

**BEFORE AN INDEPENDENT HEARINGS PANEL
IN CHRISTCHURCH**

TE MAHERE Ā-ROHE I TŪTOHUA MŌ TE TĀONE O ŌTAUTAHI

UNDER the Resource Management Act 1991 (the **RMA**)

AND

IN THE MATTER OF the hearing of submissions on Plan Change 14 (Housing and Business Choice) to the Christchurch District Plan

**STATEMENT OF REBUTTAL EVIDENCE OF GAVIN STANLEY (QUANTITY
SURVEYOR) ON BEHALF OF CHRISTCHURCH CITY COUNCIL**

QUALIFYING MATTER: HERITAGE (HERITAGE SITES)

Dated: 9 October 2023

TABLE OF CONTENTS	
EXECUTIVE SUMMARY	1
INTRODUCTION	1
SCOPE OF REBUTTAL EVIDENCE	2
DARESURY	2
BLUE COTTAGE	6
HARLEY CHAMBERS	14

EXECUTIVE SUMMARY

1. I have reviewed the evidence of:
 - (a) Stewart Harrison (Quantity Surveying) on behalf of Daresbury Limited, dated 20 September 2023, which relates to repair estimates for the heritage listing at 9 Daresbury Lane, 67 and 67B Fendalton Road, Christchurch (**Daresbury**):
 - (b) Tom Chatterton (Quantity Surveying) on behalf of Carter Group, dated 20 September 2023 which relates to repair estimates for the heritage listing at 32 Armagh Street; 325 Montreal Street, Christchurch (**Blue Cottage**); and
 - (c) Keeley Pomeroy on behalf of Cambridge 137 Limited, dated 20 September 2023 which relates to repair estimates for the heritage listing at 137 Cambridge Terrace (**Harley Chambers**).
2. Having considered the evidence above, I have made some amendments to my repair estimates. I also outline the areas in which I disagree with the evidence of these experts.
3. All figures included within this rebuttal evidence exclude GST.

INTRODUCTION

4. My name is **Gavin Stanley**. I am a Quantity Surveyor.
5. I prepared a statement of primary evidence on behalf of Christchurch City Council (**Council**) dated 11 August 2023, on the submissions and further submissions on Plan Change 14 to the Christchurch District Plan (the **District Plan; PC14**). My primary evidence considered budgets/estimates for repairs to heritage listed sites including Daresbury and the Blue Cottage.
6. I have the qualifications and experience set out at paragraphs 10 to 17 of my primary evidence dated 11 August 2023.
7. I repeat the confirmation given in my primary evidence that I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2023, and that my evidence has been prepared in compliance with that Code.

SCOPE OF REBUTTAL EVIDENCE

8. In preparing this rebuttal statement, I have read and considered the evidence filed on behalf of submitters, as that evidence relates to my evidence. In this evidence I respond to:
- (a) The following issues identified in the statement of evidence of Mr Harrison for Daresbury Limited, dated 20 September 2023, which relate to repair estimates for Daresbury:
 - (i) Gross Floor Area (**GFA**);
 - (ii) Bespoke Items;
 - (iii) Percentages Applied;
 - (iv) Betterment;
 - (v) Fluctuation Calculation; and
 - (vi) P&G to Appendix E.
 - (b) The issue of additional damage identified in the statement of evidence of Mr Chatterton for Carter Group Limited, dated 20 September 2023, in relation to the Blue Cottage; and
 - (c) The following issues identified in the statement of evidence of Mr Pomeroy for Cambridge 127 Limited, dated 20 September 2023, in relation to Harley Chambers:
 - (i) Basis of calculation for escalation;
 - (ii) Additional damage; and
 - (iii) Façade.

DARESBUY

GFA (Gross Floor area)

9. Mr Harrison has identified a discrepancy with my GFA calculation which reduces the GFA calculation from 1,643 m² to 1,089 m². I agree with Mr Harrison's assessment and agree that my calculations would need to be revised accordingly which would reduce the overall values of replacement costs.

10. My revised figures allowing for the adjusted GFA area as detailed below:
- (a) *Replacement replica (reconstruction using alternative materials and construction methods to achieve the overall look of the original)* – Given the type of building and standard of finishes included I would give a guide replica replacement cost of around \$8,000/m² (subject to further detail) which is based on an approximate GFA of 1,089 m² equates to an estimated replacement cost of around \$8,712,000.
 - (b) *Replacement modern high end multi level house* – A replacement with a modern structure with a high standard of finish (which would bear no resemblance to the existing) from our recent experience, depending upon construction would range from between \$7,000/m² to \$10,000/m² at current market rates. GFA is approximately 1,089 m², this would result in replacement estimates between \$7,623,000 and \$10,890,000

Bespoke Items

11. Mr Harrison disagrees with the comment I made in the report attached to my evidence in chief that some 'bespoke item' allowances in the 2019 Milne Construction repair quotation contain additional allowances for risk. I stand by my comments that some bespoke elements appear to contain additional risk allowances, but as stated in my report, I did not adjust these allowances in my repair estimate, as I am unable to confirm what exactly is included within these works.

Percentages Applied

12. Mr Harrison made a number of comments in relation to the percentages applied to my repair estimate, which I respond to below:
- (a) **Margin:** Mr Harrison suggests the market allowance should be 10%. I am currently seeing 7.5% and 8% in the market hence I agreed with the Milne Construction 2019 assessment of 7.5%
 - (b) **Contingencies:** Mr Harrison did not agree with my comment that Contingency could be reduced given my view on the amount of risk already being built into some rates. Mr Harrison considers a 10% Contingency is appropriate and, in any event, I did not adjust the 10% Contingency, so this is reflected in my estimate.

- (c) **Professional Fees:** Mr Harrison disagrees with my allowance of 10% for professional fees and has suggested 20%. I had suggested a range between 10% and 15% but had allowed for 10% in my estimate. Depending upon the resourcing around the works this could increase and so I accept that the 20% allowance suggested is appropriate. Revised figures as attached (**Appendix C**).

Betterment

13. Mr Harrison disagrees with my comments on the degree of betterment reflected in the 2019 Milne Construction repair estimate. Despite making these comments, I had not omitted the relevant Milne Construction figures from my estimate; but rather noted that they 'may be classed either wholly or in part as betterment'. The areas I questioned were as follows:
- (a) **HVAC:** It was not clear from the Milne Construction estimate provided that the HVAC was to substitute fireplaces that were not to be reinstated. I would agree with Mr Harrison's comments that this would become a cost neutral item.
- (b) **Fire System:** Replacement on a like for like basis would be for 3 fire hose reels. The extra value to replace these reels with a full modern system unless required for code compliance would be classed as betterment.
- (c) **Curtains:** I note that Mr Harrison has made no comment with reference to this item which equates to \$72,913 before escalation. This would not be a construction item and would usually be covered by contents insurance.

Fluctuation Calculation

14. Mr Harrison states that he agrees with the method I have used for the calculation to escalate costs.
15. Mr Harrison noted that Indices 2023Q3, which were not available at the time of my report have now been published by Stats NZ. I agree that given the published indices are higher than my estimated allowance that the increase should be considered, and the figures adjusted accordingly. Revised figures as attached (**Appendices A and B**)

P&G (Preliminaries and general) to appendix E

16. Mr Harrison noted that certain elements should be split out and priced independently from the P&G percentage whilst still retaining its overall value with additional items. For simplicity 12% was applied to cover all related P&G, including Contract Works Insurance, Mobile Scaffolding and Scaffolding for the duration of the works. I have now separated out the scaffolding allowance presented by Milne Construction and have re-evaluated the preliminaries and general required for this project which equates to around 10% of the construction cost, including contract works insurance.
17. My revised Preliminary and General including scaffolding before escalation now totals \$525,759 an increase of \$52,715.

Conclusion on Daresbury

18. In conclusion, the following represents the current differences between my and Mr Harrison's estimates which incorporate all of the latest revisions (note all figures exclude GST):
 - (a) *Replacement replica (reconstruction using alternative materials and construction methods to achieve the overall look of the original)* – both estimates now align at \$8,712,000 with no differences.
 - (b) *Replacement modern high end multi level house* – both estimates now align at between \$7,623,000 and \$10,890,000 with no differences.
 - (c) *Repair Estimate Option 3 – Adjusted Option 2 (Changes To Value Of %'s Of Margins, Contingencies, Professional Fees, P&G), excluding and deduction for betterment* – my allowance is now calculated at \$7,693,272 whereas Mr Harrison's calculation remains at \$8,127,788 a difference of \$434,516.
 - (d) The difference between my repair estimate Option 3 of \$7,693,272 and my replacement estimate of \$8,712,000 is an additional \$1,018,728. making the retention and repair of the heritage elements a favourable proposition.
 - (e) The difference between my repair estimate Option 3 of \$7,693,272 and a proposed modern structure with a high standard of finish of between

\$7,623,000 and \$10,890,000, would be either a saving of \$70,272 or an addition of \$3,196,728.

