discharge consent 36222 for land use, earthworks and discharges associated with the development of a controlled fill at 985 Mt Eden Rd.
- Contaminated site discharge consent 20836 for the redevelopment of a retirement home at 539 Mount Albert Road.

• Discharge to air consent 40041 for the extraction, crushing, screening, transport storage and processing of aggregate at 987-1021 Mt Eden Rd.

#### Proposed Consents:

- : Discharge to air consent 36223 prelodgement set-up for 985 Mt Eden Rd.
- Bore consent 9818 for the construction of one pumped test bore and up to 7 observation wells for groundwater level and/or flow investigations along Mt Eden Rd.

#### **Expired Consents:**

- Bore consent 22986 for the construction of a bore for groundwater level and/or chemistry investigations at Mount Albert Road.
- Bore consent 16094 for the construction of a bore for groundwater level and/or chemistry investigations at Mount Albert Reserve.
- : Bore consent 21803 for the construction of a soakhole at 37 Landscape Rd.
- Bore consent 16095 for the construction of a bore for groundwater level and/or chemistry investigations at Fyvie Rd Reserve.
- Discharge to air consent 21875 for the extraction, crushing, screening, transport storage and processing of aggregate at 985 Mt Eden Rd.
- Bore consent 15588 for the construction of a bore for groundwater level and/or chemistry investigations at 987-1021 Mt Eden Rd.
- Bore consent 13346 for the construction of a bore for the extraction of groundwater for municipal supply at 987-1021 Mt Eden Rd.
- Bore consent 21583 for the construction of a bore for the extraction of groundwater for municipal supply at 985 Mt Eden Rd.
- Bore consent 20970 for the construction of a bore for groundwater level monitoring on Mount Albert Road.

Pollution Incident:

 In September 2010, an incident of <10 litres of washwater being discharged to stormwater is noted to have occurred at Grahame Breed Drive.

## 7.0 Site Walkover

The site walkover was completed by PDP on 19 May 2014 in fine weather conditions. The extent of the site walkover was focussed on the following areas:

- : 23-25 Fyvie Avenue sportsfield and former scoria pit;
- : Mount Roskill / Auckland Council works depot;
- Telecom cellular / GPS tower;
- : Carpark Area;
- : Former quarry pit (to the south of the Main Three Kings Quarry); and,
- Former dog pound area.

Inspections were not carried out inside the works depot building and current site infrastructure because they were locked/unavailable (see below). Refer to Appendix B for representative site photographs.

An inspection of the 23-25 Fyvie Ave sportsfield and former scoria pit of 15,000m<sup>2</sup> (MRBC, 1987) showed that the ground level was relatively flat across the extent of the sportsfield. The ground surface was finished as a specially-constructed sportsfield. The area showed no evidence of the rock floor expected from former quarry operations. It is suspected that filling of this area has been significant to bring the ground level to its current height. The nature of this fill material is unknown.

As mentioned, the Mount Roskill / Auckland Council works depot building was not inspected, but the area was assessed from outside the fenced compound. The compound houses a building along its southern boundary – presumably used as administration offices, equipment storage and chemical/fuel storage – and the remainder of the compound is sealed with asphalt. The depot is home to plant used for the maintenance and care of recreational parks and sportsfields under the jurisdiction of AC. The plant housed within the depot consists of 4-Wheel drive trucks, utilities, ride-on mowers and powered hand tools. The depot stores chemicals, fuels and oils that are used with this type of equipment (as noted on their hazard identification board).

The Telecom cellular and GPS tower was identified during the walkover. The area was surrounded by landscaped garden, and a powered container. The use of the container is unknown.

The carpark area is extensive; covering approximately 6,400m<sup>2</sup>. The entire area is sealed with asphalt. Stormwater management exists in the area to direct rain water and run-off into the Council's reticulated system.

The former quarry pit of 6,000m<sup>2</sup> area between the northern edge of the carpark and the southern edge of the Main Three Kings Quarry was previously described (in MBRC, 1987) as 15m deeper than the former scoria pit. The current ground level at the time of the investigation was relatively flat across the extent of the area. The current ground surface is grass and tussock over rock rubble, scoria and clay. It is suspected that filling of this area has been significant to bring the ground level to its current height. The nature of this fill material is unknown. Some refuse material (wood and metal pipe) was noted in this area; piled on the current ground level (see photos). A slope from the flat platform the south-west of the quarry down to the former quarry pit area appeared to be artificial.

The former dog pound area is located to the north-east of the 1011 Mount Eden Road parcel. The area has gated vehicular access from Grahame Breed Drive. The compound is fenced. Some refuse material (bricks) was noted in this area; piled on the current ground level (see photos).

## 8.0 Summary

This PSI into the current and historical use of the reserve land areas of 23-25 Fyvie Ave and 1011 Mount Eden Road has shown that the subject land has been used by local government since 1955; although quarrying activity has been previously permitted for Winstone's in these areas. The current works depot building onsite was constructed sometime between 1959 and 1987. The building has been extended and altered, both internally and externally, since construction. The building has been utilised predominantly as the works depot where its primary uses are:

- : Storage of park maintenance and care equipment;
- : Storage of fuels and chemicals for park maintenance and care; and,
- : Administrative offices.

Table 1 below summarises the potential sources of contamination, which have been identified through a search of historical and current documents relating to the Sites, and from a site walk over. The location of these potential contaminant sources are also indicated on Figure 1 in Appendix A.

Table 1: Potential Sources of Contamination				
Contaminant Source	Location	Contaminant(s) of Concern	Potential Contamination Mechanism	
Unlicensed fill material of unknown nature and extent	Former scoria pit beneath sportsfield Former quarry pit Artificial slope	Unknown – possible heavy metals; organochlorine pesticides; hydrocarbons; etc (depending on nature of fill)	Disposal of contaminated fill; leaching of contaminants to ground	
Chemical / fuel / oil storage	Council works depot	Hydrocarbons and hydrocarbon products; Pesticides	Storage and use of chemicals, fuels and oils; spills and leaching of contaminants to ground	
Diesel refuelling	Council works depot	Petroleum hydrocarbons	Spills during vehicle refilling	
Refuse materials	Former quarry pit and in former dog pound area	Unknown – possible heavy metals; hydrocarbons; etc (depending on nature of fill)	Leaching of contaminants to ground	

Table 1: Potential Sources of Contamination			
Contaminant Source	Location	Contaminant(s) of Concern	Potential Contamination
			Mechanism
Carpark area	Southern edge of 1011 Mt Eden Rd parcel	Hydrocarbons and heavy metals	Spills or leaks of oil from vehicles while parked

#### 9.0 Conclusions and Recommendations

With respect to the potential contaminant sources identified in this PSI, the following conclusions and recommendations can be made.

- : Significant fill materials are expected in three main areas of the site:
  - 1. beneath the sportsfield;
  - in the area of the former quarry pit to the south of the quarry parcel; and,
  - 3. the artificial slope at the south-western corner of the quarry parcel.

