

St Mark's Chapel - Feasibility Study

Studio Two Architecture & Design Pty Ltd

Issue B – 24th March 2023

Introduction

This feasibility study is provided for St Mark's Chapel at 73 Trevenna Road, University of New England, Armidale.

This study aims to provide an analysis of the existing site conditions at St Mark's Chapel in addition to the cost considerations, benefits, and deficits, of the potential refurbishment of the existing chapel, or the alternate development of a new facility. Sketches of options are provided and the included features of the alternate options are also compared.

We have also considered possible expenditure on the various options. However the designs for expansion are very preliminary and should be regarded as indicative only. A more detailed Opinion of Cost can be prepared at a later point, as required. We typically base our cost opinion on a developed Concept Design, however we note that this is outside of the current scope of this Feasibility Study.

Site Analysis - Existing Chapel

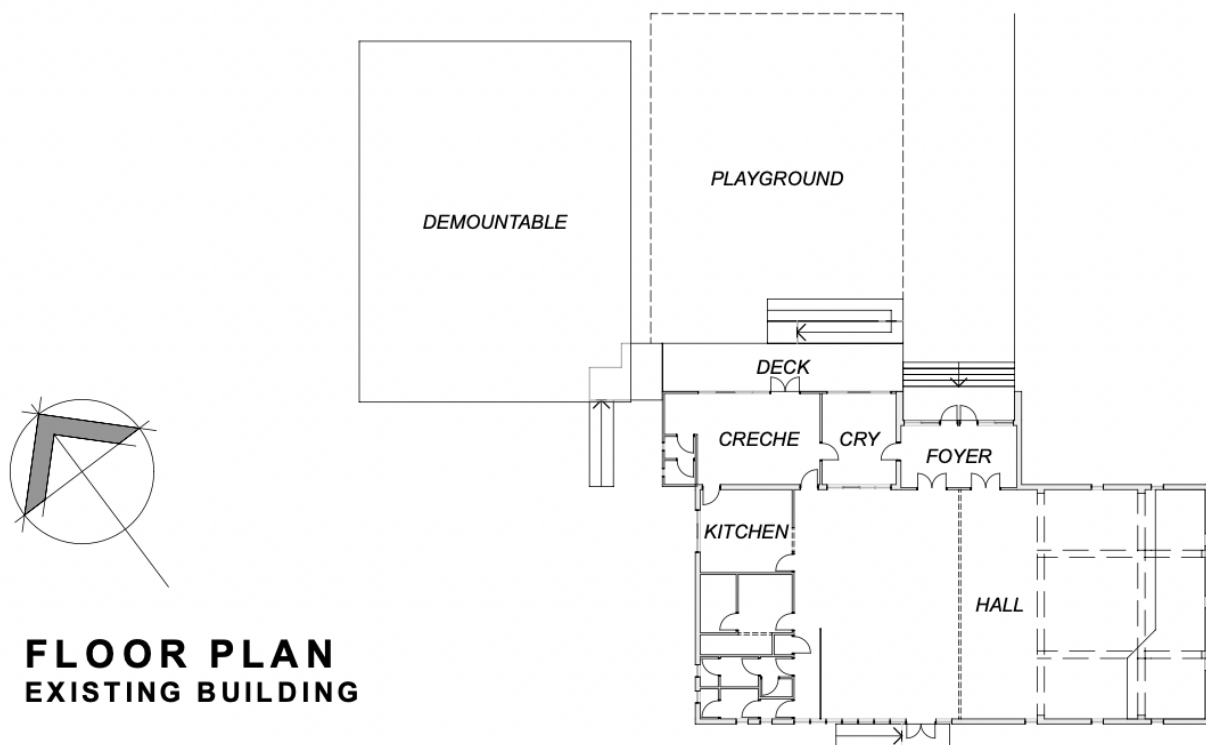


Figure 1- Floor Plan of Existing Chapel

The existing chapel and site has a range of features, positive and negative, that must be considered. The existing chapel (long axis) is orientated to face north-east on a large site with a slight downwards slope towards the north-western boundary.