BLUE COTTAGE

19. Mr Chatterton notes that my costings relate to 'redecorating and some minor repairs' whereas his costings represent 'essentially deconstructed and rebuilt version of the building'.
20. My report was based upon my original estimate of November 2015 where the building was in a general good state of repair and required minimal works to prevent further deterioration and bring it back to an acceptable condition whilst maintaining the majority of the heritage fabric. I was instructed to only update my original estimate and to exclude any deterioration that may have occurred since November 2015.
21. The details for my latest estimate 4 August 2023 had not been attached to my evidence in chief (but a copy is attached to this rebuttal as **Appendix D**). In this estimate, rates had been adjusted in line with current rates, but descriptions had remained the same.
22. It is evident that the building has been allowed to fall into a state of disrepair and now requires an additional amount of work to now bring it back to an acceptable standard.
23. I have not carried out an internal inspection of the building since November 2015.
24. Mr Chatterton refers to his 'Order of Costs – Estimate' dated September 2023 as 'a worst-case scenario' which appears to have been based on Mr Brookland's (building condition assessment on behalf of Carter Group Limited) and Mr Hill's (architecture on behalf of Carter Group Limited) statement of evidence.
25. No engineer appears to have carried out a structural assessment of the property which would have enabled me to make informed comment on the validity of those related works/costings included.
26. The worst-case scenario allowances do not appear to align with Mr Fulton's Statement of Evidence (heritage, on behalf of Carter Group Limited) as Mr

Chatterton has allowed a substantial amount of replacement where Mr Fulton suggests repair. This would have a substantial cost implication.

27. I note several statements made within Mr Chatterton's estimate regarding my estimate and address these as follows, bearing in mind additional deterioration of the building since I carried out my original estimate. I set out Mr Chatterton's comments in *italics* with my responses below.

Structure and envelope

28. *This estimate allows for the removal and replacement of a new tiled roof, new flashings and rainwater goods, and the inclusion of replacing of damaged trusses and framing. The Rhodes estimate allowed for redecorating roof and minor repairs only.*
- (a) This is not a tiled roof it is a steel roof.
 - (b) In addition to the redecoration and repair to the roof, I had allowed the supply and installation of insulation to the roof void.
29. *This estimate allows a new foundation beams and building releveled, The Rhodes Estimate allowed for "minor repairs" only*
- (a) There is no evidence on site to show that levels had been affected by the earthquakes or engineers report, and this may be part of the character of the building.
30. *This estimate allows for the careful replacement of all external wall framing. The Rhodes estimate assumes the existing framing is not changed*
- (a) I had allowed for various repairs to wall posts and had made a provisional allowance for the replacement of rotten framing to the northwest elevation.
 - (b) There is no evidence to support replacement of all framing.
 - (c) Mr Chatterton's estimate seems to contradict his statement that the 'estimate allows for the replacement of all external framing' when he has allowed Sums for replacement where required.
31. *This estimate allows for the full replacement and decoration of weatherboards, insulation and building paper. The Rhodes Estimate allowed for redecorating only.*

- (a) This is incorrect, as I had made allowance for treatment to borer affected weatherboards and made allowance for the replacement of 25% of the weatherboards as stated within my estimate clarifications.
- (b) *This estimate allows for new double glazed sash windows throughout. The Rhodes estimate allows for repairs only.*
- (c) I had allowed for repairs to windows. As I understand it there is not a requirement to replace the glass with double glazing, although this would be preferred by potential tenants, in this instance the extra value could be categorized as betterment.

Architectural

32. *This estimate allows for a full internal demolition and replacement of internal walls, new finishes, doors, fittings and joinery and make good throughout the property, compared to the light redecoration and minor make good noted in the Rhodes Estimate.*
- (a) I had allowed for a full redecoration internally.
 - (b) I had allowed for making good to existing walls, ceiling finishes along with repairs to doors and windows.
 - (c) In addition to the making good there were additional allowances for the replacement of a door and frame to space G-3, reinstatement of a ceiling along with associated works to space G-4, replacement of Seratone walls with GIB Aqualine and associated works.
 - (d) Full internal demolition, in my opinion, appears excessive.

Services

33. *This estimate allows for the full removal and replacement of electrical works, plumbing fittings and reticulation and 3no. new heat pumps including external units. The Rhodes estimate allows for some electrical and plumbing works only.*
- (a) No heat pumps were evident originally and an element of the new proposed could be classed as betterment.
 - (b) I had allowed for the full replacement of all sanitary ware to the bathroom as stated within my estimate clarifications.

- (c) I had allowed for full replacement of the electrics and distribution board as stated in my estimate clarifications.
- (d) I had allowed for isolating/draining down reinstating and testing of existing hydraulic systems.

Rates

- 34. I have carried out a high-level review on the rates contained within the estimate and generally the rates provided appear to be reasonable for the tasks that Mr Chatterton has identified, albeit the methodology and reasoning for such extensive works is subject for debate between the respective experts.
- 35. It is evident that in some areas the property has not been costed on a like for like basis with items added over and above that originally in place and effectively increasing the overall costs. In this regard, I make comment on the following elements contained within the estimate:
 - (a) Substructure
 - (i) This is a relatively simple structure and the allowance for releveling the foundations appears high for what would generally be packing to existing piles especially when there is an allowance to lift all the floorboards in the property which would provide good access to the piles.
 - (ii) It is my understanding from conversations with Mr Holmes (on behalf of Christchurch City Council) that there is no requirement for insulation to the underside of the building (*reduction of \$4,380*).
 - (b) Frame/Interior walls
 - (i) A significant allowance has been made for replacement of framing without a great deal of investigation.
 - (ii) From discussions with Mr Holmes (Heritage on behalf of Christchurch City Council) it may be that allowing the timbers to dry out would eliminate the need to replace as many.
 - (c) Roofing

- (i) An extra value item has been allowed for replacing the roofing iron with slate, the building as it stands only has an iron roof and it is my understanding that this would be replaced on a like for like basis (*reduction of \$43,400*).
 - (ii) From discussions with Mr Holmes, it was confirmed that the roofing does not need to be replaced in its entirety with the possibility of just a few panels requiring replacement and the remaining redecorated.
 - (iii) With reference to the above timber battens for slate roofing would not be required (*reduction of \$10,850*).
 - (iv) R6.0 insulation has been allowed to the pitched roof (217 m²); this would typically be laid on the ceilings (146 m²) (*reduction of 71 m² at \$40/m² = \$2,840*).
 - (v) An allowance has been made for new trusses where no structural assessment has been carried out. It may be that repair/additional strengthening can be added to the roof structure rather than replacement and the additional works associated with that.
- (d) Weatherboard
- (i) An item has been allowed for the complete removal and replacement of all weatherboard, both Mr Fulton and Mr Holmes have indicated that that the majority of weatherboarding is sound and requires complete redecoration with an element of replacement where borer is present. Obviously, the extent at which this work could be undertaken greatly depends upon how much framing would need to be replaced.
 - (ii) Stripping off and replacing all weatherboard including all other associated works appears to be excessive. The finish to the weatherboarding has been assessed as having a lead which can be safely prepped and repainted along with the replacement of defective weather board at a significantly lower cost than a full replacement.
- (e) Windows and exterior doors/Interior doors

- (i) Full replacement has been allowed. Repair may be applicable where a conservation approach is applied.
 - (ii) Double glazing has been allowed where it would not be required as discussed with Mr Holmes, carrying out repairs should be in line with a Building Act Section 112 approach.
- (f) Wall finishes/Ceiling finishes
 - (i) It appears that everything is to be replaced which appears excessive given the comments by Mr Fulton who states '*There is isolated cracking in the lathe and plaster which will need to be repaired or replaced with new bracing elements*'.
- (g) Fixtures and fittings
 - (i) The original building had very basic fittings, the allowances made are for a much higher standard than existed, therefore there is a reasonable amount of betterment included which needs to be adjusted for a like for like comparison.
 - (ii) Hot and cold reticulation was isolated to one part of the building, the allowance suggested appears excessive.
- (h) Fire services
 - (i) There were no smoke detectors present in the building, whilst I agree there should be an allowance although it should be to the bare minimum required.
- (i) Electrical services
 - (i) Existing lights were not recessed, quantity and rate are too high and does not represent the type of fitting in place and would be classed as part betterment.
 - (ii) New power outlets, quantity and rate is too high and does not represent what was in place and would be classed as part betterment.
- (j) Heat pumps and ventilation services

- (i) The costs allowance for heat pumps at \$7,000 per unit is higher than expected, 1 No heat pump would most likely be permissible but the other 2 No could be viewed as betterment given that the original building did not have heat pumps.
- (k) Special services
 - (i) No broadband, data outlets or security system was evident (reduction \$6,150).
- (l) Drainage and connections
 - (i) The costs for drainage and connections to existing services appear high considering the building sits on its original footprint and no mention has been made to the state of the existing drainage. Any additional connections to the existing drainage to the building would be minimal as these would be inside the building only and would be relatively straightforward and of minimal cost.
- (m) Preliminaries
 - (i) Additional time for Heritage approvals appears excessive.

