



Church Property Trustees

Christchurch Cathedral Restoration/Redevelopment Options

Financial Risk Matrix

February 2013

Executive Summary

This financial risk matrix has been prepared to assist in the identification, assessment and reporting of the financial risks and their relative impact and likelihood associated with the six options identified to rebuild the ChristChurch Cathedral.

The framework elements that were used to develop this matrix included the following:

- Risk Identification;
- Risk Consequence Rating; and
- Risk Likelihood Rating.

Financial risk exposures are relevant as they have the potential to create significant unexpected volatility on the financial success of project outcomes. Project options where financial risk exposures have the biggest potential to adversely impact the project were the highest costing projects with the longest development timeframes:

1. Via GCBT Scheme;
2. Via Max Retention; and
3. Stabilise and deconstruct

The top three individual financial risk exposures identified as potentially exposing the project to the most adverse financial volatility across all project outcomes were:

1. Fundraising issues;
2. Investment income risk; and
3. Cost escalation

Executive Summary

From this analysis, it is clear that the **higher the cost** and the **longer the duration** of the project, the greater the financial risk exposures will be. Also, in order to secure and sustain the success of any one of the projects, it will be necessary for the Diocese to be able to **attract capital at no cost**. This will require an ability to provide confidence to the philanthropic and donor community that the Diocese has **adequate governance, systems, resources (e.g. enough people) and controls** in place to safeguard and manage the funds contributed, and that these funds are not going to be consumed in **long term legal and litigation battles**. This will require an ability to be able to communicate, under challenging economic conditions, the long-term vision of the Cathedral and it's importance to the Diocese and city of Christchurch.

Other challenges will include maintaining the **relevancy of longer project horizons** to the **future Cathedral community and donors** who may hold very different values and opinions about how church activities, including buildings, should be used and maintained in the future.

There will also be significant external risks outside the control of the Diocese that will need to be closely monitored and require patience and courage to overcome.



Risk Management Framework

Risk Likelihood, Consequence and Prioritisation Explained



Risk Likelihood

Analysing financial risk requires an assessment of their frequency of occurrence. The following table provides broad descriptions which have been used to support risk likelihood ratings to be applied to the risks identified in this report. The review period is in relation to the planning horizon of each project.

| Rating | | Likelihood of Occurrence |
|----------------|---|--|
| Almost Certain | 4 | The risk is almost certain to occur within the project period. |
| Likely | 3 | The risk is likely to occur within the project period. |
| Possible | 2 | The risk may occur within the project period. |
| Unlikely | 1 | The risk is not likely to occur in the planning period. |