A generous and functional car park exists on the site to the south of the existing building, and access to the carpark is via *The Short Run* on the south-eastern boundary. We surmise that future development could encroach upon the car park, although there are obvious cost advantages in avoiding this. While the original entry (and small foyer) to the existing chapel addresses the University Ring Road to the north, it is observed that public access to the building now occurs via a secondary southern entrance due to the proximity to the car park. This situation should be resolved in any potential future development of the site.

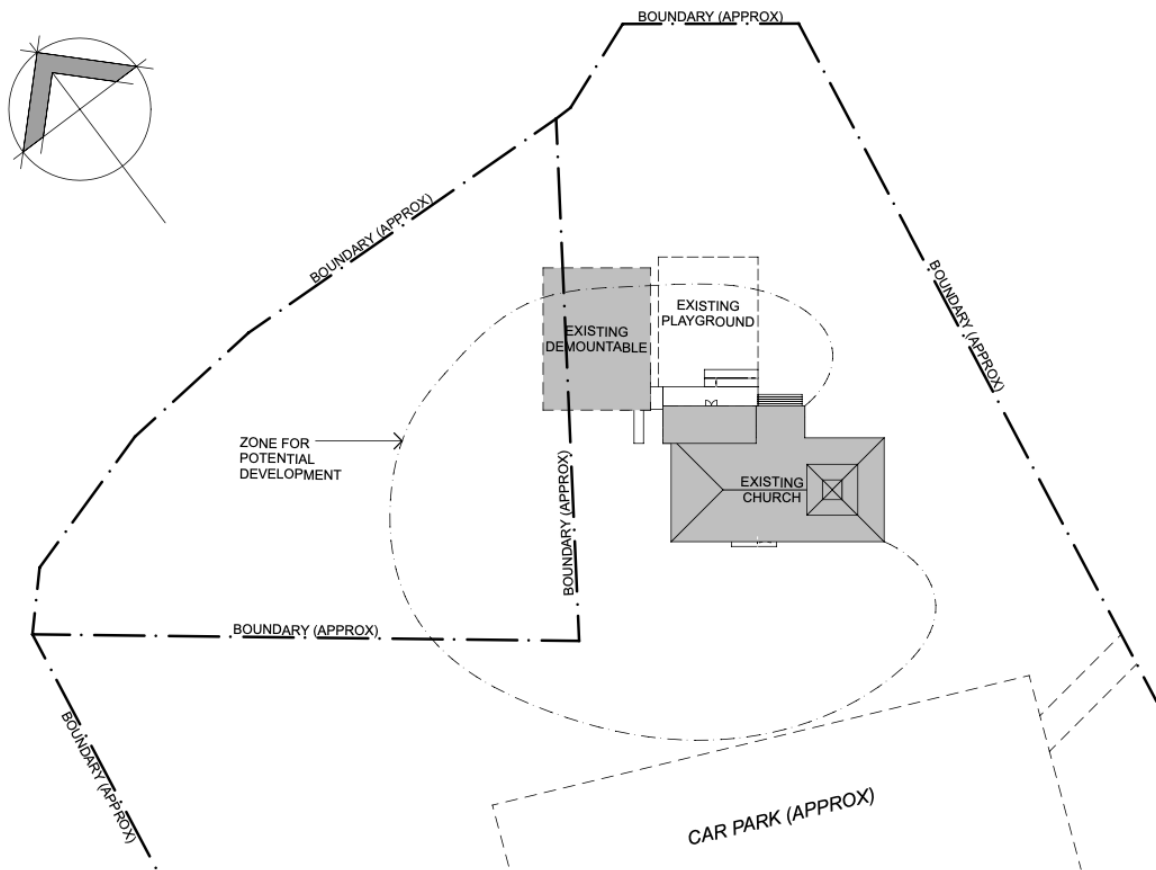
The existing chapel consists of the original chapel building with amenities constructed in the late 1960s, a lightweight extension and deck (late 1990s), and an additional “demountable” building. It is noted that the demountable building, which was a purchase from the University around 2008, is deteriorating, and contains asbestos. Hence this component, while well used for Offices, Meetings and Kids Ministry, has increasing concerns in terms of OH&S