Dimensions

- 36. I have identified a discrepancy in the measured elements, whilst looking at the differences between Mr Chatterton's measure and my own. I have since carried out an additional external site visit and undertook a physical measure for confirmation of actual GFA. The drawings that were available do show the correct layout but unfortunately are not scalable, which brings into question the measure undertaken by Mr Chatterton.
- 37. I have cross checked a few of the measures (as below) with my recent site measurements which clearly show an overmeasure by Mr Chatterton which leads to an additional overestimation of costs.
 - (a) GFA – Mr Chatterton's measure equates to 146 m², the GFA from my own site measure equates to 135 m², a difference of 11 m² or 8% discrepancy.

- (b) Roof - Mr Chatterton's measure equates to 217 m², my measure making allowance for at 45 degree pitch equates to 190 m², a difference of 27 m² or 12% discrepancy.
- (c) Weatherboarding – Mr Chatterton's measure equates to 204 m², my measure equates to approximately 152 m², a difference of 52 m² or 25% discrepancy.

Percentages

- 38. A margin of 10% has been allowed, I am currently seeing margins ranging from between 7.5% and 8%, I feel 8% is a more realistic margin in the current environment.
- 39. As Mr Chatterton has alluded to, his estimate is based upon a worst-case scenario. A large amount of risk has been allowed within his measure and rates for works to be completed. He has included a 15% Construction Contingency which when considering the risk already built in the measured is too high. A lower contingency of 10% would be reasonable.
- 40. Finally, there is an additional 5% for Heritage works contingency, which is over and above the Design Contingency, Construction Contingency and Professional Fees. I would suggest this is already covered in the previous noted items and should be omitted.

Conclusion on Blue Cottage

- 41. My original estimate which excluded any damage since November 2015 totalled \$259,000, while Mr Chatterton's estimate was \$1,452,000, a difference of \$1,193,000.
- 42. Mr Chatterton has based his estimate on a worst case scenario which by definition considers all potential risks no matter how small or likely which has the effect of inflating the overall construction cost.
- 43. Mr Chatterton's estimate relies on inaccurate measures such as GFA, roof area and cladding area which has had the effect of increasing the estimate value. I have identified in my review of Mr Chatterton's estimate items which should be adjusted to better reflect the building as it stands, retaining the heritage elements. Considering these items would substantially reduce Mr Chatterton's estimate value.

HARLEY CHAMBERS

44. I attended expert conferencing with Mr Pomeroy (among other experts) on 27 September 2023. We signed a joint witness statement, dated 4 October 2023, which was submitted to the panel.

Basis of calculation for escalation

45. Mr Pomeroy and I agreed at Expert Conferencing that his original estimates should be adjusted using the indices produced by Stats NZ, we do however differ in the Indexation methodology to be used.

46. My I have based my escalation calculations on NZS 3910:2013 Appendix A which is clearly used for construction projects. This method uses both Stats NZ PPI (Producers Price Index Inputs) and LCI (Labour Cost Index).

47. I acknowledge that since my witness statement was made, Stats NZ have published updated Indices for 2023Q3 which shows a marginal increase over my original estimated increase, I have taken this opportunity to adjust my figures accordingly.

48. Mr Pomeroy has based his escalation calculations using the 'Capital Goods Price Index (CPGI) for Non-residential buildings'.

49. I have summarised the differences as follows:

(a) NZS 3910:2013 Appendix A

(i) Calculation is an approved method in the contract NZS 3910:2013 which is applicable on all types of construction projects .

(ii) This method uses a weighted combination of both Stats NZ PPI (Producers Price Index Inputs) and LCI (Labour Cost Index).

(iii) I have used this method on multiple occasions in my dealings with other experts including lawyers in disputes.

(iv) Using this method for calculating escalation increases the original estimate by 28%.

(b) Capital Goods Price Index (CPGI) for Non-residential buildings'

(i) Method is based only on the CPGI.

- (ii) Stats NZ states 'Capital goods price index (CGPI) measures changes in prices of new physical assets. For the construction industry, these physical assets include residential and non-residential buildings, and infrastructure-related construction such as roads and pipelines. It excludes the cost of ongoing maintenance and services. This exclusion is the key difference between the PPI construction output index and CGPI for construction asset types.'
 - (iii) From Stats NZ statement it would be fair to assume the restoration and repair element to Harley Chambers would not make it a new physical asset. This element would not be subject to calculations using CPGI, however new replacement buildings would potentially fall into calculations using CGPI.
 - (iv) Using this method for calculating escalation increases the original estimate by 41%.
- (c) Alternatives examples for context
- (i) Rider Levett Bucknall (**RLB**) TPI % Change calculator¹
 - (1) I have looked at RLB's own online calculator which 'calculates the construction cost differential between two selected dates'. This method indicates an escalation increase of 30.9% as confirmed by Mr Pomeroy via e-mail dated 05 October 2023.
 - (ii) Reserve Bank of New Zealand Inflation calculator²
 - (1) I have looked at the Reserve Bank of New Zealand's Inflation calculator which uses Stats NZ Consumer Price Index (CPI) which only covers up to 2023Q2 and equates to an increase of 22.5%. If I add on the escalation from 2023Q1 to 2023Q2 I arrive at an approximate increase of 23.6%.
- (d) Summary:

¹ Calculator can be found at <https://www.rlb.com/ccc/#rlb-tpi-change>

² Calculator can be found at <https://www.rbnz.govt.nz/monetary-policy/about-monetary-policy/inflation-calculator>

- (i) In summary I have established a range of between 23.6% to 30.9% within which my calculation of 28% appears reasonable, whereas 41% (i.e., Mr Pomeroy's escalation) appears excessive.
- (ii) I have carried out a recalculation on the basis that all original estimates for refurbishment, repair and strengthening works will be escalated using the 3910:2013 Appendix A calculations including latest revised Indices whereas new build will be based upon Mr Pomeroy's escalation calculation using the CPGI indices for Non-residential buildings. Revised figures excluding additional works as attached (**Appendix E to F**)

50. Summary of revised estimates (excluding GST):

- (a) 2.1 - Option 1A: Building Reinstatement & Strengthening (34% NBS) – Adjustment based on 3910:2013 Appendix A \$16,423,838
- (b) 2.2 - Option 1B: Building Reinstatement & Strengthening (67% NBS) – Adjustment based on 3910:2013 Appendix A \$21,902,727
- (c) 2.3 - Option 1C: Building Reinstatement & Strengthening (100% NBS) – Adjustment based on 3910:2013 Appendix A, \$24,109,680
- (d) 3.2 - Option 2A: Retained Historic Façade with New Open Plan Office Building Connected (100% NBS) – Adjustment based on 3910:2013 Appendix A for façade and CPGI for new building, \$20,126,980
- (e) 3.3 - Option 2B: New Open Plan Office (100% NBS) – Adjustment based on CPGI, \$13,627,656
- (f) *Extra Value for Retention of Façade* – Adjustment based on 3910:2013 Appendix A, \$6,566,969

Additional damage

51. Mr Pomeroy had revised his previous estimate to include additional damage which has occurred since his original estimate of 22 September 2017 and totals \$1,340,000.
52. I make comment on the items included as additional damage as follows:
- (a) Repair Fire Damage - \$259,690

- (i) I refer to Mr Hogg's (Heritage Engineer on behalf of Christchurch City Council) statements included within his Rebuttal Evidence. '*I consider it as an overestimation of scope of repair to allow for the partial demolition and replacement the 200 mm wide ribs and topping slab in this area.*' And concludes with the statement of '*I consider the extent of repair to the floor will be limited to cleaning up surficial smoke damaged surfaces*'. Based on Mr Hogg's evidence I would omit all works relating to the slab and add back a cleaning allowance
- (ii) The allowances for the replacement of windows appears excessive and needs to be adjusted accordingly.
- (iii) Revised figures for repair fire damage as follows:

Allowance for cleaning smoke damage	\$2,000
Replace 2 No feature glazed windows	\$80,000
Replace 3 No regular glazed windows	\$32,000
Revised total	\$114,000

(b) East side front canopy - \$10,254

(i) Agreed

(c) Building Degradation – \$579,470

(i) *Roofing* – \$161,500

(1) It was agreed at Expert Conferencing that this was required and is agreed.