The extent of the fill material was not documented at the time of the filling; and no analytical results are on file which characterise the nature of the fill material. There is potential that contaminated fill has been deposited onsite. There has reportedly been some 'waste' material dumped in the former quarry area at 1011 Mt Eden Road. Investigation prior to site redevelopment to determine nature and extent of fill materials is recommended;

- The nature of the materials used and stored onsite as part of the continued use of the area as a works depot (since 2005) suggests that investigation in this area should target hydrocarbons and potentially pesticide/herbicide contaminants. In more recent years (since the 1996 aerial image) any spills or leaks of such chemicals is expected to have run-off into the reticulated stormwater network, but potential for ground contamination exists where the area may not have been previously sealed.
- Further, the level surface of the works depot compound suggests some cut or fill earthworks where material may have been imported to site. There is potential that contaminated fill has been deposited onsite. A discussion with a longstanding employee of the works depot is recommended, in order to accurately determine the type of chemicals and fuels stored here both now, and in the past. If these discussions indicate that discharge of contaminants to ground may have occurred during the historical occupation of the area, then further investigation may be warranted;
- Surface refuse material has been identified above the former quarry pit and in the former dog pound area. At the surface the refuse material comprises metal,

wood and bricks. This material is not expected to be of a hazardous nature, but may have leached contaminants onto the surrounding ground. Investigation is recommended;

The carpark area has been in place at least since 1987 (reported in MBRC); and the present-day Grahame Breed Drive has existed since at least 1940 in some form. The nature of contaminants from a roading area like this typically include metals and hydrocarbon-based compounds. While the area is currently sealed, there is no information available to assess the former surface (e.g. prior to the 1996 aerial image). If the surface was metalled (as the previous Grahame Breed Drive was), then the contaminants of concern could have discharged directly to the grounds surface. Another consideration is that the large area is relatively level and some earthworks to cut/fill the surface are anticipated to have taken place in the past. This would typically include the addition of fill material during the carpark construction. There is potential that contaminated fill has been deposited onsite.

In summary, the subject investigation area has been subject to HAIL land use based on this PSI and hence the NES applies to this piece of land. The proposed change of land use, subdivision and soil disturbance trigger the NES.

This PSI, undertaken in accordance with MfE CLMG No 1, has identified several actual or potential contaminated land issues within the subject investigation area. A Detailed Site Investigation (DSI) should be undertaken to characterise the nature and extent of potential contamination issues, primarily fill of unknown origin, across the undeveloped areas of the site. A DSI for the entire site may not feasible at this stage due to the current site use (car park and works depot). Hence it is proposed that actual and/or potential contaminated land issues in these areas, or the entire site, be addressed through a Site Management Plan (SMP) prior to or during development of the site.

The actual and potential contamination issues identified by this PSI are able to be addressed using standard contaminated land management practices. It is understood that the proposed development will require a resource consent as a discretionary activity under NES Regulation 11.

#### **10.0 References**

- AC, 2013a. Auckland Council Regional Plan: Air, Land and Water. Auckland Council. Operative 30 September 2013.
- AC, 2013b. *Proposed Auckland Unitary Plan*. Auckland Council. Notified 30 September 2013.
- Kermode L. O. 1992. *Geology of the Auckland Urban Area*. Geological Map of New Zealand 1:50,000, Sheet R11.
- MfE, 2011. Contaminated Land Management Guideline 1. Site Investigation and Analysis of Soils. Ministry for the Environment.

- MfE, 2012. Users' Guide National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health, Ministry for the Environment.
- Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011.

# Appendix A

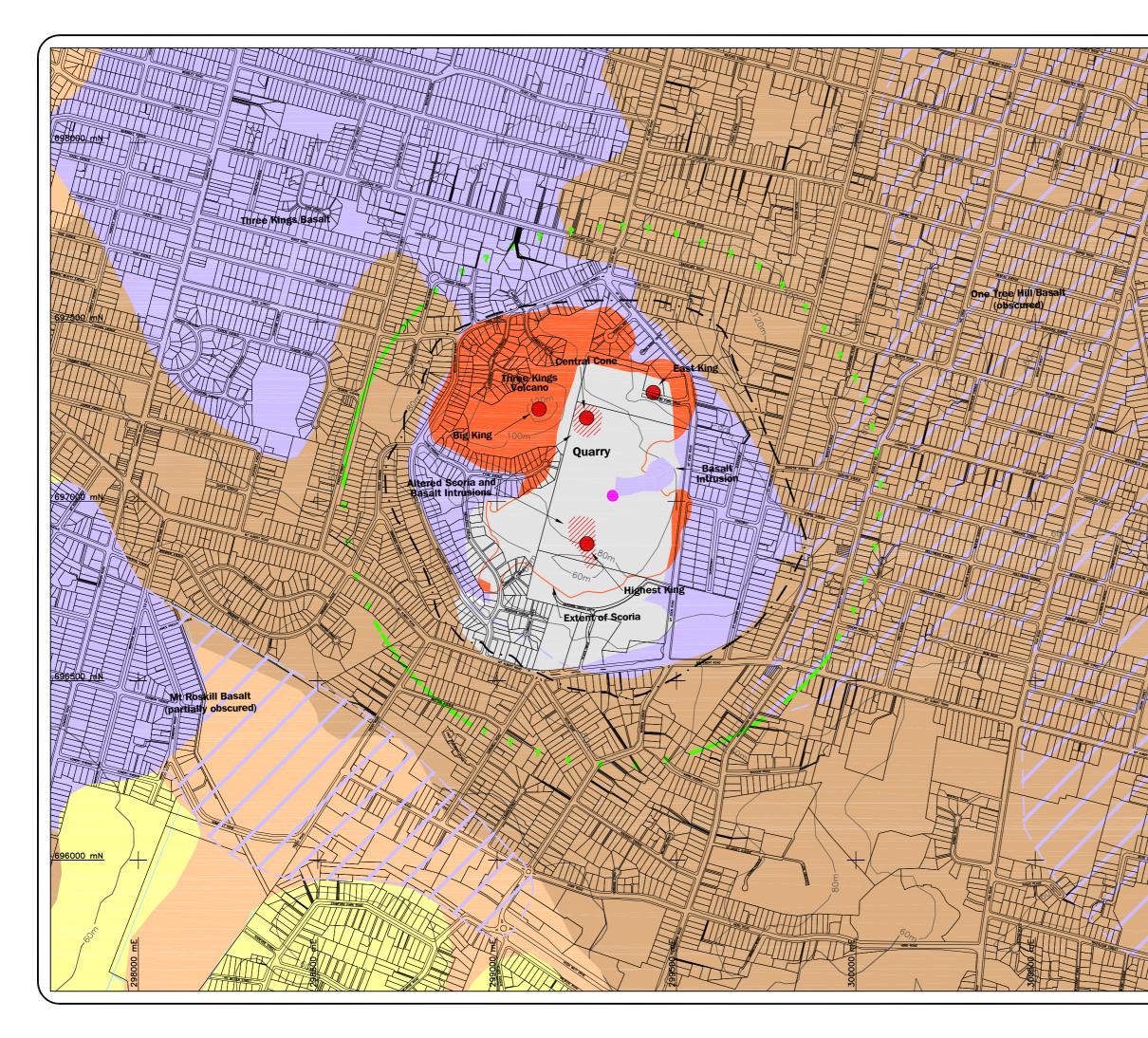
Figure 1: Preliminary Site Investigation Plan Figure E1: Geology (prepared by PDP in 2009 for Winstone Aggregates Ltd)

