

# SH16 CAUSEWAY UPGRADE PROJECT



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#### 1.0 INTRODUCTION

#### 1.1 PURPOSE OF THE REPORT

To provide Auckland Council with a monthly overview of construction progress and compliance activity on the SH16 Causeway Upgrade project.

This report describes and details activities during the month of January 2014.

## 2.0 OVERVIEW of ACTIVITIES UNDERTAKEN

#### 2.1 Environmental

Regular contact is continuing with the Auckland Council compliance team.

## 2.2 Communications and Stakeholder Management

- Produced fortnightly Causeway News project updates to stakeholders, project neighbours and wider community.
- Provided media releases on project progress relating to wick drains, drainage blanket, and orange temporary lane marking tape
- Eight community callers provided feedback regarding the risk of unclear lane definition on State Highway 16 over Great North Road eastbound. Only positive feedback has been received since the implementation of the orange temporary lane marking in that area.

Otherwise, positive feedback has been received from residents and stakeholders.

#### 2.3 Construction

- Alwyn Ave (Whau River bridge south-west) ground improvements continued in the
  marine area at the bridge (soft material excavated and replaced), preparing access for
  constructing temporary staging for widening the southern side of the Whau River Bridge.
  Install rock revetment under Whau Bridge (western end).
- Whau River Bridge (north-west) Installation of temporary staging continuing and permanent bridge piling for eastbound bridge widening underway.
- Whau River Bridge (north-east) permanent bridge piling continuing.
- Patiki to Whau (westbound, around Rosebank Park Domain) north-western cycleway relocated, and Construction Yard 2 in Rosebank Park Domain was established. Site clearance continuing in Rosebank Domain, reclamation work began in marine area.
- Whau to Rosebank (eastbound) site clearing complete, reclamation work underway (under Patiki Road off ramp), retaining wall works underway (including rock revetment)

- Causeway (from North Traherne Island eastbound direction) continue installation of the
  preload fill layer (surcharge) up to full height opposite Traherne Island, further east
  continue coffer dam/stability berm, working platform, wick drain and drainage blanket
  installation.
- Causeway (South Traherne Island) earthworks, wick drain and drainage layer installation (towards Rosebank Road off-ramp) continuing.
- Great North Road Interchange (GNRI) (northern side, eastbound from Causeway Bridge) –
  geotechnical solution at slump of embankment (opposite Causeway Bridge channel)
  confirmed as timber piles. Filling further east of Causeway Bridge continuing.
- GNRI (southern side, westbound towards Causeway Bridge) continue earthworks for raising the area. Section of shared path diverted onto new and final (permanent) location.

## 3.0 MEETINGS, INSPECTIONS AND EVENTS

- 9 January Auckland Council's earthworks compliance inspection
- 16 January Auckland Council's coastal compliance inspection
- 28 January Meeting with Council on the Urban Design and Landscape Master Plan
- 30 January Auckland Council's earthworks compliance inspection

#### 4.0 **ENVIRONMENTAL MONITORING**

#### 4.1 EARTHWORKS COMPLIANCE

Compliance Inspections were completed by Auckland Council officers on the 9 January and 30 January and recorded a compliance score of 1 (Full Compliance).

## 4.2 CONSTRUCTION NOISE AND VIBRATION

Site Specific Noise Management Plan #6 was approved in January for a street light relocation at GNRI westbound on-ramp.

## 4.3 AIR QUALITY

No air quality complaints or issues were received during the period.

## 4.4 CONTAMINATED SOIL

A summary of exported material disposal locations, along with material classifications, sample methods and quantities at various site locations along the alignment during January is included in Appendix B.

#### 4.5 EROSION AND SEDIMENT CONTROL

An addendum to Erosion and Sediment Control Plan #13 was approved on 17 January for the Causeway east.

Erosion and Sediment Control Plan #17 was approved on 21 January for the Whau River southeast staging.

Erosion and Sediment Control Plan #18 was approved on 20 January for the GNRI area stockpile.

#### 4.6 ARCHAEOLOGICAL

Council's Local and Sports Park Manager (as landowner) approved an area of minor vegetation trimming and removal in Eric Armshaw Park (required to undertake repairs to the old dry stone wall) on 29 January. A resource consent application will be submitted in February for the vegetation clearance, as this is required to enable compliance with BoI Condition ARCH.7.

#### 4.7 COASTAL MONITORING

Compliance Inspection was completed by Auckland Council officers on the 16 January and recorded a compliance score of 1.

#### 4.8 MARINE MONITORING

The summer 2014 marine benthic monitoring commenced during low tide periods at the same 12 sites as the pre-construction baseline monitoring undertaken in February/March 2012.

## 4.9 ECOLOGICAL

Inspections of Significant and Valued vegetation were undertaken on 9 and 22 January at North and South Traherne Island, Patiki Road/Rosebank Domain (Zone 2), Whau River Bridge (Zone 3) and at GNRI (Zone 5).