(ii) *Flooring* – \$166,890

(1) Decontamination, clean and seal concrete floors – Agreed

(2) Extra for replacement of T&G timber flooring including insulation.

A. Full extent unknown and insulation unless was already in place would be seen as betterment and should be omitted

(iii) *Ceilings* - \$40,260

- (1) Decontamination, clean and seal interior soffits and bulkheads – Agreed.

(iv) *Door replacement* - \$131,300

- (1) Assumption that 80% of doors are beyond repair appears high given the number of doors within the building. No survey has been carried out, so I am unable to agree this item.

(v) *Walls* - \$69,520

- (1) Decontamination, clean and seal interior soffits and bulkheads – Agreed.
- (2) Extra value to replace baseboards/skirtings, no survey has been carried out, so I am unable to agree the overall quantity to be replaced.

(vi) *Mechanical Services* - \$10,000

- (1) Assume further cleaning and decontamination required – Agreed.

Fluctuation period

53. Mr Pomeroy stated that the incorrect period Indices had been used. I can confirm that the correct Indices had been used for the relevant quarters in question but a portion of text on the actual calculation was incorrect.
54. Mr Pomeroy had agreed in his Expert Witness statement that there was a discrepancy in his façade measure and had reduced the original measure from 820 m² to 760 m². I carried out an additional site measure and ended up with a range of between 722 m² to 742 m², although the method of measurement is down to interpretation. I confirm that I do not have an issue with the measure presented by Mr Pomeroy.
55. I agree with Mr Pomeroy with reference to his comments concerning the use of pro rata rates for the façade, I would however clarify this had been used as a suggestion due to the lack of supporting information in the form of a

missing Structex e-mail dated 08 September 2017 on which Mr Pomeroy's Cost Option Estimate was based.

56. I would query the recalculation Mr Pomeroy had made with reference to the revised estimate for the façade in that the recalculation only considered the 'frame tie', no additional adjustments had been made for demolition, works to exterior walls and finishes, or main steels which may be shorter. Following on from Expert Conferencing Mr Pomeroy e-mailed me on 05 October 2023 with additional information to support his position on his submitted Expert Evidence costings but with no further adjustments. I am still unable to reconcile his costings on the basis already identified above.

Conclusion on Harley Chambers

57. I have identified the differences in methodology for the basis of calculation as below (all excluded 'Additional repairs post August 2017'):
- (a) *2.1 - Option 1A: Building Reinstatement & Strengthening (34% NBS)* – my allowance is calculated at \$16,423,838 whereas Mr Pomeroy's calculation remains at \$18,040,000, a difference of \$1,616,162
 - (b) *2.2 - Option 1B: Building Reinstatement & Strengthening (67% NBS)* – my allowance is calculated at \$21,902,727 whereas Mr Pomeroy's calculation remains at \$24,060,000, a difference of \$2,157,273
 - (c) *2.3 - Option 1C: Building Reinstatement & Strengthening (100% NBS)* – my allowance is calculated at \$24,109,680 whereas Mr Pomeroy's calculation remains at \$26,490,000, a difference of \$2,380,320
 - (d) *3.2 - Option 2A: Retained Historic Façade with New Open Plan Office Building Connected (100% NBS)* – my allowance is calculated at, \$20,126,980 whereas Mr Pomeroy's calculation remains at \$20,850,000, a difference of \$723,020 (please note my previous comments in relation to the façade)
 - (e) *3.3 - Option 2B: New Open Plan Office (100% NBS)* – Adjustment based on CPGI, \$13,627,656 whereas Mr Pomeroy's calculation remains at \$13,630,000, a difference of \$2,344 which is nominal and can be put down as rounding

- (f) *Extra Value for Retention of Façade* – Adjustment based on 3910:2013 Appendix A, \$6,566,969 whereas Mr Pomeroy’s calculation remains at \$7,155,000, a difference of \$588,031 (please note my previous comments in relation to the façade)
58. With reference to the 'Additional Repairs Post August 2017' and my assessment, my adjustments to these works equate to \$1,194,310 whereas Mr Pomeroy’s figure is \$1,340,000, a difference of \$145,690 (excludes additional items queried)
59. The effect of including 'Additional Repairs Post August 2017' based on my figures for '2.2 - Option 1B: Building Reinstatement & Strengthening (67% NBS)' verses replacement are as follows.
- (a) 2.2 - Option 1B: Building Reinstatement & Strengthening (67% NBS) including additional repairs at \$23,242,727 versus 3.3 - Option 2B: New Open Plan Office (100% NBS) at \$13,627,656, a difference of \$9,615,071
- (b) 2.2 - Option 1B: Building Reinstatement & Strengthening (67% NBS) including additional repairs at \$23,242,727 versus 3.2 - Option 2A: Retained Historic Façade with New Open Plan Office Building Connected (100% NBS) at, \$20,126,980, a difference of \$3,115,747

Gavin Stanley

9 October 2023

Appendix A
Cost Fluctuation Adjustment Calculations By Indexations

Cost Fluctuation Adjustment Calculations By Indexation

MILNE CONSTRUCTION

- Option 1** Daresbury House - Reduced Repair Quotation (03 July 2019)
- Option 2** Rhodes + Associates Adjusted Option 1 (Changes To Calculations %'s of Margins, Contingencies, Professional Fees, P&G)
- Option 3** Rhodes + Associates Adjusted Option 2 (Changes To Value Of %'s of Margins, Contingencies, Professional Fees, P&G)

$$C=V \left[\frac{0.4(L-L')}{L'} + \frac{0.6(M-M')}{M'} \right]$$

	Period	Year/Quarter	Option 1	Option 2	Difference Between Option 1 and 2	Option 3	Difference Between Option 1 and 3
			Daresbury House - Reduced Repair Quotation (03 July 2019)	Rhodes + Associates Adjusted Option 1 (Changes To Calculations %'s of Margins, Contingencies, Professional Fees, P&G)		Rhodes + Associates Adjusted Option 2 (Changes To Value Of %'s of Margins, Contingencies, Professional Fees, P&G)	
C	Cost fluctuation adjustment for the quarter under consideration, (rounded up to the nearest \$)		\$ 1,156,929.00	\$ 1,187,187.00	\$ 30,258.00	\$ 1,353,482.00	\$ 196,553.00
V	Valuation of work shown as payable in any Payment Schedule in respect of work having been completed during the quarter under consideration subject to A3, but without deduction of retentions		\$ 5,419,124.00	\$ 5,560,854.00	\$ 141,730.00	\$ 6,339,790.00	\$ 920,666.00
L	Labour Cost Index: Private Sector: Industry Group – Construction: All Salary and Wage Rates: published	2023 Q3	1399	1399		1399	
L'	Index as defined under L but applying for the quarter during which tenders close,	2019 Q3	1227	1227		1227	
M	Producers Price Index: Inputs: Industry Group – Construction, published by Statistics New Zealand applying for the quarter under consideration,	2023 Q3	1506	1506		1506	
M'	Index as defined under M but applying for the quarter during which tenders close.	2019 Q3	1193	1193		1193	
	Adjusted value (Rounded up to nearest \$)		\$ 6,576,053.00	\$ 6,748,041.00	\$ 171,988.00	\$ 7,693,272.00	\$ 1,117,219.00
	Adjusted value per m2, based on 1,089 m2 (Rounded to nearest \$)		\$ 6,039.00	\$ 6,197.00	\$ 158.00	\$ 7,065.00	\$ 1,026.00