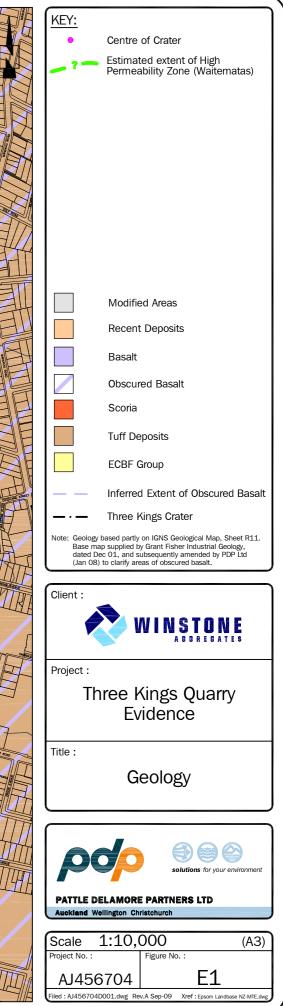


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Appendix B Site Photographs



Photograph 1: Panoramic of 23-25 Fyvie Avenue sports field facing north-east; sports field in the foreground and Three Kings Quarry in the background.



Photograph 2: Southwest corner of the quarry facing northeast looking into the Three Kings Quarry.



Photograph 3: Southwest corner of the quarry facing east looking over the former quarry pit area to the hill and former dog pound area and beyond to Mt Eden Road.



Photograph 4: Southern track area looking northeast toward the site boundary and the quarry over the artificial hill area in the centre of the photograph.



Photograph 5: Surface of former quarry pit to the south of the quarry parcel showing the different types of refuse material



Photograph 6: Southern boundary of the site facing south showing the Telecom cellular and GPS tower and the associated powered container.



Photograph 7: Southern boundary of the 1011 Mt Eden Rd site facing west to northwest and showing the extent and surface of the carpark area.



Photograph 8: Southern boundary of the 1011 Mt Eden Rd site facing west and showing the extent of the works depot compound.



Photograph 9: Panoramic from the former dog pound area at the southeast quarry facing northwest showing the sports field, the former quarry pit and the Three Kings Quarry.



Photograph 10: Former dog pound area showing the current infrastructure



Photograph 11: Former dog pound area showing rubbish (bricks) pile



Photograph 12: Southern boundary of the site (Grahame Breed Drive) facing east to southeast and showing the athletic field and remaining part of the 1011 Mt Eden Rd parcel. This are is not included in the PSI.

Appendix C Certificates of Title (current and historic)



# COMPUTER FREEHOLD REGISTER UNDER LAND TRANSFER ACT 1952

Search Copy



IdentifierNA20C/259Land Registration DistrictNorth AucklandDate Issued02 April 1971

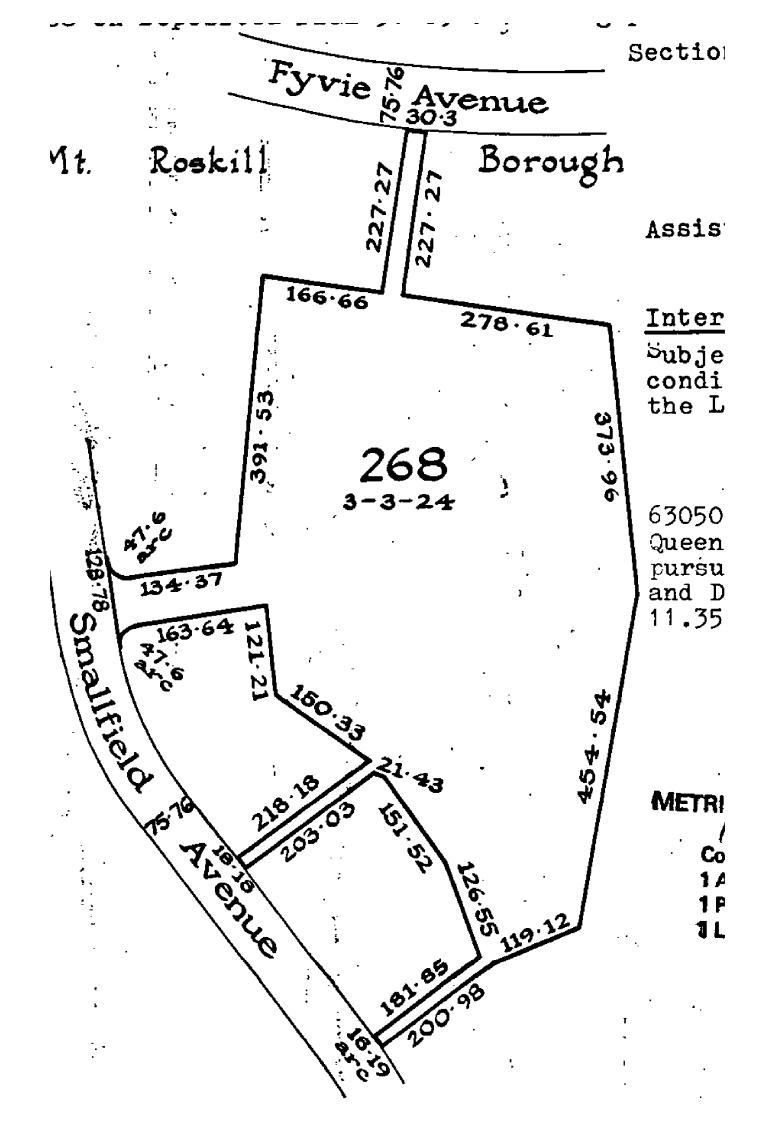
**Prior References** NAPR2093/18

<b>D</b> 4 4	Eas Cinerla
Estate	Fee Simple
Area	1.5783 hectares more or less
Legal Description	Lot 268 Deposited Plan 50169
Purpose	Recreation purposes
Proprietors	

Auckland Council

## Interests

Subject to Section 59 Land Act 1948





# COMPUTER INTEREST REGISTER UNDER LAND TRANSFER ACT 1952

Search Copy



Identifier	632671
Land Registration District	North Auckland
Date Registered	06 November 2013 07:00 am

#### **Prior References** GN B952064.1

Туре	Fee Simple	Instrument	GN B952064.1
Area	2655 square metres more or less		
Legal Description	Part Allotment 85B Section 10 Suburbs of Auckland and Part Allotment 85B Section 10 Suburbs of Auckland and Part Allotment 85B Section 10 Suburbs of Auckland and Marked A Survey Office Plan 61151		
Purpose	Local Purpose (depot site) Reserve		
<b>Proprietors</b> Mount Roskill Bord	ough Council		

## Interests

Subject to the Reserves Act 1977

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#### **Change of Classification of Reserve**

Pursuant to the Reserves Act 1977, and to a delegation from the Minister of Conservation, the Northern Regional Manager, Department of Conservation hereby changes the classification of the reserves, described in the Schedule hereto, to the purposes specified at the end of the respective descriptions of the said reserves, subject to the provisions of the said Act. Schedule

# North Auckland Land District-Mount Roskill

Borough

Ail those portions of land situated in Block IV, Tilirangi Survey District, described as follows:

Area  $m^2$ 

#### Being

- 2655 Parts Allotment 85B, Section 10, suburbs of Auckland; marked "A" on S.O. Plan 61151 bodged in the office of the Chief Surveyor at Auckland, (local purpose [depot site]).
- Area ha

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#### Being

5.8706 Parts Allotments 85A and 85B and part Allotment 85C, Section 10, suburbs of Auckland, marked "B" on S.O. Plan 61151. Jodged in the office of the Chief Surveyor at Auckland (recreation).