The clerestory windows and spire over the gathering space of the chapel (Refer Figure 2) are a significant architectural feature of the existing building, the spire being visible from the main approaches to the building. The high windows give the principal teaching space increased height and allow natural light to access. This is noted as an important and distinctive element of the original design, and one that should be preserved in future development at the site.

The primary condition of the existing chapel which has prompted consideration for redevelopment is the seating capacity of the original gathering space. The flexibility afforded to the existing Principal Teaching space by the large bi-fold doors to the adjacent Break-out space has also allowed the building to have a flexible usage for many years and allowed for the congregation to grow.

The teaching of kids and youth are important ministries for St Mark’s Chapel, and the existing playground is an integral part of the success of these ministries and should be retained or expanded in potential future schemes. The practice of safe ministry with kids and vulnerable people in the church also necessitates a degree of visibility and transparency. While this is in one sense a matter of behavior and conduct, it can also be fostered through the built environment and should be seen as an important characteristic of potential expansion.

As a building, St Marks has been a place of Christian worship since the early 1970s. It is to be expected that a strong connection has developed by its user group/congregation towards the building and its physical attributes. This is a factor that may need to be carefully considered in discussions and planning for future alterations and expansion.



SITE PLAN EXISTING BUILDING

Figure 2 - Site Plan of Existing Chapel

We believe that to address the problem of insufficient space and amenity St Marks could undertake one of the following strategies.

Two of these strategies assume the redevelopment and expansion of the present Chapel space, with Option A being a more sensitive intervention on the existing building:

- **Option A: Retention/Refurbishment of Existing Chapel** - Retain and expand the existing Chapel as a Principal Teaching space, plus add a new entrance and foyer addressing the Arrival point (from the Carpark).
- **Option A-2: Re-Development of Existing Chapel** - Retain the existing Chapel as a Principal Teaching space, but consider expansion to either the north or east, plus add a new entrance, amenities, secondary teaching space and foyer addressing the Carpark.
- **Option B: Development of New Chapel/Meeting Space as a Stand-alone space** - Construct a new Principal Teaching space, and retain the existing chapel to continue to become the main space for kids ministry during Sunday services, and as a functional space for smaller gatherings.

Option A – Retention/Refurbishment of Existing Chapel, and expansion of the building on the Carpark side.

Option A (see Figure 1.3 below) depicts a potential refurbishment of St Mark’s Chapel in light of the site analysis considered above. This sketch is intended to allow a basis for discussion of potential options and also provides a very loose indication of the developed area. The pros and cons of this scheme are considered in Table 1.

A major difference between this option and the others is the retention of the existing width (approx. 12m) of the Chapel space. We pertain that this dimension creates a shortcoming in terms of forming a functional “church in the round” space, that is, the typical seating arrangement for contemporary worship/meeting spaces, allowing for maximum audience engagement (based on a Lecture Hall or similar building typology).

It is also noted that the chapel as it presently existing operates (Refer Figure 1) with exactly this limitation, accommodating up to 200 people with the 6 or more rear-most rows having substandard connection with the raised teaching area.