Monthly assessment of avian roosting locations was undertaken at Harbourview-Orangihina (Pony Club) and the temporary roosting rafts at the Causeway Bridge. The monthly avian count at Harbourview – Orangihina for January 2014 was 38 birds compared to the pre-establishment baseline count in January 2010 of 42 birds. No coastal birds were observed to use the two temporary bird roost sites (floating pontoons) installed south of Causeway Bridge, as there was no construction activity affecting roosting sites.

## 5.0 CORRESPONDENCE ON CONSENT CONDITIONS AND PLANS

Letter received from Council on 22 January on the interpretation of BoI conditions LV.2 and OS.4 relating to artworks.

## 6.0 WORKS PROPOSED FOR FEBRUARY 2014

Refer Appendix A for Construction Zone Plan.

## **Zone 1 Causeway**

• Eastbound: Continue installing the working platform, preload fill (surcharge), drainage blanket layer, wick drains, coffer dam and reclamation in the coastal area.

## Zone 2 / Zone 3 Whau to Rosebank

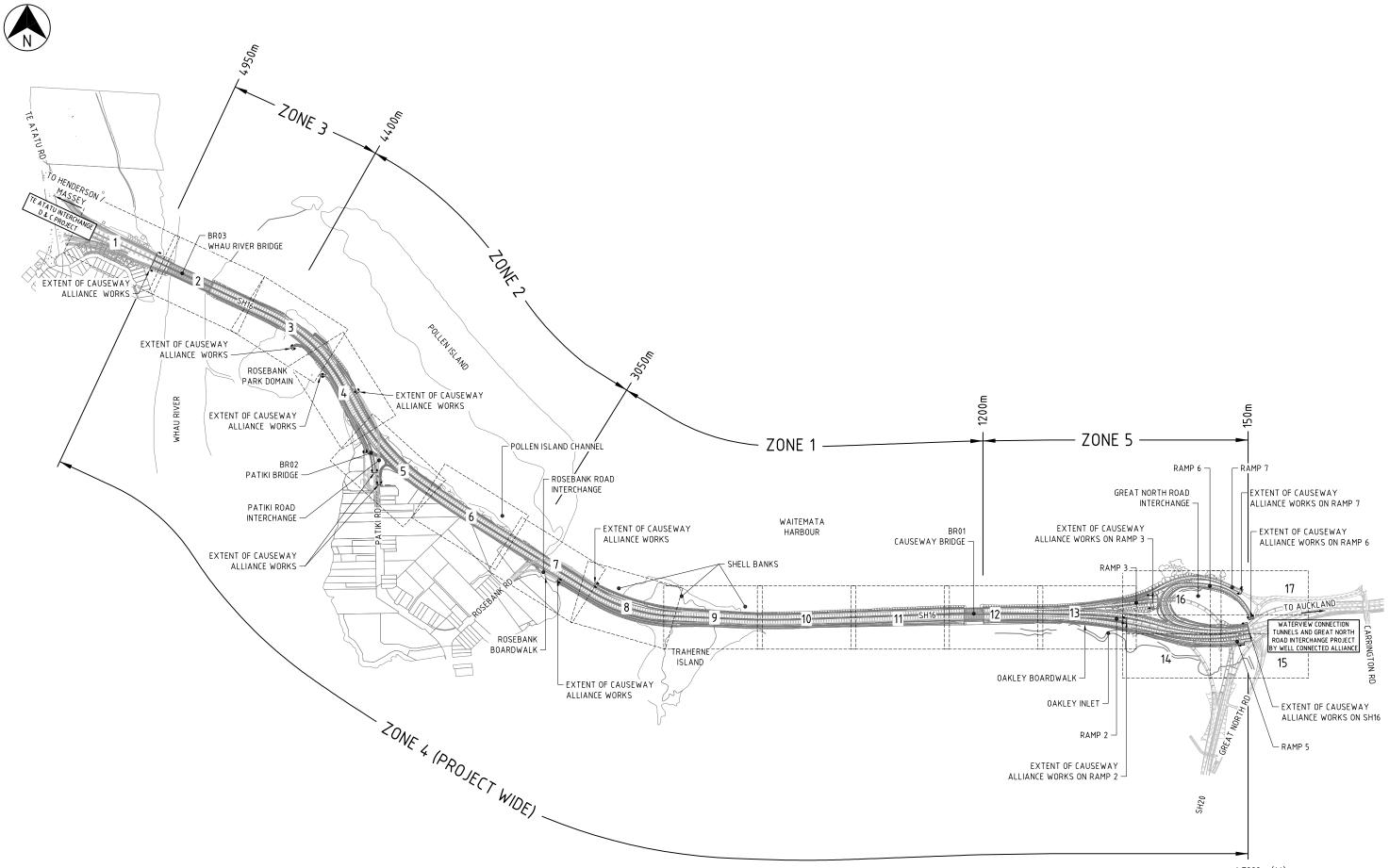
- Whau River eastbound: continue permanent piling for widening Whau Bridge.
- Patiki/Rosebank eastbound: continue earthworks and construction of retaining wall.
- Whau River westbound: continue earthworks between Whau River Bridge and Rosebank Domain.