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Being

- x116 Lot 278. D.P. 51921, being part certificate of title 2B/809 (recreation). × 113 Lot 286, D.P. 51921, being part certificate of title
- 2 115 Lot 200, D.F. OFFLT, Using part estimate of an 228/808 (recreation).
   2 8251 Parts Allotment 85B and part Allotment 85C, Section 10, suburbs of Auckland; marked "C" on S.O. Plan 61151, lodged in the office of the Chief Surveyor at Auckland (local purpose [municipal building size). buildings site]).

Dated at Auckland this 19th day of September 1988.

G. E. ROWAN, Regional Manager, Department of Conservation, Auckland. (Cons. C.O. Res. 2/2/124; R.O. 8/3/442) in10944

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# COMPUTER INTEREST REGISTER UNDER LAND TRANSFER ACT 1952

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Identifier	632708	
Land Registration District	North Auckland	
Date Registered	06 November 2013 07:00 am	

**Prior References** GN B952064.1

Туре	Fee Simple	Instrument	GN B952064.1
Area	5.4251 hectares more or less		
Legal Description	Part Allotment 85A Section 10 Suburbs of Auckland and Part Allotment 85A Section 10 Suburbs of Auckland and Part Allotment 85A Section 10 Suburbs of Auckland and Part Allotment 85A Section 10 Suburbs of Auckland and Part Allotment 85A Section 10 Suburbs of Auckland and Part Allotment 85A Section 10 Suburbs of Auckland and Part Allotment 85A, 85B, 85B, 85B, 85B, 85C Section 10 Suburbs of Auckland and		
	Marked B Survey Office Plan 61151		
Purpose	Recreation Reserve		
<b>Proprietors</b> Auckland Council			

# Interests

Subject to the Reserves Act 1977

Title Diagram Gazette dg

MT ROSKIL	L BOROUGH C	DUNCIL	٦,
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#### **Change of Classification of Reserve**

Pursuant to the Reserves Act 1977, and to a delegation from the Minister of Conservation, the Northern Regional Manager, Department of Conservation hereby changes the classification of the reserves, described in the Schedule hereto, to the purposes specified at the end of the respective descriptions of the said reserves, subject to the provisions of the said Act. Schedule

# North Auckland Land District-Mount Roskill

Borough

Ail those portions of land situated in Block IV, Tilirangi Survey District, described as follows:

Area  $m^2$ 

#### Being

- 2655 Parts Allotment 85B, Section 10, suburbs of Auckland; marked "A" on S.O. Plan 61151 bodged in the office of the Chief Surveyor at Auckland, (local purpose [depot site]).
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#### Being

5.8706 Parts Allotments 85A and 85B and part Allotment 85C, Section 10, suburbs of Auckland, marked "B" on S.O. Plan 61151. Jodged in the office of the Chief Surveyor at Auckland (recreation).



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- x116 Lot 278. D.P. 51921, being part certificate of title 2B/809 (recreation). × 113 Lot 286, D.P. 51921, being part certificate of title
- 2 115 Lot 200, D.F. OFFLT, Using part estimate of an 228/808 (recreation).
   2 8251 Parts Allotment 85B and part Allotment 85C, Section 10, suburbs of Auckland; marked "C" on S.O. Plan 61151, lodged in the office of the Chief Surveyor at Auckland (local purpose [municipal building size). buildings site]).

Dated at Auckland this 19th day of September 1988.

G. E. ROWAN, Regional Manager, Department of Conservation, Auckland. (Cons. C.O. Res. 2/2/124; R.O. 8/3/442) in10944

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# COMPUTER FREEHOLD REGISTER UNDER LAND TRANSFER ACT 1952

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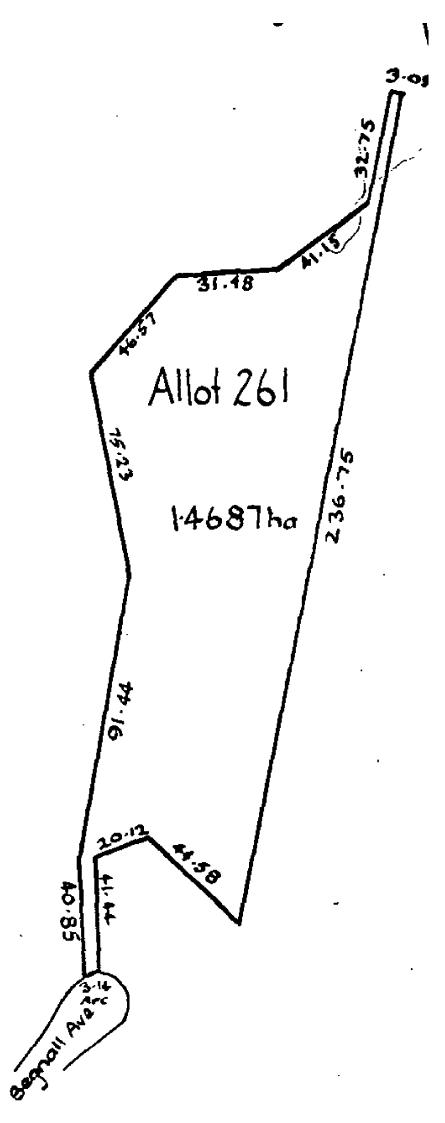
Identifier	NA26A/1256
Land Registration District	North Auckland
Date Issued	02 May 1973

<b>Prior References</b> GN A10497	NA1313/48
Estate	Fee Simple
Area	1.4687 hectares more or less
Legal Description	Allotment 261 Section 10 Suburbs of Auckland
Purpose	Reserve for recreation purposes
<b>Proprietors</b> Auckland Council	

## Interests

SUBJECT TO THE RESERVES AND DOMAINS ACT 1953

K62755 Certificate that a pipeline for the passage of sewage passes through the within land - 26.8.1957 at 9.07 am





# COMPUTER INTEREST REGISTER UNDER LAND TRANSFER ACT 1952

**Historical Search Copy** 



Identifier	632671
Land Registration District	North Auckland
Date Registered	06 November 2013 07:00 am

#### **Prior References** GN B952064.1

Туре	Fee Simple	Instrument	GN B952064.1
Area	2655 square metres more or less		
Legal Description	<ul> <li>Part Allotment 85B Section 10 Suburbs of Auckland and Part Allotment 85B Section 10 Suburbs of Auckland and Part Allotment 85B Section 10 Suburbs of Auckland and Marked A Survey Office Plan 61151</li> </ul>		
Purpose	Local Purpose (depot site) Reserve		
Original Proprietors Mount Roskill Borough Council			

