

SH16 CAUSEWAY UPGRADE PROJECT



Document history and status

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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 February 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.
- Project updates were written for a variety of local community publications and distributed to stakeholders in the Rosebank business community
- Cycle Action Auckland as a key stakeholder group have been kept informed of cycleway diversions and changes and have expressed their appreciation.
- Positive community feedback has been received since the implementation of the orange temporary lane marking on State Highway 16 eastbound in the Great North Road interchange area.
- One neighbour in Alwyn Ave, Te Atatu South provided feedback about noise relating to crane movements in his neighbourhood. The project team has taken additional steps to ensure full noise mitigation from similar operations in the future.

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 permanent bridge piling/crossheads for eastbound bridge widening continuing.
- Whau River Bridge (north-east) permanent bridge piling/crossheads 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 continuing (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) stability berm slump area being stabilised with timber piles. Filling further east of Causeway Bridge continuing.
- GNRI (southern side, westbound towards Causeway Bridge) continue earthworks for
 raising the area, laying pavement layers, lighting poles and preparing to move onramp
 across in March. Embankment slump occurred into channel of Oakley Creek on 28
 February. The slump transported the rock armouring into and across the western
 channel. Filling opposite the slump has stopped until a remedial solution is devised and
 agreed with Council.

3.0 MEETINGS, INSPECTIONS AND EVENTS

12 February – Auckland Council's coastal compliance inspection

20 February – Auckland Council's earthworks compliance inspection

4.0 ENVIRONMENTAL MONITORING

4.1 EARTHWORKS COMPLIANCE

Compliance Inspection was completed by Auckland Council officers on the 20 February and recorded a compliance score of 1 (Full Compliance).

4.2 CONSTRUCTION NOISE AND VIBRATION

There were no Site Specific Noise Management Plans submitted or approved in February.

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 February is included in Appendix B.

4.5 EROSION AND SEDIMENT CONTROL

There were no Erosion and Sediment Control Plans submitted or approved in February.

4.6 ARCHAEOLOGICAL

A resource consent application was submitted in February for vegetation clearance in Smale Street (Eric Armshaw Park), to assist with compliance of BoI Condition ARCH.7 for repairs to the stone wall (note this application was subsequently withdrawn in March following Auckland Council acceptance of an alternative methodology to undertake the vegetation removal and stone wall repair works in accordance with the relevant BoI conditions thus avoiding the need for a resource consent).

4.7 COASTAL MONITORING

Compliance Inspection was completed by Auckland Council officers on the 12 February and recorded a compliance score of 1.

4.8 MARINE MONITORING

The summer 2014 marine benthic monitoring continued 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 11 and 27 February at Traherne Island (Zone 1), Patiki Road/Rosebank Domain/Whau River (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 February 2014 was 147 birds compared to the pre-establishment baseline counts in February 2011 of 92 and 296 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 5 February certifying the Urban Design and Landscape Master Plan is in compliance with BoI conditions LV.1 and LV.2.

6.0 WORKS PROPOSED FOR MARCH, APRIL AND MAY 2014

Refer Appendix A for Construction Zone Plan.

Zone 1 Causeway

- Eastbound: Continue installing the timber piles and Continuous Flight Auger piles at Causeway Bridge transitions, working platform, preload fill (surcharge), drainage blanket layer, wick drains, coffer dam and reclamation in the coastal area.
- Westbound: Divert cycleway onto closed bus lane westbound from Causeway Bridge to Traherne Island South, complete wick drain and preload in Traherne Island South