## **Zone 5 GNRI**

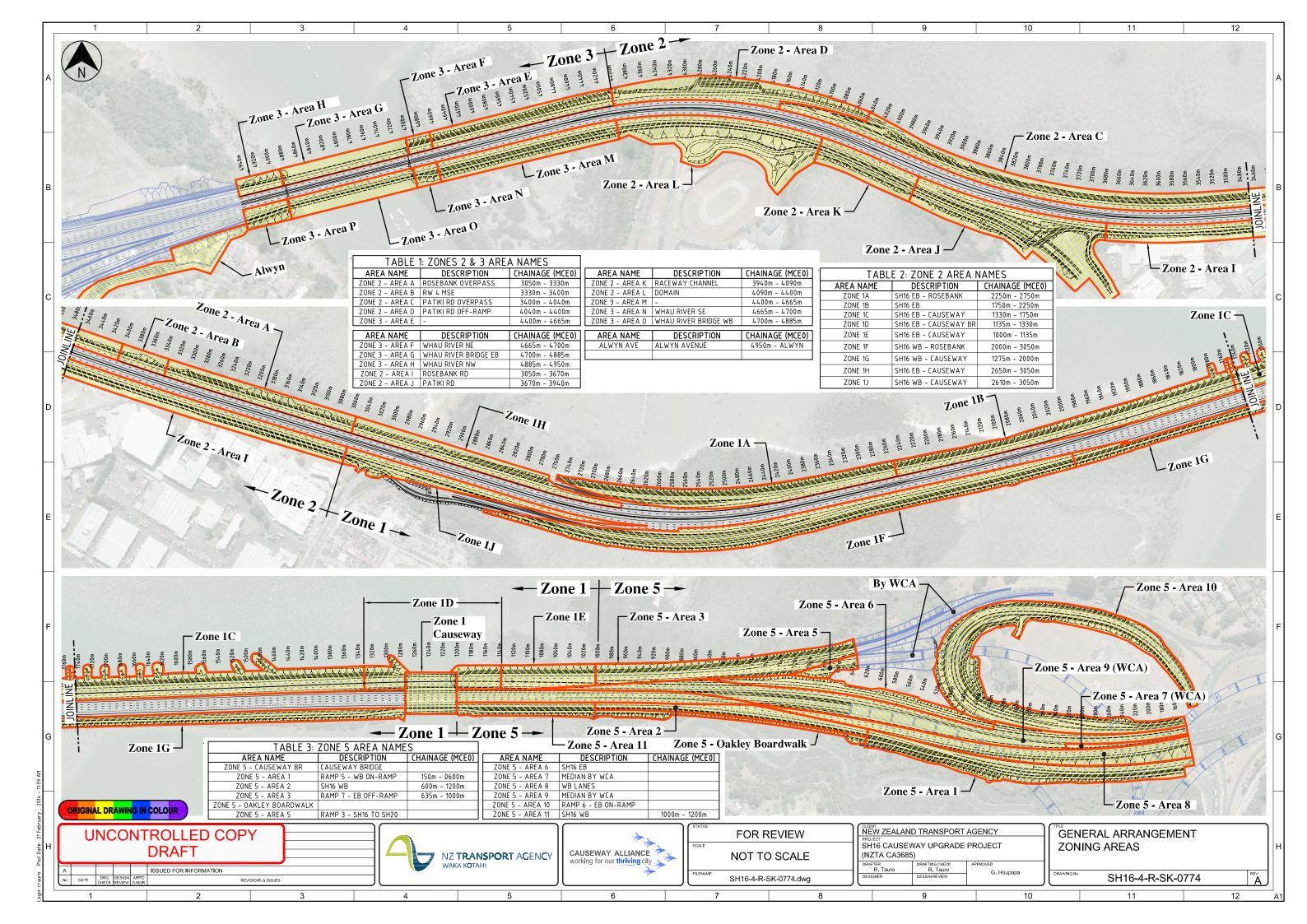
- East bound: continue earthworks to widen the embankment in an easterly direction alongside Great North Road east-bound off-ramp (towards Stone wall). Install timber piles for embankment stability eastern side of Causeway Bridge.
- Westbound: Continue filling new widened embankment area and at on-ramp.

The environmental focus for February will continue to be on inspections prior to and during vegetation removal, management replanted area at Traherne Island and ground clearance to ensure ecological and archaeological stand over requirements are met. The establishment and monitoring of sediment and erosion controls will also continue.