**Labour Cost Index - LCI - L and L¹ -
Jan 2011 to Dec 2020**

**Work Income And Spending | Labour
Cost Index**

**Private Sector and Industry Group
(ANZSIC06)(Base: June 2009 qtr (=1000))
(Qrtly-Mar/Jun/Sep/Dec)**

	All Salary and Wage Rates Construction	Movement In Index
2019Q3	1227	5
2019Q4	1236	9
2020Q1	1242	6
2020Q2	1235	-7
2020Q3	1246	11
2020Q4	1253	7
2021Q1	1264	11
2021Q2	1273	9
2021Q3	1284	11
2021Q4	1294	10
2022Q1	1305	11
2022Q2	1326	21
2022Q3	1336	10
2022Q4	1353	17
2023Q1	1361	8
2023Q2	1380	19
2023Q3*	1399	19

*Last updated by Statistics New Zealand 02
August 2023 at 10:45am*

**Producers Price Index - PPI - M and
M¹ - Jan 2011 to Dec 2020**

**Economic Indicators | Producers Price
Index - PPI**

**Inputs (ANZSIC06) - NZSIOC level 1, Base:
Dec. 2010 quarter (=1000) (Qrtly-
Mar/Jun/Sep/Dec)**

	Construction	Movement In Index
2019Q3	1193	9
2019Q4	1199	6
2020Q1	1202	3
2020Q2	1198	-4
2020Q3	1207	9
2020Q4	1211	4
2021Q1	1223	12
2021Q2	1246	23
2021Q3	1277	31
2021Q4	1304	27
2022Q1	1353	49
2022Q2	1409	56
2022Q3	1445	36
2022Q4	1467	22
2023Q1	1474	7
2023Q2	1490	16
2023Q3*	1506	16

*Last updated by Statistics New Zealand 17
August 2023 at 10:45am*

* Denotes estimated indices taken as movement in last confirmed quarter

Appendix C
Adjustments to Milne Construction Quotation

MILNE CONSTRUCTION

Option 1 Daresbury House - Reduced Repair Quotation (03 July 2019)

Option 2 Rhodes + Associates Adjusted Option 1 (Changes To Calculations %'s of Margins, Contingencies, Professional Fees, P&G)

Option 3 Rhodes + Associates Adjusted Option 2 (Changes To Value Of %'s of Margins, Contingencies, Professional Fees, P&G)

DESCRIPTION	OPTION 1 Daresbury House - Reduced Repair Quotation (03 July 2019)	OPTION 2 Rhodes + Associates Adjusted Option 1 (Changes To Calculations %'s of Margins, Contingencies, Professional Fees, P&G)	OPTION 3 Rhodes + Associates Adjusted Option 2 (Changes To Value Of %s of Margins, Contingencies, Professional Fees, P&G)
	%	VALUE	VALUE
Milne Construction - Sub Total Excluding GST		\$4,179,704.89	\$4,179,704.89
<i>Ornit as included within P&G</i>			
<i>Establishment - Storage Containers</i>			
<i>Establishment - Site Office</i>			
<i>Insurance - Contract Works</i>			
<i>Mobile Scaffolding - Hire for Stairwells and Interior</i>			
<i>Environmental - Control report including Monitoring</i>			
<i>Scaffolding for Duration of Works</i>			
<i>Locksmith - ReKey Cellar Door and Courtyard Key Pad</i>			
Sub Total Excluding GST		\$4,179,704.89	\$4,179,704.89
Margins	7.50%	\$ 313,477.87	
Contingencies	10.00%	\$ 417,970.49	
Professional Fees	5.00%	\$ 208,985.24	
Project Management		\$ 90,000.00	
P&G	5.00%	\$ 208,985.24	
Preliminaries			
Scaffolding			
Project Management			
Margins			
Contract Contingencies			
Other Development Costs (Professional Fees)			
Sub Total Excluding GST Including Margins, Contingencies and P&G (Rounded up to nearest \$)		\$5,419,124.00	\$5,560,854.00

A
B = 7.5% of A
C = 7.5% of A
D = 7.5% of A
E
F = 7.5% of A

G = (A+B+C+D+E+H)

DESCRIPTION	OPTION 1 Daresbury House - Reduced Repair Quotation (03 July 2019)	OPTION 2 Rhodes + Associates Adjusted Option 1 (Changes To Calculations %'s of Margins, Contingencies, Professional Fees, P&G)	OPTION 3 Rhodes + Associates Adjusted Option 2 (Changes To Value Of %s of Margins, Contingencies, Professional Fees, P&G)
	%	VALUE	VALUE
Sub Total Excluding GST		\$4,179,704.89	\$4,179,704.89
Margins	5.00%	\$ 208,985.24	
Contingencies	7.50%	\$ 335,901.76	
Professional Fees	10.00%	\$ 481,459.19	
Project Management	5.00%	\$ 264,802.55	
P&G			
Preliminaries			
Scaffolding			
Project Management			
Margins			
Contract Contingencies			
Other Development Costs (Professional Fees)			
Sub Total Excluding GST Including Margins, Contingencies and P&G (Rounded up to nearest \$)		\$5,560,854.00	\$6,339,790.00

B = 5% of A
C
D
E = 7.5% of (A+B+C+D)
F = 10% of (A+B+C+D+E)
G = 5% of (A+B+C+D+E+H)

H = A+B+C+D+E+H+G

DESCRIPTION	OPTION 1 Daresbury House - Reduced Repair Quotation (03 July 2019)	OPTION 2 Rhodes + Associates Adjusted Option 1 (Changes To Calculations %'s of Margins, Contingencies, Professional Fees, P&G)	OPTION 3 Rhodes + Associates Adjusted Option 2 (Changes To Value Of %s of Margins, Contingencies, Professional Fees, P&G)
	%	VALUE	VALUE
Sub Total Excluding GST		\$4,179,704.89	\$4,179,704.89
Margins	10.00%	\$ 394,202.80	
Contingencies		\$ 131,556.00	
Professional Fees			
Project Management			
P&G			
Preliminaries			
Scaffolding			
Project Management			
Margins			
Contract Contingencies			
Other Development Costs (Professional Fees)			
Sub Total Excluding GST Including Margins, Contingencies and P&G (Rounded up to nearest \$)		\$6,339,790.00	\$6,339,790.00

B = 10% of A
C
D
E = 7.5% of (A+B+C+D)
F = 10% of (A+B+C+D+E)
G = 20% of (A+B+C+D+E+H)

H = A+B+C+D+E+H+G

4 August 2023

Te Hononga Civic Offices
53 Hereford Street
CHRISTCHURCH 8013

Attn: Amanda Ohs (e: Amanda.ohs@ccc.govt.nz)

Dear Amanda

**3380/004 R2 – BUDGET REPAIR ESTIMATE – HIN 390 – FORMER DWELLING AND SETTING – 325
MONTREAL STREET, CHRISTCHURCH**

Please find enclosed our revised budget repair estimate of **\$259,000 (two hundred and fifty-nine thousand dollars)** excluding GST for the works to the above-mentioned project as detailed below.

Please refer to the enclosed report which provides further detail on clarifications, exclusions and assumptions made.

Should you have any queries, please do not hesitate to contact the writer.

Yours faithfully



Gavin Stanley
BSc QS NZIQS (Affil)
Project Cost Consultant
Rhodes + Associates Limited



**Rhodes
+Associates**

Quantity Surveyors
Cost Consultants

3380/004 R1 - HIN 390 - 32 ARMAH STREET & 325 MONTREAL
STREET

Repair Cost Estimate

04 August 2023

Christchurch City Council

QUALITY ASSURANCE INFORMATION

Report: REPAIR COST ESTIMATE
Document: HIN 390 - 32 ARMAH STREET & 325 MONTREAL STREET
Ref: 3380/004 R1
Date: 04 August 2023
Client: CHRISTCHURCH CITY COUNCIL
Lead QS: GAVIN STANLEY

Ver:	Date:	Prepared By:	Reviewed By:
	01/12/2015	Gavin Stanley	Lindsey Rhodes
R1	04/08/2023	Gavin Stanley	Phil Griffiths

EXECUTIVE SUMMARY

Rhodes + Associates Limited have been appointed by Christchurch City Council to provide a revised repair cost estimate for the former dwelling and setting at 325 Montreal Street, Christchurch using modern construction techniques to comply with current building regulations.

As this is a revised repair cost estimate Rhodes + Associates Limited have made certain assumptions on the method of construction and the services taking into account their experience on these types of works. This cost estimate allows for repairs works to match the existing design and level of quality no better or no less.