Zone 2 / Zone 3 Whau to Rosebank

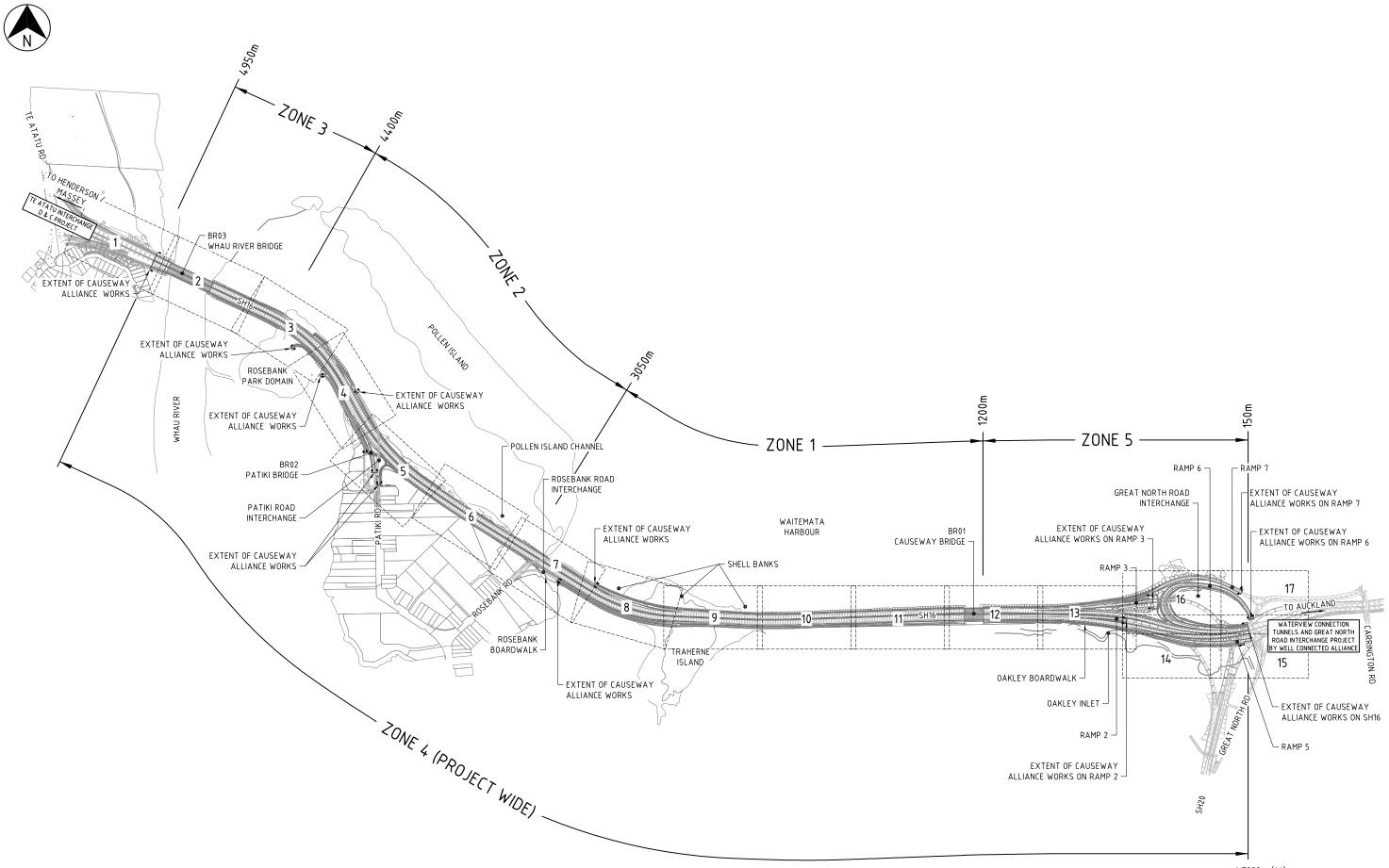
- Eastbound: continue permanent piling for widening Whau Bridge and installing new bridge spans. Continue earthworks and construction of retaining wall (midway between Patiki and Rosebank ramps).
- Westbound: commence temporary and permanent piling for Whau Bridge widening, continue and complete earthworks between Whau River Bridge and Patiki Road (including reclamation and works on Rosebank Domain batter slope). Commence works for Patiki Road onramp widening, including culvert extension/outfalls.