## Appendix A: SH16 Causeway Alliance Construction Zone Plan



**Appendix B: SH16 Causeway Imported and Exported Material Summary** 



## SH16 Causeway Upgrade - January 2014 Materials Tally On Site Materials Movement and Disposal to Landfill

Date	Transport Subcontractor	Ordering Zone	Docket #	Material Source	From Area	Gate	From Description Non-Import Only	To Area	Sample ID	Lab Report ID	Classification	Acceptable Disposal Facility	Conformance	To Description	Specification Description	Material Type	Truck Type	Load Count	Truck Volume (T)		Total Volume (m³) (conversion factor of 1.6 (1 t = 1/1.6))	Sample Rate
20/01/2014	G&C	Zone 1	73417	Site	Zone 1A	C5		Ridge Road Landfill	XRF testing of Zone 1A and western edge of Zone 1B was undertaken by Envirowaste: Watercare sample #872913	1	Cleanfill - CA advised material was screened by XRF and			Cut to Waste	Cut to Waste	Topsoil - Clean but unsuitable	Truck & Trailer			29		Total volume of material disposed from Zone 1A: 177 m³ (includes 35 m³ already disposed of in August 2013). One analysed sample relates to Zone 1A. The current sample rate is one sample per 177 m³. This meets the minimum sampling requirements of one sample per 1000 m³ for cleanfill.
21/01/2014	G&C	Zone 1	73448	Site	Zone 1A	C5	-	Ridge Road Landfill			classed as cleanfill. Envirowaste detected one sample that had elevated lead (247 ppm). Based on low levels of contaminants			Cut to Waste	Cut to Waste	Topsoil - Clean but unsuitable	Truck & Trailer			28		
21/01/2014 21/01/2014	G&C G&C	Zone 1	73450	Site	Zone 1A	C5 C5		Ridge Road Landfill Ridge Road Landfill			detected in the other samples the material was accepted for	, ,		Cut to Waste	Cut to Waste	Topsoil - Clean but unsuitable	Truck & Trailer	-		28		
21/01/2014	G&C	Zone 1 Zone 1	73454 73452	Site Site	Zone 1A Zone 1A	C5	+	Ridge Road Landfill		Watercare: 58462-0	cleanfill at Greenmount. The material was subsequently taken to Ridge Road cleanfill and upon reviewing the acceptance	Greenmount cleanfill/managed fill, Ridge Road cleanfill/Managed fill, Hampton Downs.	Yes	Cut to Waste Cut to Waste	Cut to Waste Cut to Waste	Topsoil - Clean but unsuitable  Topsoil - Clean but unsuitable	Truck & Trailer Truck & Trailer	+ +		28	142	
21/01/2014	G&C	Zone 1	73438	Site	Zone 1A	C5		Ridge Road Landfill			criteria this was deemed acceptable. The Watercare sample			Cut to Waste	Cut to Waste	Topsoil - Clean but unsuitable	Truck & Trailer			28		
21/01/2014	G&C	Zone 1	73425	Site	Zone 1A	C5		Ridge Road Landfill			had lead concentrations (86 mg/kg) slightly above the Auckland background range (65 mg/kg), though was under	1		Cut to Waste	Cut to Waste	Topsoil - Clean but unsuitable	Truck & Trailer			29.5		
21/01/2014	G&C	Zone 1	73448	Site	Zone 1A	C5		Ridge Road Landfill			cleanfill acceptance criteria.			Cut to Waste	Cut to Waste	Topsoil - Clean but unsuitable	Truck & Trailer			28		
8/01/2014 23/01/2014	G&C G&C	Zone 2 Zone 2	73631	Site Site	Zone 2 - Area B Zone 2 - Area B	C4 C4	Topsoil strip	Zone 2 - Area C Ridge Road Landfill					Yes - Stockpiled onsite	Stockpile Cut to Waste	Cut to Waste Cut to Waste	Topsoil - Clean Clean Fill	6 wheeler Artic	3		24 19		
23/01/2014 23/01/2014	G&C	Zone 2 Zone 2	73668	Site Site	Zone 2 - Area B Zone 2 - Area B	C4 C4		Ridge Road Landfill Ridge Road Landfill						Cut to Waste	Cut to Waste Cut to Waste	Clean Fill Clean Fill	Artic Truck & Trailer			19		
24/01/2014	G&C G&C	Zone 2	11343	Site	Zone 2 - Area B	C4		Ridge Road Landfill						Cut to Waste Cut to Waste Cut to Waste Cut to Waste	Cut to Waste	Clean Fill	Artic			29 19		
24/01/2014 24/01/2014	G&C G&C	Zone 2 Zone 2	73776 73811	Site Site	Zone 2 - Area B Zone 2 - Area B	C4 C4		Ridge Road Landfill Ridge Road Landfill							Cut to Waste Cut to Waste	Clean Fill Clean Fill	Artic Artic	-		19 19	ı	