This report has been prepared specifically for Christchurch City Council. Rhodes + Associates Limited accepts no liability in the event this report is used for any other purpose or by any other party.

CLARIFICATIONS AND EXCLUSIONS

The revised repair costs presented in this report are our opinion of the likely repair cost and are provided in accordance with the Scope of Works agreed with Jackie Gillies (Expert Witness - Conservation Architect).

This update is based upon Rhodes + Associates Limited original budget repair estimate dated 01 December 2015 (see Appendix A) (note original estimate stated including GST where it should have stated excluding GST) and as such no allowance has been made for any further deterioration or additional works that may now be required to the building that may have occurred beyond that period.

Documentation (see Appendix B)

- Site visit 09 November 2015
- Notice of Submission on the Proposed Christchurch Replacement District Plan – Submitted by Christ' College – 03 September 2015
- The Caretaker's Cottage Cranmer Centre Christchurch – A Conservation Plan – David Pearson Architects - January 2003
- Scope of Works agreed with Jackie Gilles dated 16 November 2015

Procurement

- It has been assumed the market is competitive with no adjustment included for inflationary factors associated with a major event
- The works are to be negotiated with a fixed lump sum contract
- Estimated contract period – 12 Weeks

Clarifications

- All external joinery, roofing and rainwater goods are to be redecorated.
- All internal walls, ceilings and joinery are to be redecorated
- Within room G4 a substantial amount of the ceiling has been replaced with hardboard, we have allowed for the complete replacement of this ceiling with new plasterboard
- All electrics have been allowed to be replaced complete with a new distribution board
- The bathroom is to have all sanitary wear replaced
- We have allowed for the replacement of 25% of external weatherboard
- Allowances have been made for minor repairs to the structure.

Notable Provisional Sums

- See Section 2 for included Provisional Sums.

Exclusions

- GST
- Security system
- Data
- White ware
- Seismic upgrading
- Delays as a result of archaeological findings
- External works unless identified within the scope of works

- Soft landscaping
- Removal of contaminated or noxious materials
- Removal of asbestos
- Prolongation costs beyond the stated programme
- Fluctuations in the exchange rate
- Loss of income, relocation and disruption costs for the period of construction
- Finance costs
- Holding costs including rates, taxes and related outgoings
- Land and legal costs
- Effects of a pandemic/war

INDEX

SECTION 1 REPAIR COST ESTIMATE

SECTION 1 - REPAIR COST ESTIMATE

SECTION 1 - REPAIR COST ESTIMATE

REPAIR COST ESTIMATE - SUMMARY

CHRISTCHURCH CITY COUNCIL

3380/004 R1 - HIN 390 - 32 ARMAH STREET & 325 MONTREAL STREET

Code	Description	Quantity	Unit	Rate	Total
A	EXTERNAL				
A01	GENERAL EXTERNAL				46,141.00
A02	ELEVATION - NORTH EAST				4,420.00
A03	ELEVATION - NORTH WEST				2,530.00
A04	ELEVATION - SOUTH WEST				4,320.00
A05	ELEVATION - SOUTH EAST				1,680.00
B	INTERNAL				
B01	GENERAL INTERNAL				47,198.00
B02	SPACE G-1				630.00
B03	SPACE G-2				1,380.00
B04	SPACE G-3 (HALLWAY)				5,090.00
B05	SPACE G-4				2,190.00
B06	SPACE G-5				680.00
B07	SPACE G-6 (TOILET)				570.00
B08	SPACE G-7 (BATHROOM)				10,580.00
B09	SPACE G-8				1,690.00
B10	SPACE G-9 (KITCHEN)				0.00
B11	SPACE G-10				550.00
B12	SPACE G-11 (ENTRY)				1,600.00
B13	SPACE G-12 (ATTIC)				4,228.00
	SUBTOTAL				135,477.00
E25	PRELIMINARY & GENERAL				53,711.00
	SUBTOTAL				189,188.00
E26	MARGIN		8 %		15,100.00
	SUBTOTAL				204,288.00
E27	CONTRACT CONTINGENCIES		10 %		20,400.00
	SUBTOTAL				224,688.00
E28	OTHER DEVELOPMENT COSTS		15 %		33,800.00
	TOTAL ANTICIPATED CONSTRUCTION COST (EXCLUDES GST)				258,488.00

CHRISTCHURCH CITY COUNCIL

3380/004 R1 - HIN 390 - 32 ARMAH STREET & 325 MONTREAL STREET

Code	Description	Quantity	Unit	Rate	Total
A01	GENERAL EXTERNAL				
	<u>Decoration</u>				
A01.1	Full decoration of all existing external joinery	147 m2		53.00	7,791.00
A01.2	Full restoration of roof including complete clean out of all gutters and hoppers etc... Allow for replacement of 25% valley gutter in new galvanised to match existing.	1 Item		9,600.00	9,600.00
A01.3	Full decoration of galvanised rainwater goods including replacement of all downpipes in new 80mm galvanised pipe.	1 Item		3,400.00	3,400.00
	<u>External works</u>				
A01.4	Remove tree to north east corner - Provisional Sum	1 Sum		5,000.00	5,000.00
	<u>Foundation</u>				
A01.5	Allow to remove loose materials from basalt foundation and check by stonemason as to structural integrity. Additional allowance for the installation of a flashing to cover top chamfer - Provisional Sum	1 Sum		5,600.00	5,600.00
A01.6	Allowance for minor repairs to basalt foundation stone - Provisional Sum	1 Sum		4,000.00	4,000.00
	<u>Joinery</u>				
A01.7	Allowance for general borer treatment - Provisional Sum	1 Sum		1,500.00	1,500.00
A01.8	Allowance of 25% replacement of weatherboard	37 m2		250.00	9,250.00
GENERAL EXTERNAL - TOTAL					46,141.00
A02	ELEVATION - NORTH EAST				
	<u>Window</u>				
A02.1	Remove aluminium cover sill and replace with new timber sill - assumed rotten	1 Item		620.00	620.00
	<u>Joinery</u>				
A02.2	Remove plant on timber to corner post and allow for replacement	1 Item		1,290.00	1,290.00
	<u>Ramp</u>				
A02.3	Allow for the removal of the existing ramp, replace with timber step and make good area disturbed	1 Item		2,510.00	2,510.00
	<u>Veranda</u>				
A02.4	Missing veranda not required to be reinstated	1 Item		Excluded	Excluded
ELEVATION - NORTH EAST - TOTAL					4,420.00
A03	ELEVATION - NORTH WEST				

REPAIR COST ESTIMATE - DETAILED

CHRISTCHURCH CITY COUNCIL

3380/004 R1 - HIN 390 - 32 ARMAH STREET & 325 MONTREAL STREET

Code	Description	Quantity	Unit	Rate	Total
	<u>Joinery</u>				
A03.1	Remove and carry out new timber splice repair to wall post	1	Item	620.00	620.00
A03.2	Replace element of framing assumed to be rotten	1	Item	1,240.00	1,240.00
	<u>Window</u>				
A03.3	Carry out repairs to rotten section	1	Item	670.00	670.00
ELEVATION - NORTH WEST - TOTAL					2,530.00
A04	ELEVATION - SOUTH WEST				
	<u>Chimney</u>				
A04.1	Missing chimney not to be reinstated, make good wall and roof to match existing - Provisional Sum	1	Sum	3,600.00	3,600.00
	<u>Pipework</u>				
A04.2	Allow for the removal of exposed service pipework and make good penetrations	1	Item	720.00	720.00
ELEVATION - SOUTH WEST - TOTAL					4,320.00
A05	ELEVATION - SOUTH EAST				
	<u>External Works</u>				
A05.1	Remove spoil and vegetation to expose foundation stone	1	Item	1,040.00	1,040.00
	<u>Joinery</u>				
A05.2	Remove and carry out new timber splice repair to wall post	1	Item	640.00	640.00
ELEVATION - SOUTH EAST - TOTAL					1,680.00
B01	GENERAL INTERNAL				
	<u>Decoration</u>				
B01.1	Redecorate ceilings	118	m2	30.00	3,540.00
B01.2	Redecorate picture rails	35	m	18.00	630.00
B01.3	Redecorate skirtings	116	m	18.00	2,088.00
B01.4	Redecorate walls	334	m2	30.00	10,020.00
	<u>Doors</u>				
B01.5	Ease and adjust all doors including redecoration	10	No	540.00	5,400.00
B01.6	Ease and adjust cabinet doors including redecoration	5	No	380.00	1,900.00
	<u>Windows</u>				
B01.7	Ease and adjust all windows including redecoration	9	No	660.00	5,940.00