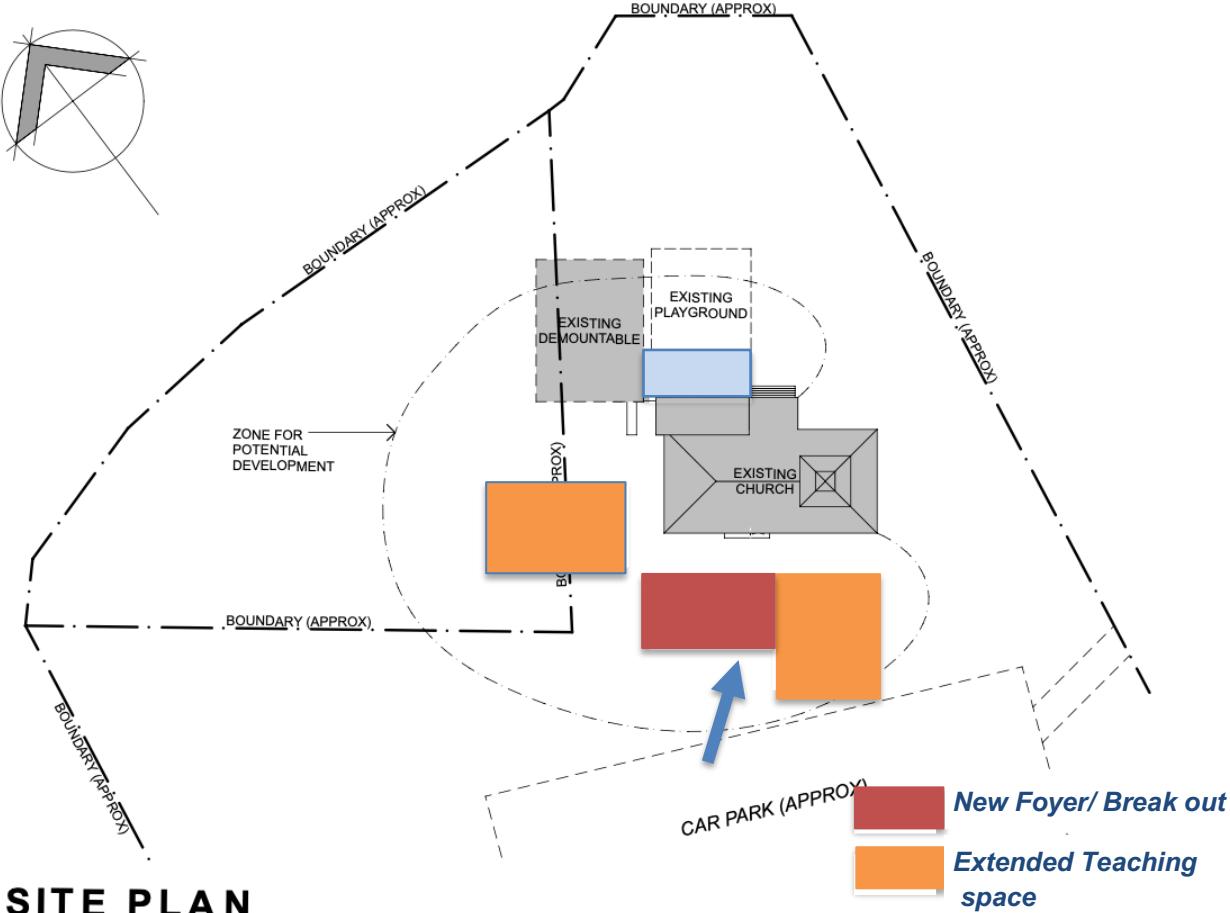
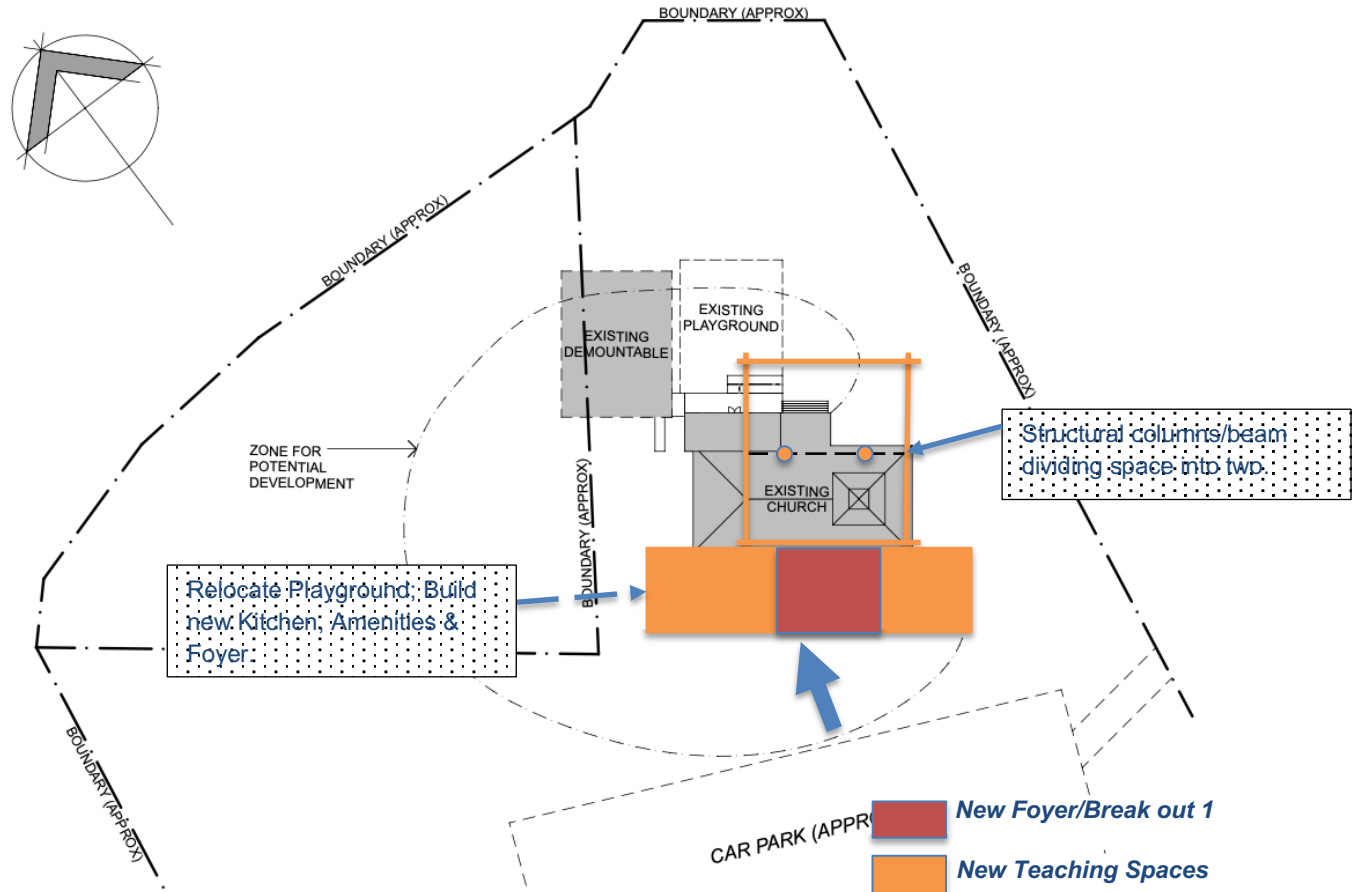