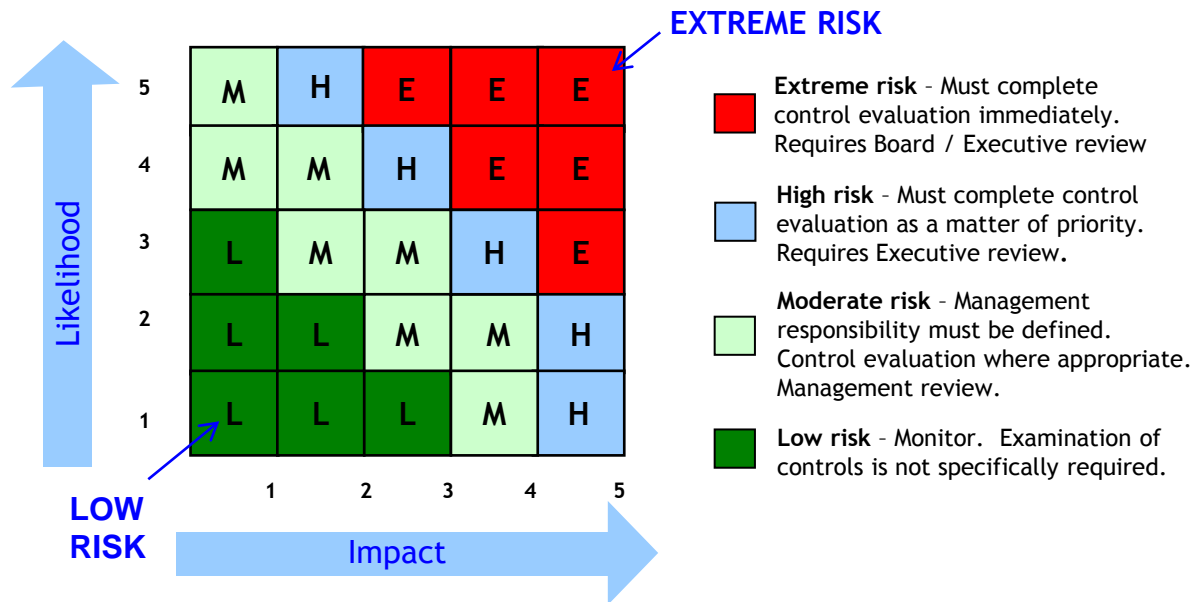
Risk Consequence

Risk consequences can range from “low” to “extreme” and are rated in terms of their potential to financially impact the project. Although it is important to consider consequences as more than just financial; for the purposes of this report, risk events have been considered in relation to their potential to incur financial losses only.

| Rating | | Consequence |
|----------|---|---|
| Extreme | 4 | Possibility of large financial losses putting project survival at risk. Will require significant Executive review. |
| High | 3 | Potential for significant financial losses occurring putting project at risk of severe budget overruns. Will require Management review. |
| Moderate | 2 | Possibility of limited financial losses. Will require Management review. |
| Low | 1 | Minor problem with the possibility of measurable financial impacts to the project possible. |

Project Risk Prioritisation Map

Risk Assessment Tool: The risk assessment tool acts as a guide to determine an appropriate risk rating for each risk.





Result Summaries

Explanation of the results of the detailed risk scoring

Project Risk - Overall Summary

Risk Ratings

Impact

- 1. Low
- 2. Moderate
- 3. High
- 4. Extreme

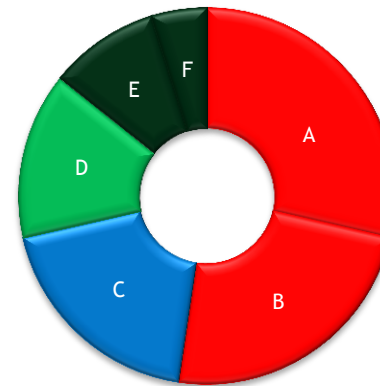
Likelihood

- 1. Unlikely
- 2. Possible
- 3. Likely
- 4. Almost Certain

Costs and development timeframes by Risk Weighting

| Project | Cost | Estimated Timeframe (Yrs to complete) | Risk Weighting | |
|-----------------------------|---------------|---------------------------------------|----------------|------------|
| | | | Consequence | Likelihood |
| A. Via GCBT Scheme | \$95-188m | 7-22 | 3.2 | 3.2 |
| B. Max Retentions | \$105m-\$208m | 7-22 | 3.2 | 3.2 |
| C. Stabilise & Deconstruct | \$74m-\$95m | 5-10 | 2.8 | 3.1 |
| D. Deconstruct to Sill | \$80m-\$161m | 5-22 | 2.6 | 2.8 |
| E. Deconstruct/ Demo Entire | \$59m-\$76m | 5-10 | 2.4 | 2.8 |
| F. Demolish Entirely | \$52m-\$68m | 5-10 | 2.3 | 2.8 |

Overall Project Risk Weightings



Legend

- A. Via GCBT
- B. Maximum Retention
- C. Stabilise & Deconstruction
- D. Deconstruct to Sill
- E. Deconstruct/Demo Entirely
- F. Demolish Entirely