REPAIR COST ESTIMATE - DETAILED

CHRISTCHURCH CITY COUNCIL

3380/004 R1 - HIN 390 - 32 ARMAH STREET & 325 MONTREAL STREET

Code	Description	Quantity	Unit	Rate	Total
<u>Electrical Services</u>					
B01.8	Allow for the removal and replacement of all electrical reticulation including light fittings for base build only. Includes allowance for working around heritage material	124 m2		120.00	14,880.00
B01.9	Allow for distribution board	1 No		2,800.00	2,800.00
GENERAL INTERNAL - TOTAL					47,198.00
B02	SPACE G-1				
<u>Walls</u>					
B02.1	Touch up minor cracking in lath and plaster in lime plaster and restore affected area	1 Item		270.00	270.00
<u>Windows</u>					
B02.2	Replace damaged sash cord	1 Item		360.00	360.00
B02.3	Retain damaged glass with minor damage	1 Item		No Cost	No Cost
SPACE G-1 - TOTAL					630.00
B03	SPACE G-2				
<u>Door</u>					
B03.1	Carry out repairs to door	1 Item		820.00	820.00
<u>Walls</u>					
B03.2	Fill crack in lath and plaster in lime plaster, reline and restore affected area	1 Item		310.00	310.00
B03.3	Replace damaged glass	1 Item		250.00	250.00
SPACE G-2 - TOTAL					1,380.00
B04	SPACE G-3 (HALLWAY)				
<u>Ceiling</u>					
B04.1	Touch up minor cracking in lath and plaster in lime plaster and restore affected area	1 Item		290.00	290.00
B04.2	Restore area where there has been an issue with damp	1 Item		90.00	90.00
<u>Door</u>					
B04.3	Replace existing door and frame	1 Item		4,200.00	4,200.00
<u>Walls</u>					
B04.4	Patch hole using block and plaster, restore affected area	1 Item		290.00	290.00
B04.5	Fill minor holes around door and restore affected area	1 Item		80.00	80.00
B04.6	Remove pin board and make good wall disturbed	1 Item		140.00	140.00
SPACE G-3 (HALLWAY) - TOTAL					5,090.00

REPAIR COST ESTIMATE - DETAILED

CHRISTCHURCH CITY COUNCIL

3380/004 R1 - HIN 390 - 32 ARMAH STREET & 325 MONTREAL STREET

Code	Description	Quantity	Unit	Rate	Total
B05	SPACE G-4				
	<u>Ceiling</u>				
B05.1	Remove plywood panel and replace with plasterboard, restore affected area (includes allowance for additional timbers where required)	16 m2		120.00	1,920.00
	<u>Wall</u>				
B05.2	Touch up minor cracking around door and restore affected area	1 Item		270.00	270.00
SPACE G-4 - TOTAL					2,190.00
B06	SPACE G-5				
	<u>Door</u>				
B06.1	Carry out repair to cracked panel in door	1 Item		270.00	270.00
	<u>Walls</u>				
B06.2	Touch up minor cracking and restore affected area	1 Item		270.00	270.00
B06.3	Touch up minor cracking in cupboard and restore affected area	1 Item		140.00	140.00
SPACE G-5 - TOTAL					680.00
B07	SPACE G-6 (TOILET)				
	<u>Ceiling</u>				
B07.1	Touch up minor cracking and restore affected area	1 Item		270.00	270.00
	<u>Joinery</u>				
B07.2	Locally treat area of suspected borer	1 Item		300.00	300.00
SPACE G-6 (TOILET) - TOTAL					570.00
B08	SPACE G-7 (BATHROOM)				
	<u>Door</u>				
B08.1	Strip paint from glazed panels	1 Item		290.00	290.00
	<u>Flooring</u>				
B08.2	Lift floor covering and make good timber flooring	1 Item		1,270.00	1,270.00
	<u>Hydraulic services</u>				
B08.3	Allow for isolating, draining down, reinstate and test upon completion - Provisional Sum	1 Item		1,200.00	1,200.00
	<u>Sanitary ware</u>				
B08.4	Allow for the removal of sanitary fittings	1 Item		520.00	520.00
B08.5	WC suite, including toilet seat and all associated plumbing pipework and installation	1 No		910.00	910.00

REPAIR COST ESTIMATE - DETAILED

CHRISTCHURCH CITY COUNCIL

3380/004 R1 - HIN 390 - 32 ARMAH STREET & 325 MONTREAL STREET

Code	Description	Quantity	Unit	Rate	Total
B08.6	Wash hand basin vanity units including tap ware, pipework and installation	1	No	1,810.00	1,810.00
B08.7	Shower, including shower rose, mixer etc... including pipework and installation	1	No	900.00	900.00
B08.8	Shower cubicle complete, including tray	1	No	2,180.00	2,180.00
B08.9	Allow for bathroom hardware, including toilet roll holders, soap dishes and towel rails	1	No	500.00	500.00
	<u>Walls</u>				
B08.10	Strip seratone linings from walls and make good wall framing behind	1	Item	640.00	640.00
	<u>Timber partitions</u>				
B08.11	Supply and install GIB Aqualine® to existing framing	6	m2	60.00	360.00
SPACE G-7 (BATHROOM) - TOTAL					10,580.00
B09	SPACE G-8				
	<u>Ceiling</u>				
B09.1	Touch up minor cracking in lath and plaster in lime plaster and restore affected area	1	Item	270.00	270.00
B09.2	Strip and replace section of curved ceiling complete with lath due to damp - Approximately 1m2 - Provisional SUM	1	Sum	500.00	500.00
	<u>Joinery</u>				
B09.3	Locally treat area of suspected borer	1	Item	300.00	300.00
	<u>Walls</u>				
B09.4	Touch up minor cracking around door and restore affected area	1	Item	270.00	270.00
B09.5	Touch up minor cracking around archway and restore affected area	1	Item	270.00	270.00
B09.6	Fill minor holes and restore affected area	1	Item	80.00	80.00
SPACE G-8 - TOTAL					1,690.00
B10	SPACE G-9 (KITCHEN)				
	<u>Note</u>				
B10.1	No works required				
SPACE G-9 (KITCHEN) - TOTAL					0.00
B11	SPACE G-10				
	<u>Walls</u>				
B11.1	Make good cracking to corner including partitioning	1	Item	550.00	550.00
SPACE G-10 - TOTAL					550.00
B12	SPACE G-11 (ENTRY)				

REPAIR COST ESTIMATE - DETAILED

CHRISTCHURCH CITY COUNCIL

3380/004 R1 - HIN 390 - 32 ARMAH STREET & 325 MONTREAL STREET

Code	Description	Quantity	Unit	Rate	Total
	<u>Ceiling</u>				
B12.1	Replace ceiling within cabinet due to rot	1	Item	600.00	600.00
	<u>Walls</u>				
B12.2	Allow to rake out movement cracks to chimney and insert helifix, re-point	1	Item	1,000.00	1,000.00
SPACE G-11 (ENTRY) - TOTAL					1,600.00
B13	SPACE G-12 (ATTIC)				
	<u>Note</u>				
B13.1	Unable to gain access - Provisional Sum	1	Sum	1,500.00	1,500.00
B13.2	Supply and lay insulation	124	m2	22.00	2,728.00
SPACE G-12 (ATTIC) - TOTAL					4,228.00
E25	PRELIMINARY & GENERAL				
E25.1	Main Contractors on site preliminaries and general - 12 weeks contract - Provisional Sum	1	Sum	39,000.00	39,000.00
E25.2	External scaffolding - erect and dismantle	151	m2	25.00	3,775.00
E25.3	External scaffolding - rental for 12 weeks	151	m2	36.00	5,436.00
E25.4	Internal mobile scaffolds	1	Item	500.00	500.00
E25.5	Temporary protection to existing structure - Provisional Sum	1	Sum	5,000.00	5,000.00
PRELIMINARY & GENERAL - TOTAL					53,711.00