Figure.3 - Sketch of Potential Retention & Refurbishment of Existing Chapel

POSITIVES	NEGATIVES
<ul style="list-style-type: none"> • <i>Retains existing space for chapel/main meetings</i> • <i>Cost saving due to reduced physical footprint</i> • <i>Playground could be retained and enlarged with improved connection to arrival/car park area.</i> • <i>Gathering space seats up to 350 people gathering. It retains the present breakout space.</i> • <i>Demountable can be replaced by secondary addition on western side, allowing for potential staging of project.</i> • <i>Toilets redeveloped (expanded, with better layout)</i> • <i>Existing Kitchen expanded into adjacent space.</i> 	<ul style="list-style-type: none"> • <i>Most obvious seating layout in traditional 'long axis' arrangement as opposed to more contemporary 'church in the round'</i> • <i>Roof beam (and related demolition of existing columns) will cause a division in the chapel space, refer to dashed lines between areas 3 & 4 in Figure 1.3.</i> • <i>Connection of the roof over new spaces to existing roof will be challenging to resolve, and there is a greater opportunity for unforeseen costs.</i> • <i>Poor location of crying room (space 6) in relation to main meeting space.</i> • <i>Foyer lacks direct access/connection to kitchen.</i> • <i>New teaching rooms may be subject to growth issues.</i> • <i>Separate teaching rooms/Offices are less integrated than Option B (i.e for accessibility and cost effectiveness, are proposed to be built at a lower level).</i>