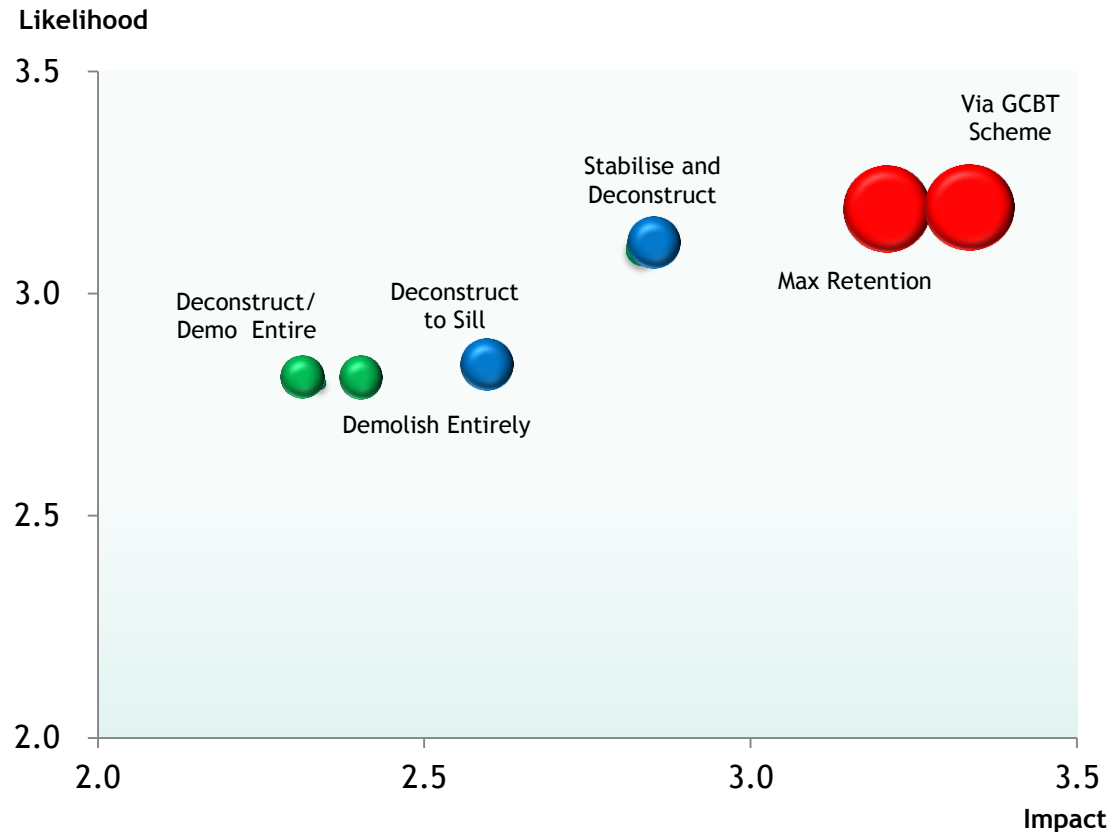
The above table and pie chart illustrate that the higher the project costs and the longer the timeframe to complete, the higher the risk of the project potentially incurring significant financial losses.

Risk Rating - By Project

| Risk Ratings | Impact | Likelihood |
|--------------|-------------|-------------------|
| | 1. Low | 1. Unlikely |
| | 2. Moderate | 2. Possible |
| | 3. High | 3. Likely |
| | 4. Extreme | 4. Almost Certain |

Summary of Project Option Risk

This chart presents the project options and their relative potential to adversely impact the project financially. From the chart it is clear that the Max Retention project options (i.e. including that proposed by the GCBT) present the highest possibility of potentially incurring significant financial losses. If either of these projects are chosen it will be important for management to ensure that the key financial risk drivers are mitigated.