24/01/2014	G&C	Zone 2	73720	Site	Zone 2 - Area B	C4		Ridge Road Landfill	1					Cut to Waste	Cut to Waste	Clean Fill	Artic			18		
24/01/2014	G&C	Zone 2	11343	Site	Zone 2 - Area B	C4		Ridge Road Landfill						Cut to Waste	Cut to Waste	Clean Fill	Artic			18		
24/01/2014	G&C	Zone 2	73776	Site	Zone 2 - Area B	C4		Ridge Road Landfill						Cut to Waste	Cut to Waste	Clean Fill	Artic	$\vdash$		18		
24/01/2014	G&C	Zone 2	73811	Site	Zone 2 - Area B	C4	1	Ridge Road Landfill					V (CAFO CD	Cut to Waste	Cut to Waste	Clean Fill	Artic	-		18		Total volume of material disposed
25/01/2014 28/01/2014	G&C G&C	Zone 2 Zone 2	73847	Site	Zone 2 - Area B Zone 2 - Area B	C4 C4	+	Ridge Road Landfill Ridge Road Landfill	CA49 SP: CA50 SP:				Yes (CA50_SP was considered cleanfill as the	Cut to Waste Cut to Waste	Cut to Waste Cut to Waste	Clean Fill Clean Fill	Artic Artic	+ +		18 18		from Zone 2B: 368 m <sup>3</sup> . Six analysed samples relates to Zone 1A. The
28/01/2014	G&C G&C	Zone 2		Site	Zone 2 - Area B	C4		Ridge Road Landfill	CA51_SP; CA52_SP;	1215417; 1226072	Cleanfill (CA50_SP very minor exceedance (0.04) of Ridge Road cleanfill criteria for Benzo[a]pyrene (BAP) (0.027).	Greenmount cleanfill/managed fill, Ridge Road cleanfill/Managed fill, Hampton Downs.	Ridge Road benzo[a]pyrene cleanfill exceedeance was	Cut to Waste	Cut to Waste	Clean Fill	Truck & Trailer			28	368.45	current sample rate is one sample per
28/01/2014	G&C	Zone 2	73936	Site	Zone 2 - Area B	C4		Ridge Road Landfill	CA53_SP; CA69		rodu dediniii dilena foi benzolajpyrene (brii ) (0.027).	cicaniii managea iii, nampion bowns.	very minor and all other	Cut to Waste	Cut to Waste	Clean Fill	Truck & Trailer			28		65 m <sup>3</sup> . This meets the minimum sampling requirements of one sample
28/01/2014 28/01/2014	G&C G&C	Zone 2 Zone 2	73938 73982	Site Site	Zone 2 - Area B Zone 2 - Area B	C4 C4		Ridge Road Landfill Ridge Road Landfill					relevant samples were within Ridge Road cleanfill criteria).	Cut to Waste Cut to Waste	Cut to Waste Cut to Waste	Clean Fill Clean Fill	Truck & Trailer Truck & Trailer			28 28		per 1000 m <sup>3</sup> for cleanfill.
28/01/2014	G&C	Zone 2	73863	Site	Zone 2 - Area B	C4		Ridge Road Landfill	j l					Cut to Waste	Cut to Waste	Clean Fill	Artic			18.52		
29/01/2014 29/01/2014	G&C	Zone 2	74008	Site	Zone 2 - Area B	C4		Ridge Road Landfill						Cut to Waste	Cut to Waste	Clean Fill	Artic	$\perp \Box$		19		
29/01/2014	G&C G&C	Zone 2 Zone 2	74005 74003	Site Site	Zone 2 - Area B Zone 2 - Area B	C4 C4	+	Ridge Road Landfill Ridge Road Landfill						Cut to Waste Cut to Waste	Cut to Waste Cut to Waste	Clean Fill Clean Fill	Truck & Trailer Artic	+ +		28 18		
29/01/2014	G&C	Zone 2	74002	Site	Zone 2 - Area B	C4		Ridge Road Landfill	]					Cut to Waste	Cut to Waste	Clean Fill	Artic			18		
30/01/2014 30/01/2014	G&C G&C	Zone 2 Zone 2	74133 74147	Site Site	Zone 2 - Area B Zone 2 - Area B	C4 C4		Ridge Road Landfill Ridge Road Landfill						Cut to Waste Cut to Waste	Cut to Waste	Clean Fill Clean Fill	Truck & Trailer Truck & Trailer	-		28 28		
30/01/2014	G&C	Zone 2	74232	Site	Zone 2 - Area B	C4		Ridge Road Landfill						Cut to Waste	Cut to Waste	Clean Fill	Truck & Trailer			28		
30/01/2014 30/01/2014	G&C	Zone 2	74241	Site	Zone 2 - Area B	C4		Ridge Road Landfill						Cut to Waste	Cut to Waste	Clean Fill	Artic	$\vdash$		18		
18/01/2014	G&C G&C	Zone 2 Zone 2	74180 73264	Site	Zone 2 - Area B Zone 2 - Area C	C4 C4		Ridge Road Landfill Ridge Road Landfill						Cut to Waste Cut to Waste	Cut to Waste Cut to Waste	Clean Fill Topsoil - Clean but unsuitable	Artic Truck & Trailer			18 29		+