Table 1 - Positives & Negatives of Chapel Retention & Refurbishment

Option A-2 – Re-Development of Existing Chapel to create enlarged Meeting Space, PLUS additions on the Carpark (approach) side.



SITE PLAN

Figure 4 - Sketch of Potential Re-Development – Northern Addition utilising existing Chapel space & Break Out area.

POSITIVES	NEGATIVES
<ul style="list-style-type: none"> Retains existing space for chapel/main meetings Playground could be retained and enlarged with improved connection to arrival/car park Gathering space could seat 350 people “in the round”. Toilets could be redeveloped (expanded, better layout) 	<ul style="list-style-type: none"> Roof beam (and related demolition of existing columns) will cause a division in the chapel space. The resolution of the roof will result in significant costs. The architectural integrity of the original chapel space, including the raised square clerestory section, will be dramatically altered. Connection of the roof over new spaces to

<ul style="list-style-type: none"> Existing Kitchen could be retained and expanded. 	<p>existing roof will be challenging to resolve, hence there is a greater opportunity for “unforeseen” costs.</p> <ul style="list-style-type: none"> This option relies on retention of the Demountable. New teaching rooms off the new Foyer (in addition to Main Teaching Space) may be insufficient and hence be subject to growth issues.
--	--

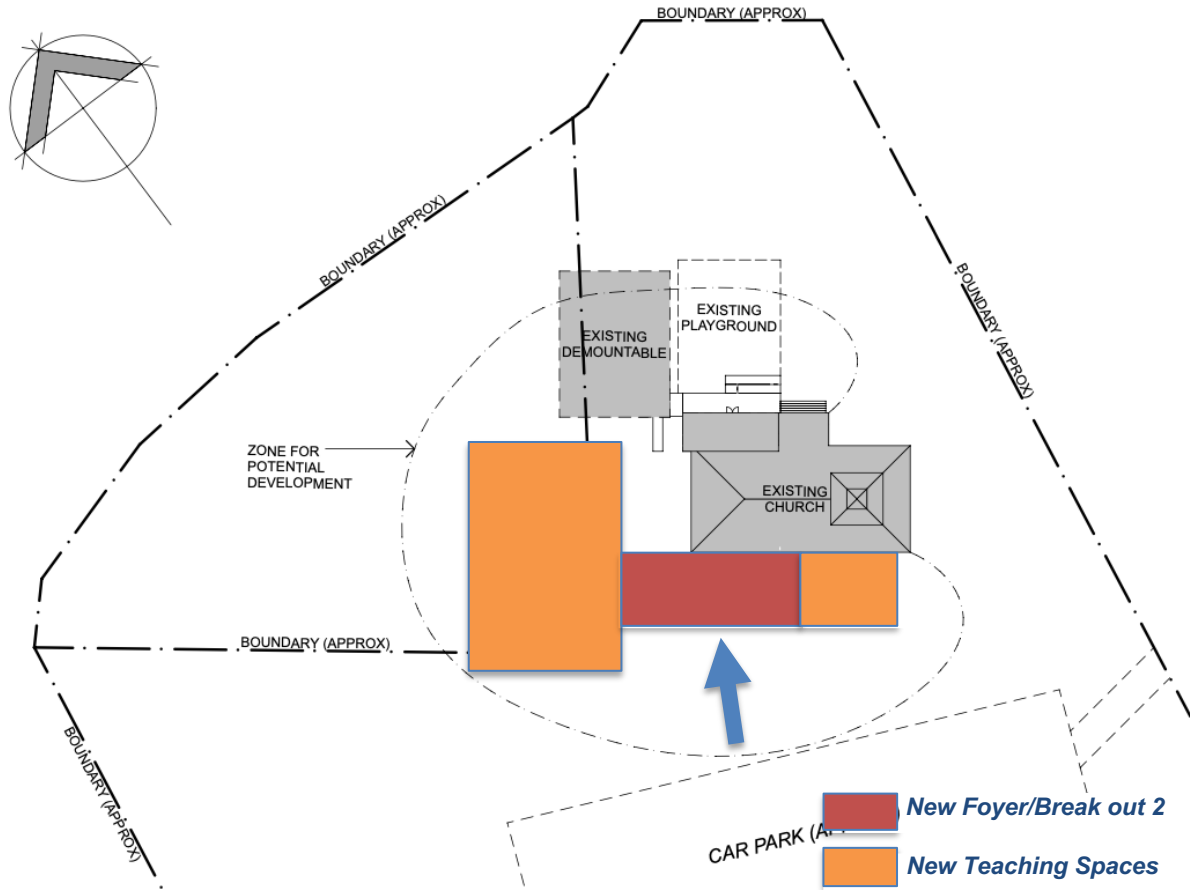
Table 2 - Positives & Negatives of New Chapel Development