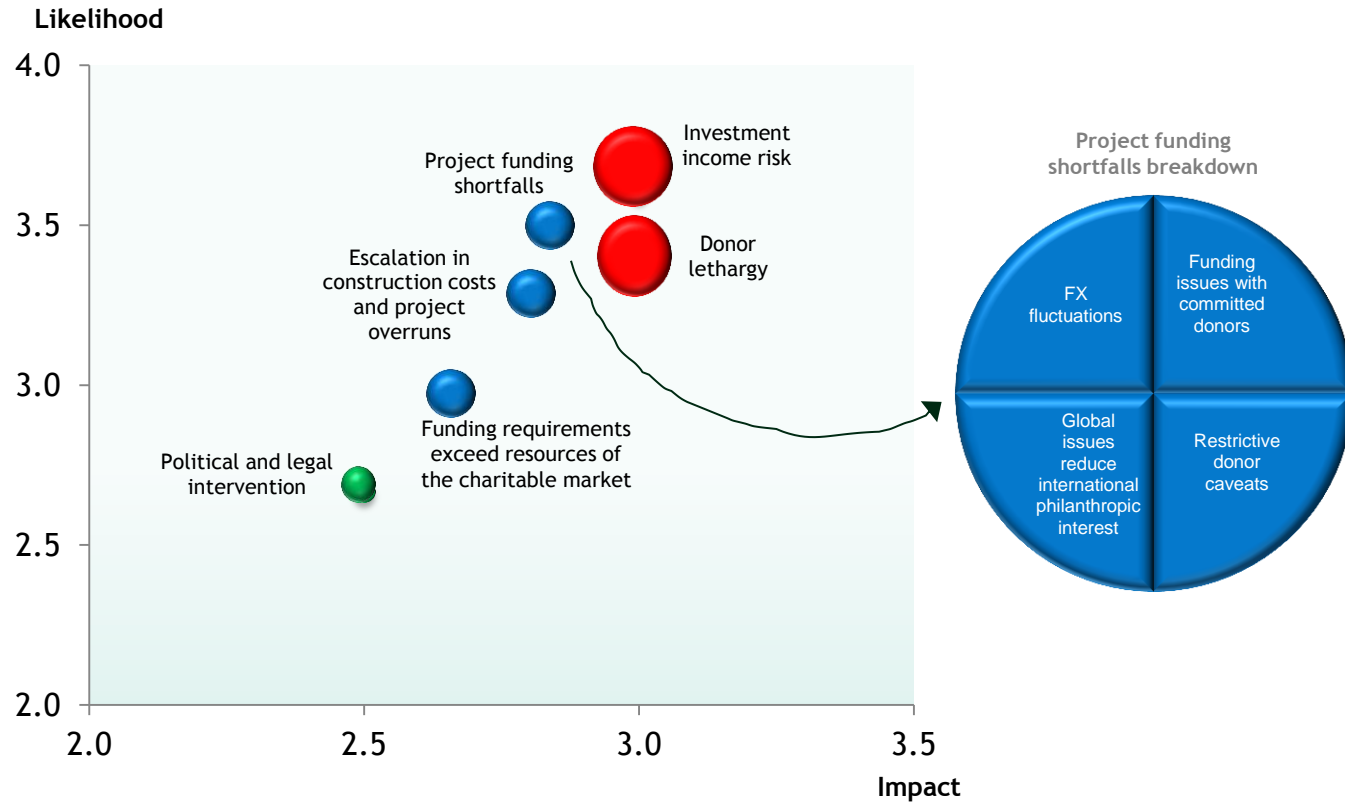
Important Note: Should worst case scenario outcomes eventuate, followed by significant financial losses, this would have a flow on effect and expose all future development plans and operations to the risk of being unable to continue indefinitely.

Risk Rating - By Significance of Individual Risks

| Risk Ratings | Impact | Likelihood |
|--------------|-------------|-------------------|
| | 1. Low | 1. Unlikely |
| | 2. Moderate | 2. Possible |
| | 3. High | 3. Likely |
| | 4. Extreme | 4. Almost Certain |

Summary of Key Risks

The chart opposite presents the key individual financial risks that have the highest combined rating for consequences and likelihood across all risks identified. These risk exposures present the greatest potential to adversely impact (i.e. incur significant financial losses) across any one of the project options. It will be important that management understand the complete impact of these risks and develop mitigating processes to take action if/when they happen.



Important Note: Fundraising risk including donor lethargy, funding shortfalls and investment income risk, collaboratively present the most significant risk to the project.