Zone 5 GNRI

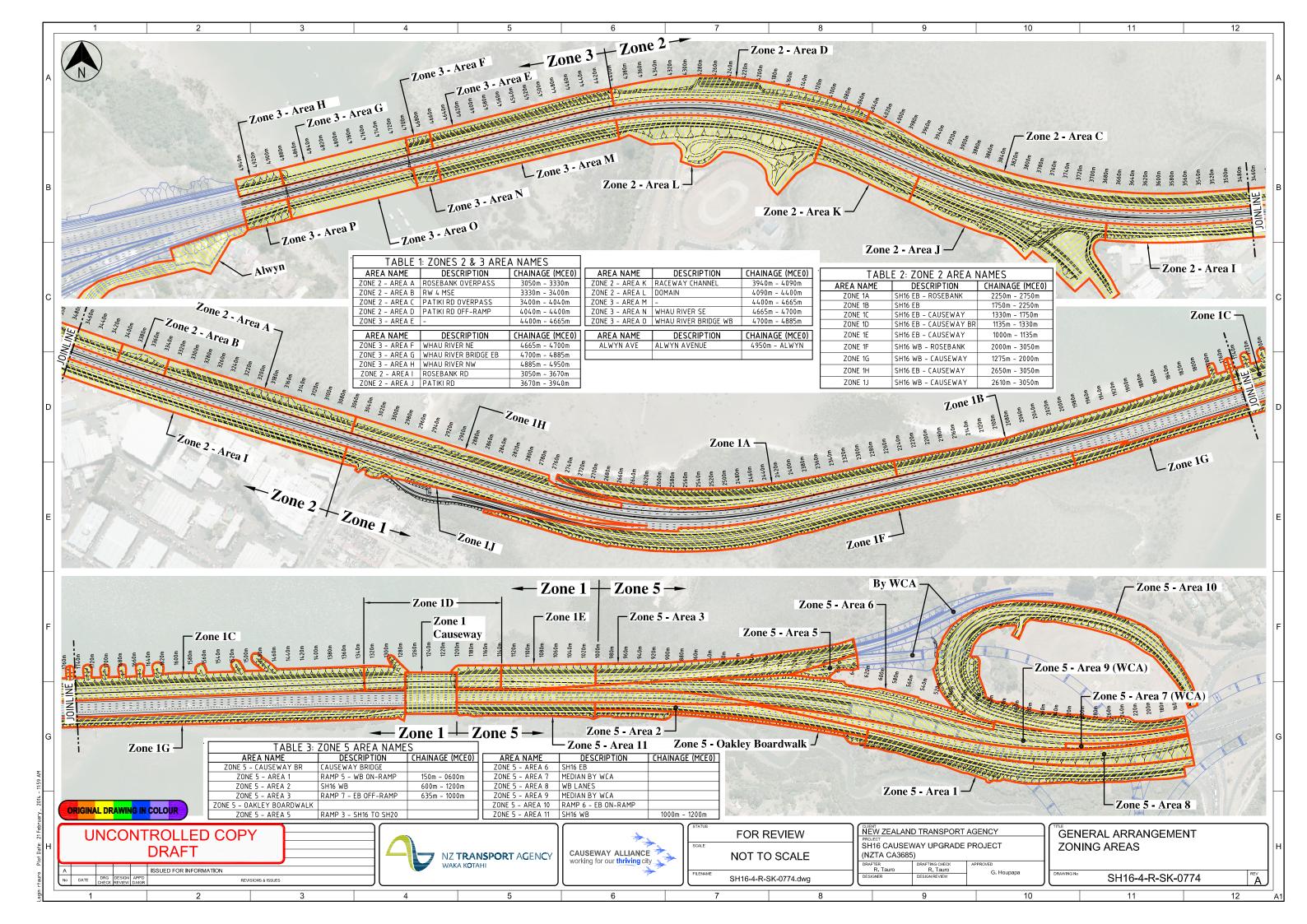
- East bound: continue earthworks to widen the embankment in an easterly direction alongside Great North Road east-bound off-ramp (towards Stone wall).
- Westbound: Continue filling new widened embankment area and open new on-ramp.
 Remediate Oakley Creek slump. Install blade wall in central median.

The environmental focus for March will continue to be on inspections prior to and during vegetation removal, monitoring material movements, management of 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 and monitoring slumps will also continue.