Option B - Development of New Chapel as a Stand-alone space

(New Main Meeting Space, Mini Kids teaching space and Foyer linked to the existing building)

Option B (see Figure 5 below) depicts a schematic layout for a Main Meeting Space, secondary teaching space and Foyer in light of the analysis considered above. This sketch below is intended to allow a basis for discussion of potential options. It is intended to provide a very loose indication of the developed area in order to provide a rough approximation of cost.

The pros and cons of this scheme are considered below in Table 3.



SITE PLAN

Figure 5 - Sketch of Potential Development of New Chapel

POSITIVES	NEGATIVES
<ul style="list-style-type: none"> • <i>Gathering space comfortably seats up to 350 people. Dimensions are better optimised for a larger gathering, compared to Option A</i> • <i>Entrance from the east indicates to visitors the main entry point to the building, as they approach the car park.</i> • <i>More accessible than Option A, as the whole development would be proposed to be at the one level (matching the existing chapel).</i> • <i>Could provide several smaller teaching spaces from existing building.</i> • <i>Existing demountable building could remain until it is no longer considered useful.</i> • <i>New crying room would be included, and would be in a suitable location for parents to remain involved in church and hear teaching</i> 	<ul style="list-style-type: none"> • <i>The footprint for Option B is larger than Option A, i.e. will result in a larger cost.</i> • <i>Existing trees will be impacted (relative to Option A).</i> • <i>The design of the development will have an impact on the existing outdoor landscaped area on the southern side of the Chapel, (which is presently well used following Sunday services).</i> • <i>Outdoor playground area could be relocated to suit the new design. Present orientation works well for winter sun.</i>

Table 3 - Positives & Negatives of New Chapel Development

Option Analysis Table

The following table (Table 4) utilises the *Option Analysis* provided in the Brief. The table compares the features that would be achievable in Options A,A-2 (refurbishment) and Option B (new building). Please note that while features may be common to both options, one option may achieve the feature in a more effectively than the alternative.