Detailed Risk Scoring

A relative weighting of each project by impact and Likelihood



Risk Details by Project

Risk Ratings

Impact
 1. Low
 2. Moderate
 3. High
 4. Extreme

Likelihood
 1. Unlikely
 2. Possible
 3. Likely
 4. Almost Certain

| Financial Risk Matrix | | | | | | | |
|--------------------------------------|---|---|---------------|-------------------------|---------------------|---------------------------|-------------------|
| Risk Description | | Project Options | | | | | |
| | | Via GCBT Scheme | Max Retention | Stabilise & Deconstruct | Deconstruct to Sill | Deconstruct / Demo Entire | Demolish Entirely |
| 1.0 | Shortfall of funds to complete the project | | | | | | |
| 1.1 | Committed Donors run into financial difficulties and fail to meet their funding commitments | 3 | 3 | 2 | 2 | 1 | |
| 1.2 | Donor conditions on the use of funds, limit how the money can be applied to the project | 4 | 4 | 3 | 3 | 2 | |
| Contributing Factors | 1.3 | Reduced government appetite for providing funds to rebuild the Cathedral, as revised estimates to rebuild Christchurch are higher than expected | 4 | 4 | 3 | 3 | 2 |
| | 1.4 | Funding from international philanthropic sources is lower due to being inundated with requests from other countries suffering natural disasters and challenges presented by the GFC | 4 | 4 | 3 | 4 | 2 |
| | 1.5 | Foreign dollar funding commitments lower than budgeted due to unfavourable exchange rate movements. | 3 | 3 | 3 | 2 | 2 |
| | 1.6 | Lack of adequate systems, controls and safe guards in place to satisfy donors due diligence requirements | 3 | 3 | 3 | 3 | 3 |
| | 1.7 | Inadequate staff resourcing, fundraising strategies and initiatives | 3 | 3 | 2 | 3 | 2 |
| Impact Risk Rating | | 3.4 | 3.4 | 2.9 | 2.7 | 2.3 | 2.1 |
| Likelihood Risk Rating for this risk | | 4.0 | 4.0 | 3.0 | 4.0 | 2.0 | 2.0 |

Risk Details by Project

| | | |
|---------------------|---------------|-------------------|
| Risk Ratings | Impact | Likelihood |
| | 1. Low | 1. Unlikely |
| | 2. Moderate | 2. Possible |
| | 3. High | 3. Likely |
| | 4. Extreme | 4. Almost Certain |

| Risk Description | | Financial Risk Matrix | | | | | | |
|--------------------------------------|--|---|---------------|-------------------------|---------------------|---------------------------|-------------------|---|
| | | Project Options | | | | | | |
| | | Via GCBT Scheme | Max Retention | Stabilise & Deconstruct | Deconstruct to Sill | Deconstruct / Demo Entire | Demolish Entirely | |
| 2.0 | Funding requirements exceed resources of the charitable market for a Cathedral project | | | | | | | |
| Contributing Factors | 2.1 | The rarity of fundraising projects in NZ exceeding \$20m - \$30m for a build project, indicate that fundraising requirements in excess of this range are not generally attainable | 4 | 4 | 4 | 2 | 2 | 1 |
| | 2.2 | The donor market is sceptical of projects based in the Canterbury region given the risk of future seismic activity | 2 | 2 | 2 | 2 | 1 | 1 |
| | 2.3 | Donor preferences for new design and lack of interest in heritage/gothic based Cathedral projects, results in lower than expected contributions | 4 | 4 | 3 | 2 | 1 | 1 |
| | 2.4 | The sustainability of long term projects is prone to donor fatigue | 4 | 4 | 2 | 4 | 2 | 2 |
| Impact Risk Rating | | 3.5 | 3.5 | 2.8 | 2.5 | 1.5 | 1.3 | |
| Likelihood Risk Rating for this risk | | 4.0 | 4.0 | 3.0 | 3.0 | 2.0 | 2.0 | |

Risk Details by Project

| | | |
|---------------------|---------------|-------------------|
| Risk Ratings | Impact | Likelihood |
| | 1. Low | 1. Unlikely |
| | 2. Moderate | 2. Possible |
| | 3. High | 3. Likely |
| | 4. Extreme | 4. Almost Certain |