Appendix A: SH16 Causeway Alliance Construction Zone Plan



Appendix B: SH16 Causeway Imported and Exported Material Summary



| Date | Transport Subcontractor | Ordering Zone | Docket# | Material Source | From Area | Gate | From Description Non-Import Only | To Area | Sample ID | Lab Report ID | Classification | Final Disposal Facility | Conformance | To Description | Specification Description | Material Type | Truck Type | Load Count | Truck Volume (T) | Total Volume (C | Total Volume (m³) onversion factor of 1.6 | Sample Rate | |
|--------------------------------------|----------------------------|----------------------------|----------------------------|--------------------|--|----------------|--|---|--|--|--|----------------------------------|--|--|--|---|---|------------|---------------------|-----------------|--|--|--|
| 26/02/2014 | G&C | Zone 1 | 1269084 | Site | Zone 1 - Area E | C12 | Waste stockpile | Hampton Downs Landfill | Refuse material | N/A | Refuse | Hampton Downs | Yes | Landfill | Cut to waste | Rubbish | Truck & Trailer | | (.) | 5.7 | (1 t = 1/1.6)) N/A | N/A | |
| 3/02/2014 3/02/2014 | G&C G&C | Zone 2 | | 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 Truck & Trailer | | | 28 28 | | | |
| 3/02/2014 | G&C G&C | Zone 2 Zone 2 | | 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 Truck & Trailer | | | 28 28 | | | |
| 3/02/2014 4/02/2014 | G&C G&C | Zone 2 Zone 2 | 74659 | 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 Truck & Trailer | | | 28 29 | | | |
| 10/02/2014 | G&C G&C | Zone 2 Zone 2 | 75055 75206 | 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 | Artic Artic | | | 19 19 | | | |
| 11/02/2014 12/02/2014 | G&C G&C | Zone 2 Zone 2 | 75273 | | Zone 2 - Area B Zone 2 - Area B | C4 C4 | | Ridge Road Landfill Ridge Road Landfill | | 1215417; 1226072 | | | | Cut to Waste Cut to Waste | Cut to Waste Cut to Waste | Clean Fill Clean Fill | Artic Truck & Trailer | | | 18 29 | | | |
| 13/02/2014 13/02/2014 | G&C G&C | Zone 2 Zone 2 | | 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 | Artic Artic | | | 19 19 | | | |
| 19/02/2014 19/02/2014 | G&C G&C | Zone 2 Zone 2 | | 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 Truck & Trailer | | | 29.5 29.5 | | | |
| 19/02/2014 19/02/2014 | G&C G&C | Zone 2 Zone 2 | 75768 75841 | 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 Truck & Trailer | | - | 29.5 29.5 | | | |
| 19/02/2014 19/02/2014 | G&C G&C | Zone 2 Zone 2 | 75815 | Site Site | Zone 2 - Area B Zone 2 - Area B | C4 C4 | | Ridge Road Landfill Ridge Road Landfill | | | Cleanfill (CA50_SP very minor exceedance (0.04) of Ridge Road deanfill criteria for Benzo(a)pyrene (BAP) (0.027). | Ridge Road Landfill as cleanfill | | Cut to Waste Cut to Waste | Cut to Waste Cut to Waste | Clean Fill Clean Fill | Truck & Trailer Truck & Trailer | | | 29.5 29.5 | | | |
| 20/02/2014 24/02/2014 | G&C G&C | Zone 2 Zone 2 | 75877 76219 | 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 | | | |
| 24/02/2014 25/02/2014 | G&C G&C | Zone 2 Zone 2 | 76223 76298 | Site Site | Zone 2 - Area B Zone 2 - Area B | C4 C4 | | Ridge Road Landfill Ridge Road Landfill | | | | | Yes (CA50_SP was considered | Cut to Waste Cut to Waste | Cut to Waste Cut to Waste | Clean Fill Clean Fill | Artic Truck & Trailer | | - | 18 28 | | | |
| 25/02/2014 25/02/2014 | G&C G&C | Zone 2 Zone 2 | 76335 76371 | Site Site | Zone 2 - Area B Zone 2 - Area B | C4 C4 | | Ridge Road Landfill Ridge Road Landfill | CA49 SP; CA50 SP; CA51 SP; | | | | cleanfill as the Ridge Road benzo[a]pyrene cleanfill | 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 from Zone 2B: 1191 m ³ (includes 368 m ³ already disposed in January 2014). Six | |