18/01/2014	G&C	Zone 2	73263	Site	Zone 2 - Area C	C4		Ridge Road Landfill			CA47, CA48, CA68, WS468 and WS672 all cleanfill (WS468 classified as managed by BECA for minor copper exceedence			Cut to Waste	Cut to Waste	Topsoil - Clean but unsuitable	Truck & Trailer			29		Total volume of material disposed from Zone 2C: 317 m³. Nine analysed samples relate to Zone 2C. The current sample rate is one sample per 35 m³. This meets the minimum sampling requirements of one sample per 500 m³ for managed fili.
18/01/2014	G&C	Zone 2	73265	Site	Zone 2 - Area C	C4		Ridge Road Landfill			(52 mg/kg) above Auckland background limit (45 mg/kg), upon			Cut to Waste	Cut to Waste	Topsoil - Clean but unsuitable	Truck & Trailer			29		
18/01/2014 18/01/2014	G&C G&C	Zone 2	73289 73291	Site Site	Zone 2 - Area C Zone 2 - Area C	C4 C4		Ridge Road Landfill Ridge Road Landfill			review sample meets cleanfill criteria). CA45 cleanfill (Greenmount only - not Ridge Road, due to exceedance (0.06			Cut to Waste Cut to Waste	Cut to Waste	Topsoil - Clean but unsuitable Topsoil - Clean but unsuitable	Truck & Trailer Truck & Trailer	$\vdash$		28		
18/01/2014	G&C	Zone 2 Zone 2	73291	Site	Zone 2 - Area C	C4		Ridge Road Landfill	1		mg/kg) of Ridge Road cleanfill criteria for Benzo[a]pyrene (BAP) (0.027 mg/kg)). CA46, CA67 and WS467 managed fill.			Cut to Waste	Cut to Waste	Topsoil - Clean but unsuitable	Truck & Trailer			28		
18/01/2014	G&C	Zone 2	73248	Site	Zone 2 - Area C	C4		Ridge Road Landfill	]		CA46 had exceedance (0.22 mg/kg) of Ridge Road cleanfill	Location CA46, CA67 and WS467 Greenmount and Ridge Road managed fill, Hampton Downs.	t	Cut to Waste	Cut to Waste	Topsoil - Clean but unsuitable	Truck & Trailer			28		
20/01/2014	G&C	Zone 2	73296	Site	Zone 2 - Area C	C4		Ridge Road Landfill	CA45; CA46; CA47; CA48; CA67: CA68	1215417: 1226072.	criteria for BAP (0.027 mg/kg) and exceedence (0.35 mg/kg) of Greenmount cleanfill criteria for BAP equivalent (0.27 mg/kg).	Location CA45 Greenmount Cleanfill/managed		Cut to Waste	Cut to Waste	Topsoil - Clean but unsuitable	Truck & Trailer			28		
20/01/2014	G&C G&C	Zone 2 Zone 2	73363 73423	Site Site	Zone 2 - Area C Zone 2 - Area C	C4 C4		Ridge Road Landfill Ridge Road Landfill	(BECA sampling: WS467 0.6-	Refer to G9 Report for BECA	Concentration of Nickel in CA46 (114 mg/kg) exceeded	fill and Ridge Road managed fill, Hampton Downs. CA47, CA48, CA68, WS468 and	sent to Ridge Road cleanfill	Cut to Waste Cut to Waste	Cut to Waste Cut to Waste	Topsoil - Clean but unsuitable Topsoil - Clean but unsuitable	Truck & Trailer Truck & Trailer	$\vdash$		28	317	
20/01/2014	G&C	Zone 2	73373	Site	Zone 2 - Area C	C4		Ridge Road Landfill	0.7 m; WS468 0.4 m; WS672 0.7 m)	results.	Auckland Council Schedule 10 permitted discharge limits (105 mg/kg). CA67 had exceedance (0.15 mg/kg) of Ridge Road	WS672 Greenmount cleanfill/managed fill,	when it was classified as managed fill only.	Cut to Waste		Topsoil - Clean but unsuitable	Truck & Trailer			28		
20/01/2014	G&C	Zone 2	73427	Site	Zone 2 - Area C	C4		Ridge Road Landfill			cleanfill criteria for BAP (0.027 mg/kg) and exceedence (0.37 mg/kg) of Greenmount cleanfill criteria for BAP equivalent	Ridge Road cleanfill/Managed fill, Hampton Downs.		Cut to Waste C	Cut to Waste	Topsoil - Clean but unsuitable	Truck & Trailer			28		
20/01/2014	G&C G&C	Zone 2	73382	Site	Zone 2 - Area C Zone 2 - Area C	C4 C4		Ridge Road Landfill Ridge Road Landfill			(0.27 mg/kg). WS467 had exceedance (0.26 mg/kg) of Ridge				Cut to Waste	Topsoil - Clean but unsuitable	Truck & Trailer Truck & Trailer			28		