| Risk Description | | Financial Risk Matrix | | | | | Project Options | |
|---|----------------------------------|---|---------------|-------------------------|---------------------|--------------------------|-------------------|---|
| | | Via GCBT Scheme | Max Retention | Stabilise & Deconstruct | Deconstruct to Sill | Deconstruct/ Demo Entire | Demolish Entirely | |
| 3.0 | Escalation in construction costs | | | | | | | |
| Contributing Factors | 3.1 | Significant increase in the price of steel, stainless steel and other metals used in construction due to increases in iron ore, fx rates and general supply and demand factors. Commodity price risk! | 2 | 2 | 3 | 3 | 4 | 4 |
| | 3.2 | Existing contractor goes into receivership making future contractors more risk adverse resulting in higher contracting prices or unwilling contractors | 3 | 3 | 3 | 2 | 2 | 2 |
| | 3.3 | Fixed amount of funds available to cover increasing (variable) cost of construction. Liquidity risk! | 4 | 4 | 3 | 2 | 2 | 2 |
| | 3.4 | Labour costs (i.e. salary and wages) in the building and construction sector in Christchurch forecast to increase exponentially as the Christchurch rebuild gains momentum. | 3 | 3 | 2 | 2 | 2 | 2 |
| | 3.5 | Contract Overruns / Variations as a result of work required outside the initial scope of contractor engagements. | 4 | 4 | 3 | 3 | 2 | 2 |
| Impact Risk Rating | | 3.2 | 3.2 | 3 | 2.6 | 2.4 | 2.4 | |
| Likelihood Risk Rating for this risk | | 4.0 | 4.0 | 3.0 | 3.0 | 3.0 | 3.0 | |

Risk Details by Project

| | | |
|---------------------|---------------|-------------------|
| Risk Ratings | Impact | Likelihood |
| | 1. Low | 1. Unlikely |
| | 2. Moderate | 2. Possible |
| | 3. High | 3. Likely |
| | 4. Extreme | 4. Almost Certain |

| Risk Description | | Financial Risk Matrix | | | | | |
|---|--|-----------------------|----------------|-------------------------|---------------------|-------------------------|-------------------|
| | | Project Option | | | | | |
| | | Via GCBT Scheme | Max Retentions | Stabilise & Deconstruct | Deconstruct to Sill | Deconstruct/Demo Entire | Demolish Entirely |
| 4.0 | Trust employee embezzles funds from the trust resulting in material losses | | | | | | |
| Contributing Factors | 4.1 Lack of safeguards such as internal controls and segregation of duties protecting trust assets | 2 | 2 | 2 | 2 | 2 | 2 |
| | 4.2 Lax policies around cash handling | 3 | 3 | 3 | 3 | 3 | 3 |
| Impact Risk Rating | | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 |
| Likelihood Risk Rating for this Risk | | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |

Risk Details by Project

| | | |
|---------------------|---------------|-------------------|
| Risk Ratings | Impact | Likelihood |
| | 1. Low | 1. Unlikely |
| | 2. Moderate | 2. Possible |
| | 3. High | 3. Likely |
| | 4. Extreme | 4. Almost Certain |

| Risk Description | | | Financial Risk Matrix | | | | Project Option | | |
|---|---|--|-----------------------|----------------|-------------------------|---------------------|-------------------------|-------------------|-----|
| | | | Via GCBT Scheme | Max Retentions | Stabilise & Deconstruct | Deconstruct to Sill | Deconstruct/Demo Entire | Demolish Entirely | |
| 5.0 | Cost of potential fines/injunctions due to non-compliance with laws and regulations | | | | | | | | |
| Contributing Factors | 5.1 | Lack of adequate governance, systems and controls in place to meet on-going legal compliance requirements | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | 5.2 | Unfavourable changes to the charitable trusts legislation and rules around gifting | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Impact Risk Rating | | | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 |
| Likelihood Risk Rating for this Risk | | | 4.0 | 4.0 | 3.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| 6.0 | Investment income lower than budgeted | | | | | | | | |
| Contributing Factors | 6.1 | Unfavourable interest rate variability | 4 | 4 | 4 | 3 | 3 | 3 | 3 |
| | 6.2 | Unfavourable systematic market risk volatility such as future recessions, political turmoil, terrorist attacks and other uncontrollable events | 3 | 3 | 3 | 2 | 2 | 2 | 2 |
| Impact Risk Rating | | | 3.5 | 3.5 | 3.5 | 2.5 | 2.5 | 2.5 | 2.5 |
| Likelihood Risk Rating for this Risk | | | 4.0 | 4.0 | 4.0 | 3.0 | 3.0 | 3.0 | 3.0 |