| 25/02/2014 25/02/2014 | G&C G&C | Zone 2 Zone 2 | 76295 76333 | Site Site | Zone 2 - Area B Zone 2 - Area B | C4 C4 | | Ridge Road Landfill Ridge Road Landfill | CA52_SP; CA53_SP; CA69 | | | | exceedeance was very minor and | Cut to Waste Cut to Waste | Cut to Waste Cut to Waste | Clean Fill Clean Fill | Truck & Trailer Truck & Trailer | | | 28 28 | 823 | analysed samples relate to Zone 2B. The current sample rate is one sample per 199 m ³ . This meets the minimum sampling | |
| 25/02/2014 25/02/2014 | G&C G&C | Zone 2 Zone 2 | 76384 76305 | Site Site | Zone 2 - Area B Zone 2 - Area B | C4 C4 C4 | | Ridge Road Landfill Ridge Road Landfill | | | | | all other 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 | | requirements of one sample per 1000 m ³ for cleanfill. | |
| 25/02/2014 25/02/2014 | G&C G&C | Zone 2 Zone 2 | 76343 76325 | | Zone 2 - Area B Zone 2 - Area B | 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 | | | 28 28 | | | |
| 27/02/2014 27/02/2014 | G&C G&C | Zone 2 | 76519 76547 | 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 | | | | 28 28 | | | |
| 27/02/2014 27/02/2014 | G&C G&C | Zone 2 Zone 2 | | 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 | | | 28 28 | | | |
| 27/02/2014 27/02/2014 | G&C G&C | Zone 2 Zone 2 | 76523 | 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 Truck & Trailer | | | 28 28 | | | |
| 27/02/2014 27/02/2014 | G&C G&C | Zone 2 Zone 2 | 76557 76531 | 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 Truck & Trailer | | | 28 28 | | | |
| 27/02/2014 28/02/2014 | G&C G&C | Zone 2 Zone 2 | 76674 | 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 Truck & Trailer | | | 28 28 | | | |
| 28/02/2014 28/02/2014 | G&C G&C | Zone 2 Zone 2 | 76524 | 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 Truck & Trailer | | | 28 28 | | | |
| 28/02/2014 28/02/2014 | G&C G&C | Zone 2 Zone 2 | | 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 Truck & Trailer | | | 28 28 | | | |
| 28/02/2014 28/02/2014 | G&C G&C | Zone 2 Zone 2 | 76631 | 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 Truck & Trailer | | | 28 28 | | | |
| 28/02/2014 28/02/2014 | G&C G&C | Zone 2 Zone 2 | 76629 | 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 Truck & Trailer | | | 28 28 28 | | | |
| 28/02/2014 | G&C G&C | Zone 2 | 76676 | Site | Zone 2 - Area B | C4 | | Ridge Road Landfill | | | | | | Cut to Waste | Cut to Waste | Clean Fill | Truck & Trailer | 1 | 1 | | | | |
| 11/02/2014 | G&C | Zone 2 Zone 2 | | Site Site | Zone 2 - Area C Zone 2 - Area C | C4 C4 | Topsoil strip Topsoil strip | Zone 5 - Area 10 Zone 5 - Area 10 | | | | | | Stockpile Stockpile | Cut to Waste | Topsoil - Clean Topsoil - Clean | 6 Wheeler | | | 200 152 | | Total volume of material disposed from Zone 2C: 1067 m³ (includes 317 m³ already disposed in January 2104). Nine analysed samples relate to Zone 2C. The current sample rate is one sample per 119 m³. This meets the minimum sampling requirements of one sample per 500 m³ for managed fill. | |
| 13/02/2014 | G&C | Zone 2 | | Site | Zone 2 - Area C | C4 | Topsoil strip | Zone 5 - Area 10 | Topsoil strip only - relevant samples: CA45 (0.1-0.2 m); CA46 | 1215417: 1226072. | | | No - Sample CA46 exceeded Schedule 10 permitted discharge | Stockpile | Cut to Waste | Topsoil - Clean | 6 Wheeler | | | 344 | | | |