## Interests

Subject to the Reserves Act 1977



# COMPUTER INTEREST REGISTER UNDER LAND TRANSFER ACT 1952

**Historical Search Copy** 



Identifier	632708
Land Registration District	North Auckland
Date Registered	06 November 2013 07:00 am

#### **Prior References** GN B952064.1

Туре	Fee Simple	Instrument	GN B952064.1
Area	5.4251 hectares more or less		
Legal Description	Part Allotment 85A Section 10 Suburbs of Auckland and Part Allotment 85A Section 10 Suburbs of Auckland and Part Allotment 85A Section 10 Suburbs of Auckland and Part Allotment 85A Section 10 Suburbs of Auckland and Part Allotment 85A Section 10 Suburbs of Auckland and Part Allotment 85A Section 10 Suburbs of Auckland and Part Allotment 85A, 85B, 85B, 85B, 85B, 85C Section 10 Suburbs of Auckland and Marked B Survey Office Plan 61151		
Purpose	Recreation Reserve		
Original Proprieto Auckland Council	ors		

# Interests

Subject to the Reserves Act 1977



# **COMPUTER FREEHOLD REGISTER UNDER LAND TRANSFER ACT 1952**

**Historical Search Copy** 



Identifier Land Registration District North Auckland **Date Issued** 

NA20C/259 02 April 1971

#### **Prior References** NAPR2093/18

Estate	Fee Simple
Area	1.5783 hectares more or less
Legal Description	Lot 268 Deposited Plan 50169
Purpose	Recreation purposes

# **Original Proprietors**

The Auckland City Council

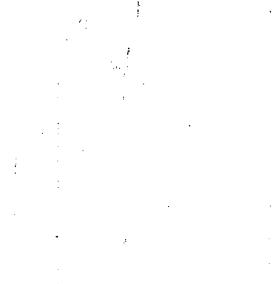
# Interests

Subject to Section 59 Land Act 1948 8770604.1 Application pursuant to Section 99A Land Transfer Act 1952 vesting the within land in Auckland Council - 20.5.2011 at 7:00 am

1160 Land and Deeds 72 Z. Reference: Certificate No. A542858 licate destro 20 P.R. Vol. 2093 Folio 18 Transfer No. 0 ISTER N 5 CERTIFICATE OF TITLE UNDER LAND TRANSFER ACT -200 100 one thousand nine hundred and Seventy One April This Certificate dated the 2nd day of 20 under the seal of the District Land Registrar of the Land Registration District of Nth.Auckland being a Certificate in lieu of Grant, WITNESSETH that THE MAYOR COUNCILLORS AND CITIZENS OF THE BOROUGH OF 2010 1020 1020 MOUNT ROSKILL as a recreation reserve 10.00 10.00 10.00 is seised of an estate in fee simple (subject to such reservations, restrictions, encumbrances, liens, and interests as are notified by memorial underwritten or endorsed hereon) in the land hereinafter described, delineated with bold black lines on the plan hereon, be the several admeasurements a little more or less, which said land was originally acquired by the abovenamed ¥..... one thousand nine hundred and Seventy One as from the 8th day of : February under Section 54 Land Act 1948 that is to say: All that parcel of land containing 3 acres 3 roods 24 perches more or less being lot 268 on Deposited Plan 50169 and being part Allotments 86,87,88 and 251 #2 Section 10 Suburbs of Auckland. -Fyvie % 200 Avenue \*\* Mt. Roskil Borough Assistant Land Registr ab, 2794 2000 2000 161 \*\* 166.66 278.61 Interests at Date of Issue: Subject to the reservations and conditions imposed by Section 59 of the Land Act 1948. 3 A.L.R. ۵ 161 630501.1 Transfer to Her Majesty The Queen as and for a recreation reserve pursuant to Section 44 of the Reserves 134.37 and Domains Act 1953 - 12.11.1976 at 11.35 o'c -64 163 for A.L.R. METRIC AREA Conversion Factors: AT COUP -1 Acre = 4046m<sup>2</sup> 1 Perch = 25.29m\* I Link = .2012 metres 6 N C) 2000 1000 1000 20 Scale 1 inch = 2 chains J.M. дн ž Register copy for L. & D. 69, 71, 72



C.561514.1 Gazette Notice (N.Z. Gazette 11.1.1993 pg. 3375) hereby vests the within reserve in The Auckland City Council in trust for recreation purposes - 26.1.1994 at 11.57 o'c



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A.L.R.

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# COMPUTER FREEHOLD REGISTER UNDER LAND TRANSFER ACT 1952

**Historical Search Copy** 



IdentifierNA26A/1256Land Registration DistrictNorth AucklandDate Issued02 May 1973

<b>Prior References</b> GN A10497	NA1313/48
Estate	Fee Simple
Area	1.4687 hectares more or less
Legal Description	Allotment 261 Section 10 Suburbs of Auckland
Purpose	Reserve for recreation purposes
<b>Original Propriet</b> The Mount Roskill	

### Interests

### SUBJECT TO THE RESERVES AND DOMAINS ACT 1953

K62755 Certificate that a pipeline for the passage of sewage passes through the within land - 26.8.1957 at 9.07 am

8770577.1 Application pursuant to section 99A Land Transfer Act 1952 vesting the within land in Auckland Council - 20.5.2011 at 7:00 am

G.N. A10497 References Prior C/T 1313/48

Transfer No. N/C. Order No. 230541



Land and Deeds 69

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REGISTER

# CERTIFICATE OF TITLE UNDER LAND TRANSFER ACT

This Certifitate dated the 2nd day of May one thousand nine hundred and seventyunder the seal of the District Land Registrar of the Land Registration District of North Auckland three WITNESSETH that THE MAYOR COUNCILLORS AND CITIZENS OF THE BOROUGH OF MOUNT ROSKILL is seised of an estate in fee simple as a reserve for recreation purposes, subject to the Reserves and Domains Act 1953

more or less being Allotment 261 Section 10 Suburbs of Auckland.

Mt Roskill Borough śsistant Land Registrar Interests at date of issue: K62755 Certifying the existence of a line of pipes for sewage. Servient Tenement Dominant Tenement Lot 275 Plan 37702 Part Lot 2 Allot 261 (C.T.1188/66) Plan 28851 (hereir) - 26.8.1957 at 9.07 o'c. Rellinge 14687ha A.L.R. TFG 5 LEMENTS ARE METRIC 26A -Scale: -1 inch Register copy for L. & D. 69, 71, 72



# MT. ROSKILL BOROUGH COUNCIL B952064.1 GN

CORNER MT. ALBERT & MT EDEN ROAD P. O. BOX 27-061 MT. ROSKILL AUCKLAND 4

·- •

When Replying or Enquiring please refer to: D.H. Thompson

Ret:

3/4/21:jfs

zelephone 656-029 Fax 653-753

AUCKLAND 7 FEB 1989 LAND AND DEEDS

3 February 1989

The Secretary, Lands & Deeds Registry, Private Bag, <u>AUCKLAND</u>



Dear Sir,

### CHANGE OF CLASSIFICATION - PART OF THREE KINGS RESERVE

The attached "cream laid" copy of a Gazette Notice relative to the above has been received from the Department of Conservation with instructions to the effect that it is to be registered with the Land Transfer Office.