Appendix E
Cost Fluctuation Adjustment Calculations By Indexations

HIN 78 - COMMERCIAL BUILDING AND SETTING, HARLEY CHAMBERS - 137 CAMBRIDGE TERRACE, CHRISTCHURCH

Cost Fluctuation Adjustment Calculations By Indexation

AECOM

Building Reinstatement Options - Using Stats NZ PPI & LCI with calculation from 3910:2013 - Appendix A (not new assets)

$$C=V \left[\frac{0.4(L-L')}{L'} + \frac{0.6(M-M')}{M'} \right]$$

	Period	Year/Quarter	A 2.1 - Option 1A: Building Reinstatement & Strengthening (34% NBS)	B 2.2 - Option 1B: Building Reinstatement & Strengthening (67% NBS)	C 2.3 - Option 1C: Building Reinstatement & Strengthening (100% NBS)	
C	Cost fluctuation adjustment for the quarter under consideration, (rounded up to the nearest \$)		\$ 3,623,838.00	\$ 4,832,727.00	\$ 5,319,680.00	
V	Valuation of work shown as payable in any Payment Schedule in respect of work having been completed during the quarter under consideration subject to A3, but without deduction of retentions		\$ 12,800,000.00	\$ 17,070,000.00	\$ 18,790,000.00	
L	Labour Cost Index; Private Sector: Industry Group – Construction: All Salary and Wage Rates: published	July to September 2023	2023 Q3*	1399	1399	1399
L'	Index as defined under L but applying for the quarter during which tenders close,	July to September 2017	2017 Q3	1182	1182	1182
M	Producers Price Index; Inputs: Industry Group – Construction, published by Statistics New Zealand applying for the quarter under consideration,	July to September 2023	2023 Q3*	1506	1506	1506
M'	Index as defined under M but applying for the quarter during which tenders close.	July to September 2017	2017 Q3	1116	1116	1116
Adjusted value (Rounded to nearest \$)			\$ 16,423,838.00	\$ 21,902,727.00	\$ 24,109,680.00	
Adjusted value \$/m2 based on GFA 2,281 m2 (Rounded to nearest \$)			\$ 7,200.28	\$ 9,602.25	\$ 10,569.79	

Building Replacement Options Using CGPI (for new assets)

	Period	Year/Quarter	D 3.1 - Replica Modern Replacement (100% NBS)	D Rev 3.1 - Replica Modern Replacement (100% NBS) - Revised To Include Demolition (See Appendix E)	E 3.2 - Option 2A: Retained Historic Façade with New Open Plan Office Building Connected (100% NBS) Less Retention Of Façade	F 3.3 - Option 2B: New Open Plan Office (100% NBS)
C	Cost fluctuation adjustment for the quarter under consideration, (rounded up to the nearest \$)		\$ 4,379,205.00	\$ 4,413,584.00	\$ 3,938,011.00	\$ 3,957,656.00
V	Valuation of work shown as payable in any Payment Schedule in respect of work having been completed during the quarter under consideration subject to A3, but without deduction of retentions		\$ 10,700,000.00	\$ 10,784,000.00	\$ 14,740,000.00	\$ 9,670,000.00
					-\$ 5,118,000.00	
	CGPI for current period	July to September 2023	2023 Q3*	1064	1064	1064
	CGPI for date of estimate	July to September 2017	2017 Q3	755	755	755
Adjusted value (Rounded to nearest \$)			\$ 15,079,205.00	\$ 15,197,584.00	\$ 13,560,011.00	\$ 13,627,656.00
Adjusted value \$/m2 based on GFA 2,281 m2 (Rounded to nearest \$)			\$ 6,610.79	\$ 6,662.68	\$ 5,944.77	\$ 5,974.42

Extra Value for Retention of Façade - Using Stats NZ PPI & LCI with calculation from 3910:2013 - Appendix A (not new assets)

$$C=V \left[\frac{0.4(L-L')}{L'} + \frac{0.6(M-M')}{M'} \right]$$

	Period	Year/Quarter	G Extra Value for Retention of Façade (See Appendix G)	
C	Cost fluctuation adjustment for the quarter under consideration, (rounded up to the nearest \$)		\$ 1,448,969.00	
V	Valuation of work shown as payable in any Payment Schedule in respect of work having been completed during the quarter under consideration subject to A3, but without deduction of retentions		\$ 5,118,000.00	
L	Labour Cost Index; Private Sector: Industry Group – Construction: All Salary and Wage Rates: published	July to September 2023	2023 Q3*	1399
L'	Index as defined under L but applying for the quarter during which tenders close,	July to September 2017	2017 Q3	1182
M	Producers Price Index; Inputs: Industry Group – Construction, published by Statistics New Zealand applying for the quarter under consideration,	July to September 2023	2023 Q3*	1506
M'	Index as defined under M but applying for the quarter during which tenders close.	July to September 2017	2017 Q3	1116
Adjusted value (Rounded to nearest \$)			\$ 6,566,969.00	

3.2 - Option 2A: Retained Historic Façade with New Open Plan Office Building Connected (100% NBS)

(E) 3.2 - Option 2A: Retained Historic Façade with New Open Plan Office Building Connected (100% NBS) Less Retention Of Façade	\$ 13,560,011.00
(G) Extra Value for Retention of Façade (See Appendix G)	\$ 6,566,969.00
Adjusted value (Rounded to nearest \$)	\$ 20,126,980.00

* Denotes estimated indices

Labour Cost Index - LCI - L and L¹ - Jan 2011 to Dec 2020

Work Income And Spending | Labour Cost Index

Private Sector and Industry Group
(ANZSIC06)(Base: June 2009 qtr (=1000))
(Qrtly-Mar/Jun/Sep/Dec)

	All Salary and Wage Rates	Movement In Index
Construction		
2017Q3	1182	7
2017Q4	1185	3
2018Q1	1192	7
2018Q2	1198	6
2018Q3	1204	6
2018Q4	1211	7
2019Q1	1216	5
2019Q2	1222	6
2019Q3	1227	5
2019Q4	1236	9
2020Q1	1242	6
2020Q2	1235	-7
2020Q3	1246	11
2020Q4	1253	7
2021Q1	1264	11
2021Q2	1273	9
2021Q3	1284	11
2021Q4	1294	10
2022Q1	1305	11
2022Q2	1326	21
2022Q3	1336	10
2022Q4	1353	17
2023Q1	1361	8
2023Q2	1380	19
2023Q3*	1399	19

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August 2023 at 10:45am

Producers Price Index - PPI - M and M¹ - Jan 2011 to Dec 2020

Economic Indicators | Producers Price Index - PPI

Inputs (ANZSIC06) - NZSIOC level 1, Base:
Dec. 2010 quarter (=1000) (Qrtly-
Mar/Jun/Sep/Dec)

	Construction	Movement In Index
2017Q3	1116	7
2017Q4	1129	13
2018Q1	1138	9
2018Q2	1151	13
2018Q3	1168	17
2018Q4	1176	8
2019Q1	1175	-1
2019Q2	1184	9
2019Q3	1193	9
2019Q4	1199	6
2020Q1	1202	3
2020Q2	1198	-4
2020Q3	1207	9
2020Q4	1211	4
2021Q1	1223	12
2021Q2	1246	23
2021Q3	1277	31
2021Q4	1304	27
2022Q1	1353	49
2022Q2	1409	56
2022Q3	1445	36
2022Q4	1467	22
2023Q1	1474	7
2023Q2	1490	16
2023Q3*	1506	16

Last updated by Statistics New Zealand 17
August 2023 at 10:45am

**Price Index asset types of capital goods
(Base: September quarter 2022 = 1000) (Qrtly-
Mar/Jun/Sep/Dec)**

	Non-Residential Buildings	Movement In Index
2017Q3	754.847645	7.848568
2017Q4	764.542936	9.695291
2018Q1	771.006464	6.463528
2018Q2	779.778393	8.771929
2018Q3	789.935365	10.156972
2018Q4	799.168975	9.23361
2019Q1	806.555863	7.386888
2019Q2	813.481071	6.925208
2019Q3	830.56325	17.082179
2019Q4	842.566944	12.003694
2020Q1	848.56879	6.001846
2020Q2	849.953832	1.385042
2020Q3	850.877193	0.923361
2020Q4	858.725762	7.848569
2021Q1	861.957525	3.231763
2021Q2	888.734995	26.77747
2021Q3	904.893814	16.158819
2021Q4	924.746076	19.852262
2022Q1	951.061865	26.315789
2022Q2	985.226224	34.164359
2022Q3	1000	14.773776
2022Q4	1018	18
2023Q1	1037	19
2023Q2	1052	15
2023Q3**	1064	12

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August 2023 at 10:45am

* Denotes estimated indices taken as movement in last confirmed quarter

** Denotes estimated indices from Aurecon