20/01/2014	G&C	Zone 2 Zone 2	73428 73512	Site Site	Zone 2 - Area C	C4	+	Ridge Road Landfill			Road cleanfill criteria for BAP (0.027 mg/kg) and exceedence (0.63 mg/kg) of Greenmount cleanfill criteria for BAP				Cut to Waste Cut to Waste	Topsoil - Clean but unsuitable Topsoil - Clean but unsuitable	Truck & Trailer	+ +		28		
22/01/2014	G&C	Zone 2	73571	Site	Zone 2 - Area C	C4		Ridge Road Landfill			equivalent (0.27 mg/kg). Concentration of Nickel in WS467			Cut to Waste	Cut to Waste	Topsoil - Clean but unsuitable	Truck & Trailer			28		
23/01/2014	G&C	Zone 2	73668	Site	Zone 2 - Area C	C4	N/A	Ridge Road Landfill			(110 mg/kg) exceeded Auckland Council Schedule 10 permitted discharge limits (105 mg/kg).			Cut to Waste	Cut to Waste	Topsoil - Clean but unsuitable	Truck & Trailer			28		
23/01/2014 23/01/2014	G&C G&C	Zone 2 Zone 3	73631 73710	Site Site	Zone 2 - Area C Zone 3 - Area E	C4 C2	N/A	Ridge Road Landfill Ridge Road Landfill						Cut to Waste Cut to Waste	Cut to Waste Cut to Waste	Topsoil - Clean but unsuitable Clean Fill	Truck & Trailer Truck & Trailer	<del>                                     </del>		28 28		
28/01/2014	G&C	Zone 3	73897	Site	Zone 3 - Area E	C3		Ridge Road Landfill						Cut to Waste	Cut to Waste	Clean Fill	Truck & Trailer			28		
28/01/2014 28/01/2014	G&C G&C	Zone 3 Zone 3	73930	Site Site	Zone 3 - Area E Zone 3 - Area E	C3		Ridge Road Landfill Ridge Road Landfill						Cut to Waste Cut to Waste	Cut to Waste Cut to Waste	Clean Fill Clean Fill	Artic Truck & Trailer	$\vdash$		18 28		
28/01/2014	G&C	Zone 3	73980	Site	Zone 3 - Area E	C3		Ridge Road Landfill	1					Cut to Waste Cut Cut to Waste Cut	Cut to Waste	Clean Fill	Truck & Trailer			28		
29/01/2014 29/01/2014	G&C G&C	Zone 3 Zone 3	74011 73999	Site Site	Zone 3 - Area E Zone 3 - Area E	C3		Ridge Road Landfill Ridge Road Landfill							Cut to Waste Cut to Waste	Clean Fill Clean Fill	Truck & Trailer Truck & Trailer			28 28		
29/01/2014	G&C	Zone 3	74124	Site	Zone 3 - Area E	C3		Ridge Road Landfill	]					Cut to Waste	Cut to Waste	Clean Fill	Truck & Trailer			28		
29/01/2014 29/01/2014	G&C G&C	Zone 3 Zone 3	74144 74136	Site Site	Zone 3 - Area E Zone 3 - Area E	C3		Ridge Road Landfill Ridge Road Landfill	<u> </u>					Cut to Waste Cut to Waste Cut to Waste Cut to Waste	Cut to Waste Cut to Waste	Clean Fill Clean Fill	Truck & Trailer Artic			28 18		
29/01/2014 29/01/2014	G&C G&C	Zone 3 Zone 3	74123 74134	Site	Zone 3 - Area E Zone 3 - Area E	C3		Ridge Road Landfill Ridge Road Landfill							Cut to Waste Cut to Waste	Clean Fill Clean Fill	Artic Artic			18 18		
30/01/2014	G&C	Zone 3	74135	Site	Zone 3 - Area E	C3		Ridge Road Landfill	]					Cut to Waste	Cut to Waste	Clean Fill	Truck & Trailer			28		
30/01/2014 30/01/2014	G&C G&C	Zone 3 Zone 3	74221 74145	Site Site	Zone 3 - Area E Zone 3 - Area E	C3		Ridge Road Landfill Ridge Road Landfill	<u> </u>					Cut to Waste Cut to Waste	Cut to Waste Cut to Waste	Clean Fill Clean Fill	Truck & Trailer Truck & Trailer			28 28		
30/01/2014 30/01/2014	G&C G&C	Zone 3 Zone 3	74138 74229	Site	Zone 3 - Area E Zone 3 - Area E	C3		Ridge Road Landfill Ridge Road Landfill						Cut to Waste Cut to Waste	Cut to Waste Cut to Waste	Clean Fill Clean Fill	Truck & Trailer Truck & Trailer			28 28		Total volume of material disposed
30/01/2014	G&C	Zone 3	74140	Site	Zone 3 - Area E	C3		Ridge Road Landfill	]		Cleanfill - BECA samples were classed as managed fill. Upon			Cut to Waste	Cut to Waste	Clean Fill	Truck & Trailer			28		from Zone 3E: 875 m <sup>3</sup> (includes 215
30/01/2014 30/01/2014	G&C G&C	Zone 3 Zone 3	74228 74223	Site Site	Zone 3 - Area E Zone 3 - Area E	C3		Ridge Road Landfill Ridge Road Landfill	CA1E (DECA	1175712 refer to 00 ''	review samples were reclassified as cleanfill. BH470 (at 0.3 m depth) had nickel concentrations (61 mg/kg) slightly above the	Croonmount cloonfills		Cut to Waste Cut to Waste	Cut to Waste Cut to Waste	Clean Fill Clean Fill	Truck & Trailer Truck & Trailer			28 28		m <sup>3</sup> already disposed in December 2013). Three analysed samples relate