| 14/02/2014 | G&C | Zone 2 | | Site | Zone 2 - Area C | C4 | Topsoil strip | Zone 5 - Area 10 | (0.1-0.2 m); CA47 (0.4-0.5 m); CA48 (0.1-0.2); CA67 (0.1-0.2); CA68 (0.1-0.3). | Refer to G9 Report for BECA results. | CA47, CA48, CA68, WS468 all cleanfill. CA45 is cleanfill (Greenmount only). CA46 and CA67 are managed fill. | Used onsite at Zone 5 - Area 10 | for nickel (Concentration of nickel in CA46 was 114 mg/kg, Auckland Council Schedule 10 permitted | Stockpile | Cut to Waste | Topsoil - Clean | 6 Wheeler | | | 40 | 750 | | |
| 18/02/2014 | G&C | Zone 2 | | Site | Zone 2 - Area C | C4 | Topsoil strip | Zone 5 - Area 10 | (BECA sampling: WS468 0.4 m) | | | | discharge limit is 105 mg/kg). | Stockpile | Cut to Waste | Topsoil - Clean | 6 Wheeler | 35 | | 280 | | | |
| 18/02/2014 | G&C | Zone 2 | | Site | Zone 2 - Area C | C4 | Topsoil strip | Zone 5 - Area 10 | | | | | | Stockpile | Cut to Waste | Topsoil - Clean | 6 Wheeler | | | 184 | | | |
| 12/02/2014 13/02/2014 | G&C G&C | Zone 2 Zone 2 | 319080 303661 | Site Site | Zone 2 - Area K Zone 2 - Area K | C6 C6 | Waste stockpile Waste stockpile | 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 | 56 56 | | | |
| 13/02/2014 13/02/2014 | G&C G&C | Zone 2 Zone 2 | 323255 317877 | Site Site | Zone 2 - Area K Zone 2 - Area K | C6 C6 | Waste stockpile | 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 28 | 59 58 | | | |
| 13/02/2014 14/02/2014 | G&C G&C | Zone 2 | 294084 317779 | Site | Zone 2 - Area K Zone 2 - Area K | | Waste stockpile Waste stockpile | 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 29 | | | | |
| 14/02/2014 14/02/2014 | G&C G&C | Zone 2 | 299540 317879 | Site | Zone 2 - Area K Zone 2 - Area K | C6 | | 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 | 1 | 29 29 | 29 | | Total volume of material disposed from Zone 2K: 690 m ³ . Two analysed samples relate to Zone 2K. The current sample rate is one sample per 345 m ³ . This meets the minimum sampling requirements of one sample per 1000 m ³ for cleanfill. | |
| 14/02/2014 15/02/2014 | G&C G&C | Zone 2 | 294088 319223 | Site | Zone 2 - Area K Zone 2 - Area K | C6 | Waste stockpile Waste stockpile | 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 | 1 | 29 | 29.5 | | | |
| 15/02/2014 15/02/2014 | G&C G&C | Zone 2 Zone 2 | 317881 | Site | Zone 2 - Area K | C6 | Waste stockpile Waste stockpile | Ridge Road Landfill | BECA Sampling: BH463 1.0 m; | Refer to G9 Report for BECA | Cleanfill | Ridge Road Landfill as cleanfill | Yes | Cut to Waste Cut to Waste | Cut to Waste Cut to Waste | Clean Fill Clean Fill | Truck & Trailer Truck & Trailer | 1 | 29 29 | 29.5 | 690 | | |
| 17/02/2014 | G&C G&C G&C | Zone 2 Zone 2 Zone 2 | 323263 317883 323266 | Site Site | Zone 2 - Area K Zone 2 - Area K Zone 2 - Area K | | Waste stockpile Waste stockpile Waste stockpile | Ridge Road Landfill Ridge Road Landfill Ridge Road Landfill | BH462 0.5 m) | results. | | | | Cut to Waste Cut to Waste Cut to Waste | Cut to Waste Cut to Waste Cut to Waste | Clean Fill Clean Fill Insitu Clay / Unsuitables | Truck & Trailer Truck & Trailer Truck & Trailer | | 29 29 29.5 | 87 87 59 | | | |
| 18/02/2014 | G&C G&C | Zone 2 | 322949 317886 | Site | Zone 2 - Area K Zone 2 - Area K Zone 2 - Area K | C6 | Waste stockpile Waste stockpile Waste stockpile | Ridge Road Landfill Ridge Road Landfill | | | | | | Cut to Waste Cut to Waste Cut to Waste | Cut to Waste Cut to Waste Cut to Waste | Insitu Clay / Unsuitables Insitu Clay / Unsuitables Insitu Clay / Unsuitables | Truck & Trailer Truck & Trailer Truck & Trailer | 2 | 29.5 29.5 | 59 | | | |