Site Items		
Item List	New Build	Refurbishment
Proximity/access to car park	√	√
Efficient site access (including option for new thru-access road from carpark to Trevenna Road)	Yes, if required	
Minimise level variations	√	If required
Future expansion compatible/ability to build for growth	√	√
Wet-weather connections between existing existing buildings	√	√

Auditorium Items		
Item List	New Build	Refurbishment
Welcoming capability (foyer/entrance)	√	√
350 seats	√	√
Removable seating	√	√
Stage/presentation space (doesn't have to be fixed)	√	√
Acoustic management/AV/Lighting	√	√ Expand on Existing
Climate control	√	√ Expand on Existing
Other Priorities		
Item List	New Build	Refurbishment
Covered/protected gathering space (can be inside or outside)	√	X
Fenced playground (preferable connected/integrated to (above) protected gathering space)	√	√ Expand on Existing
Upgraded kids facilities and staff offices	√	√
Other Activities & Needs		
Item List	New Build	Refurbishment
Toilets	New build	Refurb
Kitchen	New build	Refurb
Crying Room	New build	Refurb
Mini Kids (Age up to Kindy)	Existing chapel	Refurb
Kids Club (age up to start of high school)	Existing chapel	Refurb
Youth (high school)	Existing chapel	Refurb
Small group meetings (variety age/purpose)	Existing chapel	Refurb
Staff office spaces (admin and ministry teams)	Existing chapel	Refurb

Table 4 - Option Analysis Table

Opinion of Probable Cost *

Please note that the provided costs are ballpark estimates only and are based very loosely on square metre rates taken from the sketches of Options A, A-2 and B.

NOTE: The provided figures may vary significantly from reality and should not be taken to have a degree of accuracy equal to a final building cost after tender. Costs are subject to variation due to the size of a

project, finish of a project, availability of products and materials, the cost of work due to region, and other factors.

The following cost ranges are based on *Rawlinsons Cost Guide* relating to chapels/churches/synagogues with a medium level of finish, located in the New England region. Landscaping is not included, and GST is not included.

For **Option A** the following estimate has been made: **\$1,950,000.00 – \$2,150,000.00 EXT.GST**

For **Option A-2** the following estimate has been made: **\$2,180,000.00 - \$2,400,000.00 EXT. GST.**

For **Option B** the following estimate has been made: **\$2,260,000.00 - \$2,490,000.00 EXT. GST.**

* Note : The term *Opinion of Probable Cost* is favoured by the NSW Board of Architects. Architects are not qualified to provide *Building Cost Estimates*.

Conclusion

The site analysis undertaken in this feasibility study has shown that seating capacity and versatility of teaching spaces are key considerations of this brief.

Option A-2 has the potential of being the second most costly option, however it presents a high degree of risk associated with unforeseen costs and/or unsatisfactory outcomes due to the impact on the existing building. The qualitative aspects of a new meeting space constructed in place of the existing structure will be a challenging program, with maximum opportunity for unforeseen costs. In terms of cost, it is our opinion that it represents a saving of less than \$ 100K, or around 4%, of the cost of Option B.

In regard to **Option B**, it is clear that a new purpose built building presents a better opportunity to successfully meet your Brief requirements, particularly in terms of the flexibility and functionality of the primary gathering space. The option of building a new Meeting Space is more comprehensive and offers the potential for stronger and more positive built outcomes. While the construction cost of this option is significant, it is only marginally more costly with considerably less risk of a poor outcome in the resulting building.

Ultimately your decision must consider both the qualitative and quantitative aspects of the project. The opportunities and constraints of each option must be considered, balanced with their financial impact as well as the long-term value the spaces will add to the life and ministry of the church.

In the event that one of the above broad approaches is further developed as a Schematic Design, we do recommend your consideration of engagement of a Quantity Surveyor to prepare a more detailed and accurate cost appraisal. This discipline has the advantage of offering specialisations in assessing potential development costs of a project of this nature.

Note:

We found that it was necessary to consider potential design schemes in order to respond in a meaningful way to your Brief. The conclusions drawn above are based on a high-level exercise in analysing broad schematic options. Sketches have been produced simply to stimulate discussion and create figures for consideration.

We recommend that a more in-depth detailed analysis of the Brief necessitates that further detailed design work should be undertaken, and the design proposals may need to be developed based on your Brief, and we would most certainly welcome the opportunity of assisting St Marks Chapel's in this process.

Nicholas Brown - Director
nb