30/01/2014 30/01/2014	G&C G&C	Zone 3 Zone 3	74153 74166	Site Site	Zone 3 - Area E Zone 3 - Area E	C3		Ridge Road Landfill Ridge Road Landfill	CA15. (BECA sampling BH470 0.3 m; 2.6 m)	1175713. refer to G9 report for BECA results)	Auckland background limit (35 mg/kg), though under the acceptance criteria for all cleanfill disposal sites and under	Greenmount cleanfill/managed fill, Ridge Road cleanfill/Managed fill, Hampton Downs.	Yes	Cut to Waste Cut to Waste	Cut to Waste Cut to Waste	Clean Fill Clean Fill	Truck & Trailer Truck & Trailer	$\Box$		28 28	660	to Zone 3E. The current sample rate
30/01/2014	G&C	Zone 3	74198	Site	Zone 3 - Area E	C3		Ridge Road Landfill			Schedule 10 limits. CA15 had detectable PAH compounds,			Cut to Waste	Cut to Waste	Clean Fill	Truck & Trailer			28		is one sample per 292 m <sup>3</sup> . This meets
30/01/2014 30/01/2014	G&C G&C	Zone 3 Zone 3	74238 74206	Site Site	Zone 3 - Area E Zone 3 - Area E	C3		Ridge Road Landfill Ridge Road Landfill			though values were below Schedule 10 and cleanfill criteria.			Cut to Waste Cut to Waste	Cut to Waste Cut to Waste	Clean Fill Clean Fill	Truck & Trailer Artic			28 18		the minimum sampling requirements of 1 sample per 1000 m <sup>3</sup> for cleanfill.
30/01/2014 30/01/2014	G&C G&C	Zone 3 Zone 3	74205 74235	Site Site	Zone 3 - Area E Zone 3 - Area E	C3		Ridge Road Landfill Ridge Road Landfill						Cut to Waste Cut to Waste	Cut to Waste Cut to Waste	Clean Fill Clean Fill	Artic Artic	$\Box$		18 18		
30/01/2014	G&C	Zone 3	74142	Site	Zone 3 - Area E	C3		Ridge Road Landfill	1					Cut to Waste	Cut to Waste	Clean Fill	Artic			18		
30/01/2014 30/01/2014	G&C G&C	Zone 3 Zone 3	74209 74260	Site Site	Zone 3 - Area E Zone 3 - Area E	C3		Ridge Road Landfill Ridge Road Landfill	<u> </u>					Cut to Waste Cut to Waste	Cut to Waste Cut to Waste	Clean Fill Clean Fill	Artic Artic			18 18		
30/01/2014 30/01/2014	G&C G&C	Zone 3 Zone 3	74243 74164	Site Site	Zone 3 - Area E Zone 3 - Area E	C2 C2		Ridge Road Landfill Ridge Road Landfill	1					Cut to Waste Cut to Waste	Cut to Waste Cut to Waste	Clean Fill Clean Fill	Truck & Trailer Truck & Trailer	$\Box$		28 28		
30/01/2014	G&C	Zone 3	74197	Site	Zone 3 - Area E	C2		Ridge Road Landfill	1					Cut to Waste	Cut to Waste	Clean Fill	Truck & Trailer			28		,
30/01/2014 30/01/2014	G&C G&C	Zone 3 Zone 3	74164 74197	Site Site	Zone 3 - Area E Zone 3 - Area E	C2 C2	+	Ridge Road Landfill Ridge Road Landfill						Cut to Waste Cut to Waste	Cut to Waste Cut to Waste	Clean Fill Clean Fill	Truck & Trailer Truck & Trailer	<del>                                     </del>		28		
30/01/2014	G&C	Zone 3	74243	Site	Zone 3 - Area E	C2 C3		Ridge Road Landfill						Cut to Waste	Cut to Waste	Clean Fill	Truck & Trailer			28		
31/01/2014 31/01/2014	G&C G&C	Zone 3 Zone 3	74255 74256	Site Site	Zone 3 - Area E Zone 3 - Area E	C3		Ridge Road Landfill Ridge Road Landfill						Cut to Waste Cut to Waste	Cut to Waste Cut to Waste	Clean Fill Clean Fill	Artic Truck & Trailer			18 28		
31/01/2014 31/01/2014	G&C G&C	Zone 3 Zone 3	74294 74254	Site Site	Zone 3 - Area E Zone 3 - Area E	C3	-	Ridge Road Landfill Ridge Road Landfill						Cut to Waste Cut to Waste	Cut to Waste Cut to Waste	Clean Fill Clean Fill	Truck & Trailer Truck & Trailer	+		28		
31/01/2014	G&C	Zone 3	74278	Site	Zone 3 - Area E	C3		Ridge Road Landfill	(					Cut to Waste	Cut to Waste	Clean Fill	Truck & Trailer			28		
31/01/2014	G&C	Zone 3	74206	Site	Zone 3 - Area E	C2	ı	Ridge Road Landfill	l		L	L	1	Cut to Waste	Cut to Waste	Clean Fill	Artic	<u> </u>		18		