Will you please acknowledge receipt.

Yours faithfully,

D. H. THOMPSON Borough Secretary

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	FEB 1989

#### Change of Classification of Reserve

Pursuant to the Reserves Act 1977, and to a delegation from the Minister of Conservation, the Northern Regional Manager, Department of Conservation hereby changes the classification of the reserves, described in the Schedule hereto, to the purposes specified at the end of the respective descriptions of the said reserves, subject to the provisions of the said Act.

### Schedule

#### North Auckland Land District—Mount Roskill Borough

All those portions of land situated in Block IV, Titirangi Survey District, described as follows:

Area m<sup>2</sup>

#### Being

2655 Parts Allotment 85B, Section 10, suburbs of Auckland; marked "A" on S.O. Plan 61151 bodged in the office of the Chief Surveyor at Auckland, (local purpose [depot site]).

#### Area ha

Area m² Being

5.8706 Parts Allotments 85A and 85B and part Allotment 85C, Section 10, suburbs of Auckland; marked "B" on S.O. Plan 61151 lodged in the office of the Chief Surveyor at Auckland (recreation).



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Being

- x116 Lot 278, D.P. 51921, being part certificate of title 2B/809 (recreation).
   x 113 Lot 286, D.P. 51921, being part certificate of title
- $\times$  113 Lot 286, D.P. 51921, being part certificate of title 2B/808 (recreation).
- 8251 Parts Allotment 85B and part Allotment 85C, Section 10. suburbs of Auckland; marked "C" on S.O. Plan 61151, lodged in the office of the Chief Surveyor at Auckland (local purpose [municipal buildings site]).

.....

Dated at Auckland this 19th day of September 1988.

G. E. ROWAN, Regional Manager, Department of Conservation, Auckland, (Cons. C.O. Res. 2/2/124; R.O. 8/3/442) h10944

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and service . Jan ÷, - **1**2-. . . COY. 7. 9256 DP3 PT 85A 1.10 276 PT 85A 37702 696 800mN PT\_85A PT 858 278 2808 PT 85B B 280A 7.09 Q 5·8706 ha 2655 à 284 ØD HENE DP32/93 03058 DP ; 10 00 (m/s?) at 696 600 mN **%°**a 7 PT 858 26-MOUNT 10/2) 20/2) CLASSIF LAND DISTRICT NORTH AUCKLAND **SE** LAND 7 (O) AND PEC. SURVEY BLK. & DIST. IV TITIDANGI PUPPOSE RECORD MAP No ALICK 132 DESTERVES NZMS 261 SHT GENER 14D 4000 2 85PT# ----97. 17. 97. 97. ..

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(361922.1 Saretle Notice (N.2 Saretle 8.2.1970 No.18 P. 397) Changing the classification of pand (4455n.2) allotments 854 and 858 Section 10 Suburbs of anckland from a recreation reserve to a local purpose (nood) reserve subject to the Reserves and 1977 (narked "A" on SO Plan 6 5068) - 3.4.1992 at 2.110c

/ CAILULI3.3 Resolution dedicasting 4455<sup>min</sup> allotments 85<sup>m</sup> and 858 Section 10 suburts of ancherd as Voad. - <u>Marked 17 on S.D. Pers</u> 65065. 8/9/1992 and 11.00. D. Burnow

Ave.

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9536003.1 CIR'S ISSUED for the within lond as follows: CIR 632671 for Area A SÕGIISI CIR 632708 for Area B SOGIISI CIR 636010 for Area C SOGIISI CIR 636010 for Area C SOGIISI CIR 636011 for Kots 278 and 286 DP 51921

- 6.11.2013 at 7.000m

Roce For RGL



# **COMPUTER FREEHOLD REGISTER UNDER LAND TRANSFER ACT 1952**

**Historical Search Copy** 



Cancelled

Identifier Land Registration District North Auckland **Date Issued** 

NA1313/48 20 December 1955

# **Prior References**

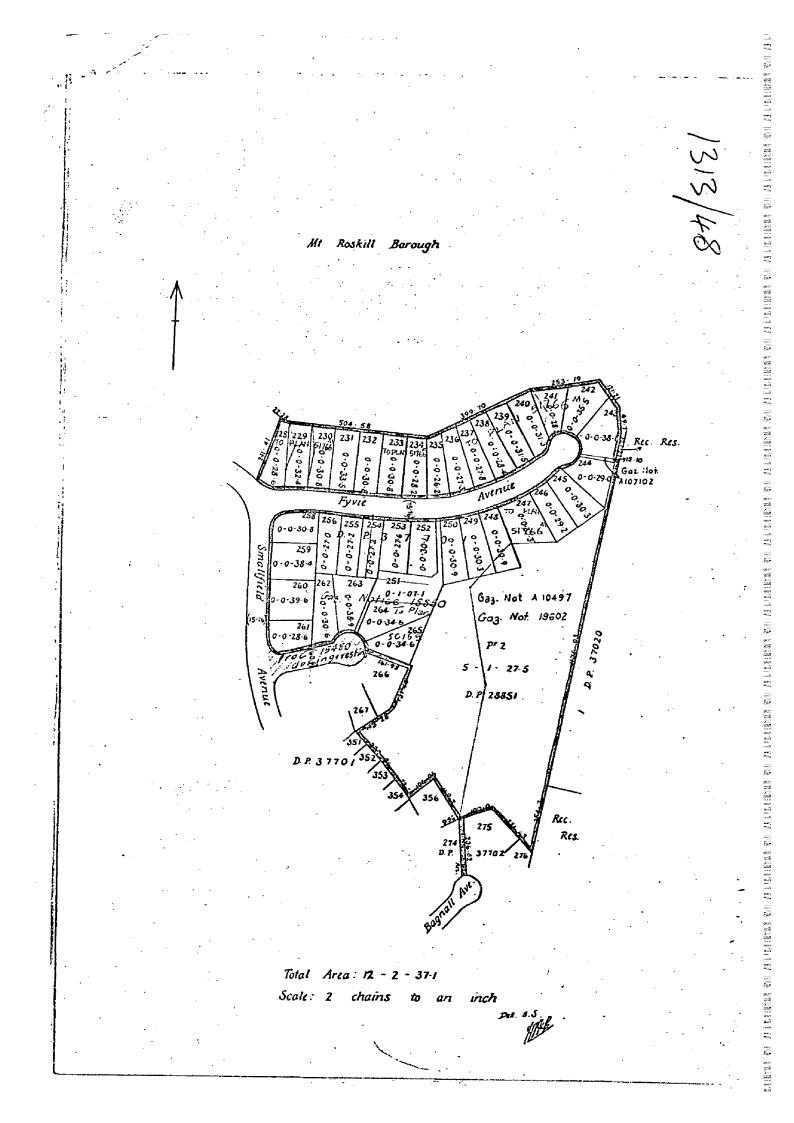
NA1019/69	
Estate	Fee Simple
Area	5.1524 hectares more or less
Legal Description	Lot 228-256, 258-265 Deposited Plan 37701 and Part Lot 2 Deposited Plan 28851
Purpose	for State Housing purposes under Housing Act 1955
<b>Original Propriet</b>	Drs
Her Majesty The Q	ueen

## Interests

For historic memorials see paper image of title. Cancelled.