| 18/02/2014 | G&C G&C | Zone 2 | 317784 319084 | Site | Zone 2 - Area K Zone 2 - Area K | C6 | | Ridge Road Landfill Ridge Road Landfill | | | | | | Cut to Waste Cut to Waste Cut to Waste | Cut to Waste Cut to Waste Cut to Waste | Insitu Clay / Unsuitables Insitu Clay / Unsuitables Insitu Clay / Unsuitables | Truck & Trailer Truck & Trailer | 2 | 29.5 29.5 | 59 | | | |
| 18/02/2014 19/02/2014 | G&C G&C | | 319083 | | Zone 2 - Area K Zone 2 - Area K Zone 2 - Area K | C6 | Waste stockpile Waste stockpile Waste stockpile | Ridge Road Landfill Ridge Road Landfill | | | | | | Cut to Waste Cut to Waste Cut to Waste | Cut to Waste Cut to Waste Cut to Waste | Insitu Clay / Unsuitables Insitu Clay / Unsuitables Insitu Clay / Unsuitables | Truck & Trailer Truck & Trailer Truck & Trailer | 2 | 29.5 29.5 | 59 | | | |
| 21/02/2014 21/02/2014 | G&C G&C | | 316823 321942 | | Zone 2 - Area K Zone 2 - Area K | C6 | Waste stockpile Waste stockpile | Ridge Road Landfill Ridge Road Landfill | | | | | | Cut to Waste Cut to Waste | Cut to Waste Cut to Waste | Insitu Clay / Unsuitables Clean Fill | Artic Artic | i | 19 | 19 18 | | | |
| 24/02/2014 4/02/2014 | G&C G&C | Zone 2 Zone 3 | 321945 74720 | 2 Area K Unsui | Zone 2 - Area K Zone 3 - Area E | C6 C2 | Waste stockpile | Ridge Road Landfill Ridge Road Landfill | | | | | | Cut to Waste Cut to Waste | Cut to Waste Cut to Waste | Topsoil Clean Fill | Artic Artic | 1 | 18 | 18 18 | | | |
| 4/02/2014 4/02/2014 | G&C G&C | Zone 3 Zone 3 | | 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 | Artic Artic | | | 18 18 | | | |
| 5/02/2014 5/02/2014 | G&C G&C | Zone 3 Zone 3 | 74780 74809 | 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 Clean Fill | Artic Artic | | | 18 18 18 | | | |
| 5/02/2014 5/02/2014 | G&C G&C | Zone 3 Zone 3 | 74778 | Site Site | Zone 3 - Area E Zone 3 - Area E | C2 | | Ridge Road Landfill Ridge Road Landfill | | | | | | Cut to Waste | Cut to Waste Cut to Waste | Clean Fill | Artic Artic | | | 18 | | | |
| 5/02/2014 5/02/2014 | G&C G&C | Zone 3 Zone 3 | 74851 | Site Site | Zone 3 - Area E Zone 3 - Area E | C2 C2 C2 | | Ridge Road Landfill Ridge Road Landfill | | | | | | Cut to Waste Cut to Waste | Cut to Waste Cut to Waste | Clean Fill Clean Fill | Artic Artic | | | 18 18 18 | | Total volume of material disposed from Zone 3E: 1173 m ³ (includes 660 m ³ already disposed in January 2014 and 215 | |
| 5/02/2014 5/02/2014 | G&C G&C | Zone 3 Zone 3 | | | Zone 3 - Area E Zone 3 - Area E | C2 | | Ridge Road Landfill Ridge Road Landfill | CA1E (DECA | 1175712 Patrata 00 P | | | Yes | Cut to Waste Cut to Waste | Cut to Waste Cut to Waste | Clean Fill Clean Fill | Artic Artic | | | 18 | | m ³ already disposed in December 2013). Three analysed | |
| 5/02/2014 7/02/2014 7/02/2014 | G&C G&C | Zone 3 | 74853 74920 74947 | Site Site | Zone 3 - Area E Zone 3 - Area E | C2 C2 | | Ridge Road Landfill Ridge Road Landfill Ridge Road Landfill | CA15. (BECA sampling BH470 0.3 m; 2.6 m) | for BECA results) | Cleanfill | Ridge Road Landfill as cleanfill | | Cut to Waste Cut to Waste | Cut to Waste Cut to Waste | Clean Fill Clean Fill Clean Fill | Artic Artic Artic | | | 18 18 | 298 | samples relate to Zone 3E. The current sample rate is one sample per 391 m ³ . This meets the minimum sampling | |
| 7/02/2014 7/02/2014 7/02/2014 | G&C G&C | Zone 3 Zone 3 | 74991 | Site Site | Zone 3 - Area E Zone 3 - Area E | C2 C2 C2 | | Ridge Road Landfill Ridge Road Landfill | | | | | | Cut to Waste Cut to Waste | Cut to Waste Cut to Waste | Clean Fill Clean Fill | Artic Artic Artic | | | 18 18 18 | | requirements of 1 sample per 1000 m ³ for cleanfill. | |