Risk Details by Project

| | | |
|--------------|---------------|-------------------|
| Risk Ratings | <u>Impact</u> | <u>Likelihood</u> |
| | 1. Low | 1. Unlikely |
| | 2. Moderate | 2. Possible |
| | 3. High | 3. Likely |
| | 4. Extreme | 4. Almost Certain |

| Financial Risk Matrix | | | | | | | | |
|---|---|--|---------------|-------------------------|---------------------|--------------------------|-------------------|--|
| Risk Description | | Project Option | | | | | | |
| | | Via GCBT Scheme | Max Retention | Stabilise & Deconstruct | Deconstruct to Sill | Deconstruct/ Demo Entire | Demolish Entirely | |
| 7.0 | Political and legal intervention resulting in grant income lower than budgeted and project delays | | | | | | | |
| Contributing Factors | 7.1 | Change of Government and Council with less appetite for supporting the rebuild and sign off on grants | | | | | | |
| | 7.2 | Resistance and other stakeholder groups potentially delaying the process in lengthy and costly legal battles | | | | | | |
| Impact Risk Rating | | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | |
| Likelihood Risk Rating for this Risk | | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | |
| 8.0 | Damage to public reputation resulting in lower than budgeted bequests and endowments | | | | | | | |
| Contributing Factors | 8.1 | Poor management of dissenters and resistance to the Anglican Diocese plans to rebuild | | | | | | |
| | 8.2 | Fraud event causes potential donors to withdraw their future commitments | | | | | | |
| | 8.3 | Other 'Anglican' issues in the media impact reputation | | | | | | |
| Impact Risk Rating | | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | |
| Likelihood Risk Rating for this Risk | | 2.0 | 2.0 | 3.0 | 4.0 | 4.0 | 4.0 | |

Risk Details by Project

| | | |
|---------------------|---------------|-------------------|
| Risk Ratings | Impact | Likelihood |
| | 1. Low | 1. Unlikely |
| | 2. Moderate | 2. Possible |
| | 3. High | 3. Likely |
| | 4. Extreme | 4. Almost Certain |

| Risk Description | | Financial Risk Matrix | | | | | | |
|---|--|--|---------------|-------------------------|---------------------|--------------------------|-------------------|---|
| | | Project Option | | | | | | |
| | | Via GCBT Scheme | Max Retention | Stabilise & Deconstruct | Deconstruct to Sill | Deconstruct/ Demo Entire | Demolish Entirely | |
| 9.0 | Poor financial modelling resulting in widely inaccurate forecasting and budget shortfalls | | | | | | | |
| Contributing Factors | 9.1 | Lack of adequate financial scenario analysis and sensitivity/stress testing to identify probable best/worst case scenarios | 4 | 4 | 4 | 3 | 3 | 3 |
| | 9.2 | Lack of actionable responses to financial volatility and adverse but plausible contingent events | 4 | 4 | 3 | 3 | 2 | 2 |
| Impact Risk Rating | | 4.0 | 4.0 | 3.5 | 3.0 | 2.5 | 2.5 | |
| Likelihood Risk Rating for this Risk | | 3.0 | 3.0 | 3.0 | 2.0 | 2.0 | 2.0 | |
| 10.0 | Inability to afford adequate insurance for the new Cathedral against future seismic activity resulting in significant losses | | | | | | | |
| Contributing Factors | 10.1 | Cost of Insurance and excess uneconomically high | 4 | 4 | 3 | 3 | 2 | 2 |
| | 10.2 | Continued large natural catastrophes here and abroad negatively impact cover and premiums | 4 | 4 | 3 | 3 | 2 | 2 |
| Impact Risk Rating | | 4.0 | 4.0 | 3.0 | 3.0 | 2.0 | 2.0 | |
| Likelihood Risk Rating for this Risk | | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |

Risk Details by Project

| | | |
|---------------------|---------------|-------------------|
| Risk Ratings | Impact | Likelihood |
| | 1. Low | 1. Unlikely |
| | 2. Moderate | 2. Possible |
| | 3. High | 3. Likely |
| | 4. Extreme | 4. Almost Certain |