8059217.1 Departmental dealing to convert and cancel the within title into Landonline - 28.1.2009 at 9:00 am

plicate Destroy PART - CANCELLED NO FORM No. 2 NOT Vol. 1019 Register-book 1313 , folio Val 48 Transfer No. No. of Street, Reference: Order for N/C No. ZEALAND CERTIFICATE OF TITLE UNDER LAND TRANSFER ACT This Certificate, dated the Twentieth day of. December one thousand nine hundred and fif ty tive under the hand and seal of the District Land Registrar of the Land Registration District of. Auchland Witnesseth that HER LAJESTY THE QUEER is seized of an estate in fee simple for State Housing purposes under the Housing Act 1955 1 is suised and another in feasing her (subject to such reservations, restrictions, encumbrances, liens, and interests as are notified by memorial under written or endorsed hereon, subject also to any existing right of the Crown to take and lay off roads under the provisions of any Act of the General Assembly of New Zealand) in the land hereinafter described, as the same is delineated by the plan hereon bordered\_\_\_\_\_\_reen\_\_\_\_ be the several admeasurements, a little more or less, that is to say: All that parcel of land containing twelve acres two roods thirty seven declmal one perches more or less being Lots 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 245 246 247 248 249 250 251 252 253 254 255 256 258 259 260 261 262 263 264 and 265 Deposited Plan 37701 and part Lot 2 Deposited Plan 28851 and being part Allotments 86 87 88 and 89 Section 10 Suburbs of Auckland 481 Enn & K 64176 16-121907 K100343 Consent to Subel 303 62 CREP\_ CT File 26/4 District + Land\_Registrar. Assistant EQUIVALENT METRIC AREA IS 5.1524 ha 5-1524 ha カ K 62300 Certifying the existence of a line of fiches of Studige ( givest schedule) and stitutionally ( second schedule) notice 19602 declaring al 1948 ominant land ervient land Sind 237 Plan 37701 [ 238 Plan 37701 Colored 238 C237 let 242 ъĽ willed as 44227 a. Second 236 Plan 37701 fat Jot 238 Flan 37701 645683 lots 13.6.1763 )231, 232, 235, 236 37701 11.00 2 Entrud 22. 7. 1957 al and lots 228 oil 237 and 238 the inidiance of a K62755 Certifyine line Q' hipes for sewing 13 01 Åkk minanT7 Servent nement 1 chement C45684) 10ts 24310246 Part (12 Man 38851 75 Klan 37701 13.6.1963 37701 a 239 6242 R 1st, 1 188/66 and lots 24.7A. d 2478 lived 26 8.195 158. Gazette Potice 18850 of 268 nalcolmsonth - Plan 50169 lat 2486 £ 5 deemed <u>C45685) Con</u> 252 Crown 13.6.M63 and subject to H to the fi 1smid 2 av าร์แห้ مە Jol 1961 Entered 1303 Malcohnson py Cancelled as to the hand in Gargeda Plotice 1855 DPU 2093/18 don Lor 268 Part Soileg 7

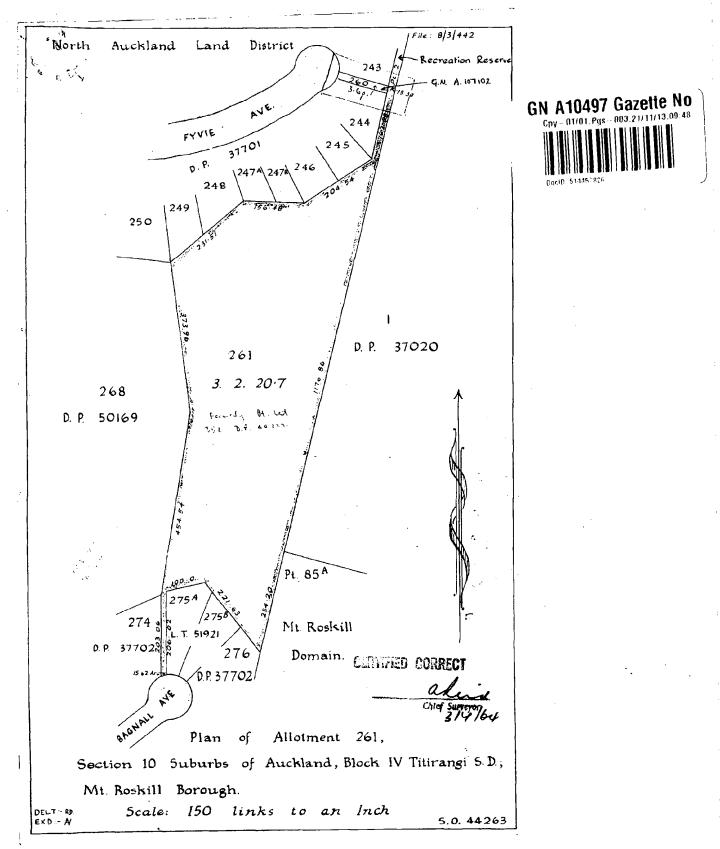


adula Ataman T . celled\_ast\_ Lots\_255,256, 257,258 C.46368\_ the parts Loto 262 a a. 263 261.0 - Plane + + 222 a 7-10-1963 cI\_ Vol: 2B Fel: 804 Alk Dewman A 10497 Gazette Notice setting part Allolinent 1 of Anthland . 241 hutin 10 1 (ru phe .t 17 K 627 of the Barry Rosh cT. 73 J. 2.00. Aloros yarette hot port (3. Pereles) auf dia, for State ausi -10-1965-at 9-03 at معدم THIS REPRODUCTION (ON A REDUCED SCALE). CERTIFIED TO BE A TRUE COPY OF THE ORIGINAL REGISTER FOR THE PURPOSES OF SECTION 215A LAND TRANSFER ACT 1952. (m A.L.R. 2 .: MA 23054 نب أ ...... 6,040°6'55—68761 J . ŝ