| 7/02/2014 7/02/2014 7/02/2014 | G&C G&C G&C | Zone 3 Zone 3 Zone 3 | | Site Site | Zone 3 - Area E Zone 3 - Area E Zone 3 - Area E | C2 C2 C2 | | Ridge Road Landfill Ridge Road Landfill Ridge Road Landfill | | | | | | Cut to Waste Cut to Waste Cut to Waste | Cut to Waste Cut to Waste Cut to Waste | Clean Fill Clean Fill Clean Fill | Artic Artic Artic | | | 18 18 18 | | | |
| 7/02/2014 7/02/2014 7/02/2014 | G&C G&C | Zone 3 Zone 3 | 74917 | Site Site | Zone 3 - Area E Zone 3 - Area E Zone 3 - Area F | C2 C2 | | Ridge Road Landfill Ridge Road Landfill | | | | | | Cut to Waste Cut to Waste Cut to Waste | Cut to Waste Cut to Waste Cut to Waste | Clean Fill Clean Fill | Artic Artic | | | 18 | | | |
| 7/02/2014 7/02/2014 10/02/2014 | G&C G&C G&C | Zone 3 Zone 3 | 74953 | | Zone 3 - Area E 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 Cut to Waste Cut to Waste | Clean Fill Clean Fill Clean Fill | Artic Artic Artic | | | 18 18 | | | |
| 5/02/2014 7/02/2014 | G&C G&C | Zone 3 Zone 3 | 70000 | Site 2 | Zone 3 - Area E (To Stockpile) Zone 3 - Area E (To Stockpile) | C4 | Waste stockpile | Zone 3 - Area E Zone 3 - Area E | | | | | Yes - Stockpiled on site | Stockpile Stockpile | Cut to Waste Cut to Waste | Clay - Clean Clay - Clean | 6 Wheeler 6 Wheeler | | | 40 40 | | (material kept on site) | |
| 25/02/2014 | G&C | Zone 3 | 316363 | Site | Zone 3 - Area M | C6 | Waste stockpile | Zone 3 Area M | | n; 1215417. Refer to G9 Report for BECA results. | rt CA54, WS675 and BH469 (2.3 m) all cleanfill. CA56 is cleanfill (Ridge Road only). CA55 and BH469 (0.75 m) are managed fill. | Used onsite at Zone 3 - Area M | No - Samples CA55 and BH469 exceeded Schedule 10 permitted discharge for nickel (Concentration of nickel in CA55 was 119 mg/kg and in BH469 was 150 mg/kg, Auckland Council Schedule 10 permitted discharge limit is 105 | Cut to Waste | Cut to Waste | Clean Fill | Artic | 1 | | 18 | | (material kept on site) | |
| 25/02/2014 | G&C | Zone 3 | 318948 | Site | Zone 3 - Area M | C6 | Waste stockpile | Zone 3 Area M | CA54, CA55, CA56. (BECA | | | | | Cut to Waste | Cut to Waste | Clean Fill | Artic | 1 | | 18 | | | |
| | 0 | 1 | | | | 1 | | | sampling BH469 0.75 m & 2.3 m; 12 WS675 0.7 m) | | | | permitted discharge limit is 105 mg/kg). | mg/kg). | | | | | | | | 93 | |
| 26/02/2014 26/02/2014 | G&C G&C | Zone 3 Zone 3 | 319237 316366 | Site | Zone 3 Area M Zone 3 Area M | C6 C6 | | Ridge Road Landfill Ridge Road Landfill | | | | | No - Material around locations | Cut to Waste Cut to Waste | Cut to Waste Cut to Waste | Clean Fill Clean Fill | Truck & Trailer Truck & Trailer | 1 | | 27.5 28 | Total analys is one | Total volume of material disposed from Zone 3M: 93 m3. Six | |
| 26/02/2014 | G&C G&C | Zone 3 | 317952 | Site Site | Zone 3 Area M | C6 | | Ridge Road Landfill | | | | Ridge Road Landfill as cleanfill | CA55 and BH469 (0.75 m) was sent to Ridge Road cleanfill when it was | ' | Cut to Waste Cut to Waste | Clean Fill | Truck & Trailer Truck & Trailer | 1 | + | 28 | | analysed samples relate to Zone 3M. The current sample rate is one sample per 16 m3. This meets the minimum sampling | |
| 26/02/2014 | G&C | Zone 3 | 316964 | Site | Zone 3 Area M | C6 | | Ridge Road Landfill | | | | | classified as managed fill only. | Cut to Waste | Cut to Waste | Clean Fill | Truck & Trailer | 1 | | 29.4 | | requirements of one sample per 500 m3 for cleanfill. | |
| | | | | | | • | | | | | | | • | • | • | • | | | • | | | • | |