| Risk Description | | Financial Risk Matrix | | | | | | |
|---|--|---|---------------|-------------------------|---------------------|--------------------------|-------------------|---|
| | | Project Option | | | | | | |
| | | Via GCBT Scheme | Max Retention | Stabilise & Deconstruct | Deconstruct to Sill | Deconstruct/ Demo Entire | Demolish Entirely | |
| 11.0 | Donor lethargy resulting in raising less funds than budgeted | | | | | | | |
| Contributing Factors | 11.1 | Donation from a big international gives the false illusion to other potential donors that there is no longer a need to donate their funds | 4 | 4 | 3 | 3 | 2 | 2 |
| | 11.2 | Inability to maintain interest in donor support | 4 | 4 | 3 | 3 | 2 | 2 |
| Impact Risk Rating | | 4 | 4 | 3 | 3 | 2 | 2 | |
| Likelihood Risk Rating for this Risk | | 4 | 4 | 4 | 4 | 4 | 4 | |
| 12.0 | Canonical laws, diocese policies and restrictions on capital raising resulting in an inability to raise interest bearing funds | | | | | | | |
| Contributing Factors | 12.1 | The Church cannot raise capital from the debt market or any instruments that are interest bearing | 2 | 2 | 2 | 2 | 2 | 2 |
| | 12.2 | Other Conical laws and diocese policies surrounding who the Church can accept money from | 3 | 3 | 3 | 3 | 3 | 3 |
| Impact Risk Rating | | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | |
| Likelihood Risk Rating for this Risk | | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | |

Risk Details by Project

| | | |
|---------------------|---------------|-------------------|
| Risk Ratings | Impact | Likelihood |
| | 1. Low | 1. Unlikely |
| | 2. Moderate | 2. Possible |
| | 3. High | 3. Likely |
| | 4. Extreme | 4. Almost Certain |

| Financial Risk Matrix | | | | | | | |
|---|--|-----------------|---------------|-------------------------|---------------------|--------------------------|-------------------|
| Risk Description | | Project Option | | | | | |
| | | Via GCBT Scheme | Max Retention | Stabilise & Deconstruct | Deconstruct to Sill | Deconstruct/ Demo Entire | Demolish Entirely |
| 13.0 | Macro global economic “boom and bust” cycles create donor fatigue | | | | | | |
| Contributing Factors | 13.1 Potential donors suffer financial difficulties during bust cycles | 3 | 3 | 3 | 3 | 2 | 2 |
| Impact Risk Rating | | 3 | 3 | 3 | 3 | 2 | 2 |
| Likelihood Risk Rating for this Risk | | 3 | 3 | 3 | 3 | 2 | 2 |
| 14.0 | Tax law changes impacting income tax and allowable deductions | | | | | | |
| Contributing Factors | 14.1 Unfavourable changes in tax law | 3 | 3 | 2 | 2 | 2 | 2 |
| Impact Risk Rating | | 3 | 3 | 2 | 2 | 2 | 2 |
| Likelihood Risk Rating for this Risk | | 2 | 2 | 2 | 2 | 2 | 2 |

Important Notice

This document has been prepared by the Church Property Trustees of the Anglican Diocese of Christchurch (“CPT”) to assist in the identification, assessment and reporting of the financial risks and their relative impact and likelihood associated with the six options identified to rebuild the Christchurch Cathedral. BDO Auckland (“BDO”) assisted the CPT in performing the procedures described in Our Understanding of Your Requirement’s paragraph of our engagement letter dated 11 February 2013. This included facilitating interviews of which the content was included in the risk profile for each of the options identified. The CPT may use the output from these interviews for inclusion in this document, but BDO assume no responsibility or liability whatsoever to any third party in respect of the contents of the output, with or without our prior written consent.

The CPT are responsible for the identification, management and mitigation of all risks associated with all the options being proposed. The work that BDO have conducted under this engagement does not constitute an audit, and no assurance is provided by BDO in this work.

BDO relied on data and information provided to us by the CPT and on enquiries and discussions with them. BDO are not in a position to verify the accuracy of the data or the information and explanations provided to us.

In no circumstances shall BDO be liable, other than in the event of our bad faith or willful default, for any loss or damage, of whatsoever nature, arising from information material to our work being withheld or concealed from us or misrepresented to us by the directors, employees, or agents of the CPT or any other person of whom we may make enquiries, unless detection of such withholding, concealment or misrepresentation should reasonably have been expected because the fact of such withholding, concealment or misrepresentation was evident without further enquiry from the information provided to us or required to be considered by us pursuant to the scope agreed under this letter. This clause, and any assessment of our work made pursuant to it, will have regard to our agreed scope under our engagement letter 11 February 2013.