R LAND 3  $\mathcal{D}$ Natura B. 101 D.P.L. 1.8 14.166 NEW ZEALAND - ma C.C.L (the day of 13 15 /68 1 6 NOV 1962 Home seto. z 9 01. Pour £ 1510 Abstract No. 7657 NORTH CKLAND LAND DISTRICT Deferred Payment Licence of Urban, Commercial or the Land Act 1948 MAYOR COUNCILLORS AND CITIZENS of the Borough of Lount Roskill, as a Recreation Reserve pursuant to KAYOR, COUNCILLORS AND CITIZENS of the Borough of Lount Roskill, as a Recreation Reserve pursuant to Reserves and Domains Act. 15 for an assigns, bereinafter referred to as "the licensee"), of the other part: their Suburbs of Auckland WHEREAS the land hereinafter described was acquired by the licensee This Deed, D.P.U. 4004 A Road did on the third day of July 19 62; in pursuance and cise of the right of n provisions of the Land Art Suis thereinafter. + ummier m deferred And inferrence is Four And whereas £429. 0. 0. 268 enosit the upon . such aforesaid th imalifield 352 Avenue 18-194 nere. Sec.e DP.50169<sub>26</sub> Her Majesty the Queen in manner following:--I. THAT the Licensee will pay to the Defarment of Lands and Survay rt the principal Land Office for the said Land District the balance of the aforesaid purchase price of the said land, together with interest thereon at the rate of <u>and the first first balance</u> of the said land, together with interest thereon at the rate of <u>and the first first balance</u> of the said land together with interest thereon at the rate of <u>and the first balance</u> of Jone and the thirty-first day of *Interdependent* in each year during the term aforesaid. The first such interface of purchase money and interest, and also the interest on the balance of purchase money from the day of the balance of the 1010 shall be payable on the Coned Not had expired allot the trem during which instationents of purchase-money and interest would otherwise have been payable shall be reduced accordingly. 3. THLAT the Licensee will pay and discharge all rates, taxes, assessments, and outgoings whatsoever that now are or heresfter may be assessed, levied, i respect of the said land or any part or parts thereof during the said term. 4. THAT the Licensee will hold and use the said land bone fide for his own use and benefit and will not transfer, assign, sublet, mortgage, charge, or subscission of the said land or any part thereof vibrout the previous approval of the Land Settlement Board: Provided that such approval, will not be necessary in mortgage to the Grown or to a Department of State. d. levied, or navable 5 THAT the Livensee will throughout the term of the licence to the matisfaction of the land of all nozious weeds, and will comply strictly with the provisions of the Nozious of the Commissioner cut and trim all live fences and hedges, clear and keep clear the prious Weeds Act 1950. said land of all notions weeds, and will comply strictly with the provisions of the Noxious Weeds Act 1950. 6. THAT the Licensee will at all times during the said term repair and maintain and keep in good substantial repair, order, and condition all improvements belonging to the Corum (including those specified in the Schelule hereto which are being purchased by the Licensee) how or hereafter creted on the said land, and will not, without the prior written consent of the Commissioner, pull down or remove them or any part of them. 7. THAT the Licensee will insure all buildings belonging to the Crown (including those specified in the Schedule hereto which are being purchased by the Licensee) how or hereafter creted on the said land to their full insurable value in the name of the Commissioner insurance office approved by the Commissioner and will pay all premiums falling due under every such insurance policy and deposit with the Commissioner every such policy and, not later than the forenoon of the day on the day on the said land is the water in the remement of of the Lend Act 1948 then the licensee will fully and multicular proves the area of an entry for the Licensee. ĝ Ę, 8. SHOULD the said land be supplied with water in pursuance of section 50 of the Land Act 1948 then the licensee will fully and punctually pay all levies in respect thereof and will observe and perform all the conditions and obligations of the said section and the regulations made thereunder and should the licensee complete the payment of all moneys payable thereunder and obtain a fee simple title to the said land he will execute a covenant in a form approved by the Land Settlement Board binding him to pay such levies and perform all the said conditions and obligations and further binding him if and when he shall threafter sell the said land to obtain from the purchaser a like covenant and so on with every successive sale. Lation • 1 (a) THAT the interest on the balance of the purchase money from the third day of July 1962, the thirty-first day of December 1962, shall be payable on the said thirty-first day of December 1962. to the AND it is hereby agreed and declared by and between Her Majesty and the Li (a) THAT the License shall have no right tile, or claim whatcover to any minerals (within the many of the said hand, and all such minerals are reserved to Her Majesty. ig of the Land Act 1948) on or under the surface of the soil of the said land, and all such minerals are reserved to Her Majesty.
(6) THAT if the Licensee shall leave New Zealand or ahandon the said land or if he cannot be found or if he shall neglect or fail or refuse to comply with the covenants and conditions herein arpressed or implied to the satisfaction of the Land Settlement Board or the Commissioner, as the case may be, or make default for not least than two months in the payment of any instalment of purchase-morey or of any interest, water levy, or other payments due to the Department, then the Land Settlement Board are, subject to the provisions of section 146 of the Land Act 1948, declare this licence to be forficied, and thrempon the licence and determine, and all moneys theretofore paid by the Licensee under this licence in in respect of the said contract shall remain the property of Her Majesty; or from any isbility for any breach theretofore committed of the completions there are pressed or implied.
(c) THAT these presents are intended to take effect as a licence to one proprise by deferred payments under the provisions of the Land Act 1948, and of the regulations thereunder, applicable to such here the sub-distribute between a sub-distribute of the sequence to a complete on the provisions of the Land Act 1948.
(c) THAT these presents are intended to take effect as a licence to completion of purchase. METRIC AREA IS 1. 5782 also 161 Genversion Factors: 1 Ac e = 4046m<sup>e</sup> 1 Pc;ch = 25.29m<sup>2</sup>

1 Link -= 2012 metres

0 & S. ncing Assistant ÷ said/Commissioner of Crown Lands, on behalf is whered of Her Majesty the Queen, has hereunto also been executed by the ioner of Crown Lands, on behalf of Her Maj figuen by the/Comm the in th Wid Оссы OROUM NOWIT RCS Signed by the above-na, Wi a E بالمنجاد Que M't 24. Marie Address SECTION 215A LAND TRANSFER ACT 1952. 00 A Suzes (CANCELLED AND CERTIFICATE OF TITI IBBUED VOL. 20CFOL TITLE 9 A. L. R. 1.61 CANCELLED ÷.,... - 2



# Extract from N.Z. Gozette, 7 May 1964, No. 28, page 779

vation of Land and Vesting in the Mouni Roskill Borough Council Reser

DURSUMART to the Land Act 1948, the Minister of Lands here-by sets apart the land described in the Schedule hereto as a reserve for recreation purposes and, further, pursuant to the Reserves and Domains Act 1953, vests the said reserve in the Mayor, Councillors, and Citizens of the Borough of Mount Roskill, in trust, for that purpose, subject to K. 62755, Avekland Land Registry, certifying the existence of a line of pipes for sewage.

Not. 1960Z V 1313/48

SCHEDULE NORTH AUCKLAND LAND DISTRICT ALLOTMENT 261, Section 10, Suburbs of Auckland, situated in Block IV, Titirangi Survey District: Area, 3 acres 2 roods 20-7 perches, more or less (S.O. Plan 44263). Dated at Wellington this 4th day of May 1964. R. C. GERARD, Minister of Lands. (L. and S. H.O. 1/1/107/1/9; D.O. 8/3/442) 28/114

R. E. Owaw, Government Printer, Wellington, New

A 10497		
PARTICULARS ENTERED IN THE REALISTER-BOCK VOL. 13/3 FOLIO 48 THE 2.6 DAY OF 201 org. 1964 AT 2.00 O'CLOCK. Assisted tase Augistres. AUCKLAND (Now) NORTH		
states and the the the		:
ML 230541 Naw Zitle isened O.N.C.T. 2.5.1973 C.T. 26A/1256 A.L.R.	•	
LAND & DEEDS Nettres $\subseteq N$ . Firm: $C \in L$ 26 MAY 1964 Time: $2 \cdot 00$ Roo: $E$ Abstract No. (935) (1)		