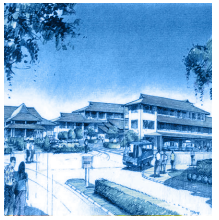







Proposal

College of Micronesia Masterplan

Prepared for College of Micronesia, FSM (Client)

Prepared by Beca International Consultants Ltd (Beca)

October 2012

Contents

1 Introduction

This proposal, by Beca International Consultants Ltd. (Beca) is submitted in response to a request from President Joseph M Daisy, initially verbally and later by e-mail dated 21st August 2012.

Our understanding of a facilities master plan is that it provides a comprehensive review that evaluates and prioritises the needed facility improvements that respond to the College's forward strategic direction. This direction is outlined in the "COM – FSM Quality, Sustainability and Success: A Framework for Planning and Action, April 2012" and the "Facility and Campus Environment Plan, January 2011" with goals being to;

- Increase rigor in decision making regarding new facilities construction
- Ensure adequate maintenance of College facilities
- Provide grounds and campus environments conducive to learning.

This proposal outlines the scope of work for the suggested two stage approach to the development of masterplans for the six campus in the Federated States of Micronesia. The purpose of dividing this work into two stages is to allow for "road testing" of the approach, assessment of the data needs and availability, and for progressive refinement of the approach if required, for Stage 2.

Stage 1 includes the national and state campus on Pohnpei and Stage 2 would encompass the four remaining educational campus on Chuuk, Kosrae, Yap and the FSM Fisheries and Maritime Institute Campus also on Yap.

In **Section 2**, Scope, we have summarised our understanding of a facilities masterplan report,

In **Section 3**, Proposed methodology, we have summarised our understanding of the process through which a final masterplan is achieved,

In **Section 4**, Assumptions, we have summarised key assumptions on which this proposal is based.

In **Section 5**, Our team, we have identified the key staff who will be involved in the project.

In **Section 6**, Program, we have provided an indicative realistic program that allows for a phased development of the masterplan with identified milestones. The masterplan development involves site visits for interviews and assessments to be conducted along with the presentation of deliverables.

Section 7, Our financial proposal, is based on our best estimate of work inputs required for the assignment. Our rates are those proposed in the Architect-Engineer (A-E) Indefinite-Quantity Contract in Support of the Infrastructure Development Plan of the Federated States of Micronesia.

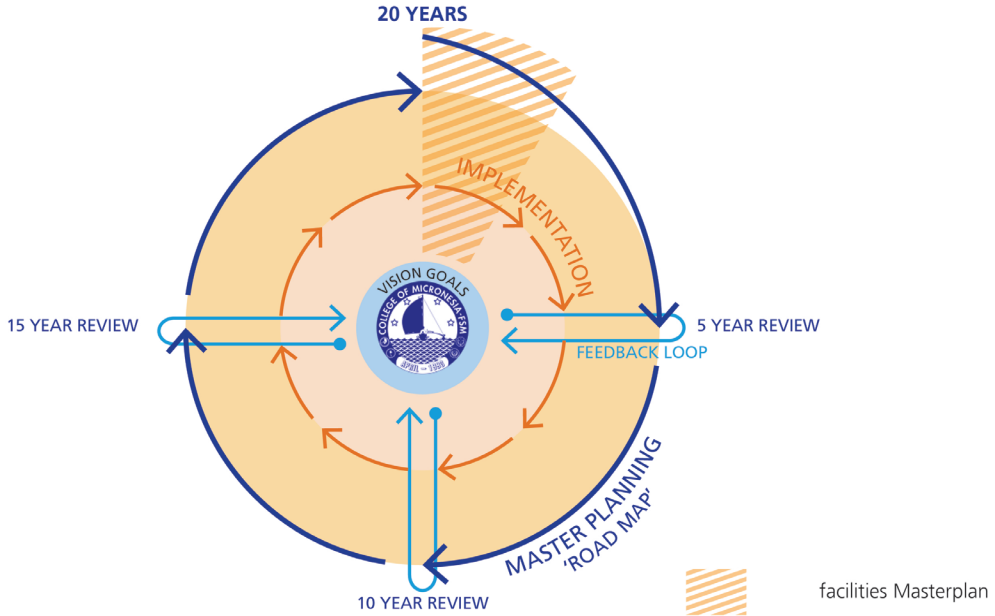
Our disbursements (document transfer, transport, accommodation, etc.) are based on actual anticipated costs.

In preparing the outputs Beca will rely on getting full access to and cooperation from the staff and educational management at the various campus that make up the College of Micronesia, other government agencies on island and/or in wider FSM, in collecting data and identifying accommodation requirements aligned to the agreed future educational needs. We will also receive inputs from the currently separately commissioned Sandy Pond and Associates who are a higher education consulting firm with extensive experience with accreditation, planning, and assessment.

Section 8, Outlines the glossary of terms

Section 9, Covers engagement terms and conditions

Further background information on Beca as a company, our relevant educational masterplanning experience and track record in the Pacific and referees along with their contact details is provided in Appendix A.



Masterplanning and implementation process, the success of a masterplan is its ability to be implemented and referred back to for strategic planning purposes.

2 Scope

The outcome of the masterplan process, a final facilities master plan report, will provide a robust framework to enable the physical facilities available to the College to meet the future educational needs. The report will demonstrate to potential project funders that both the physical and educational factors have been addressed in a robust, comprehensive and integrated fashion.

The final facilities master plan provides a "roadmap" that gives effect to the goals that are sought for the College, these being identified in the January 2011 Facilities and Campus Environment Plan as;

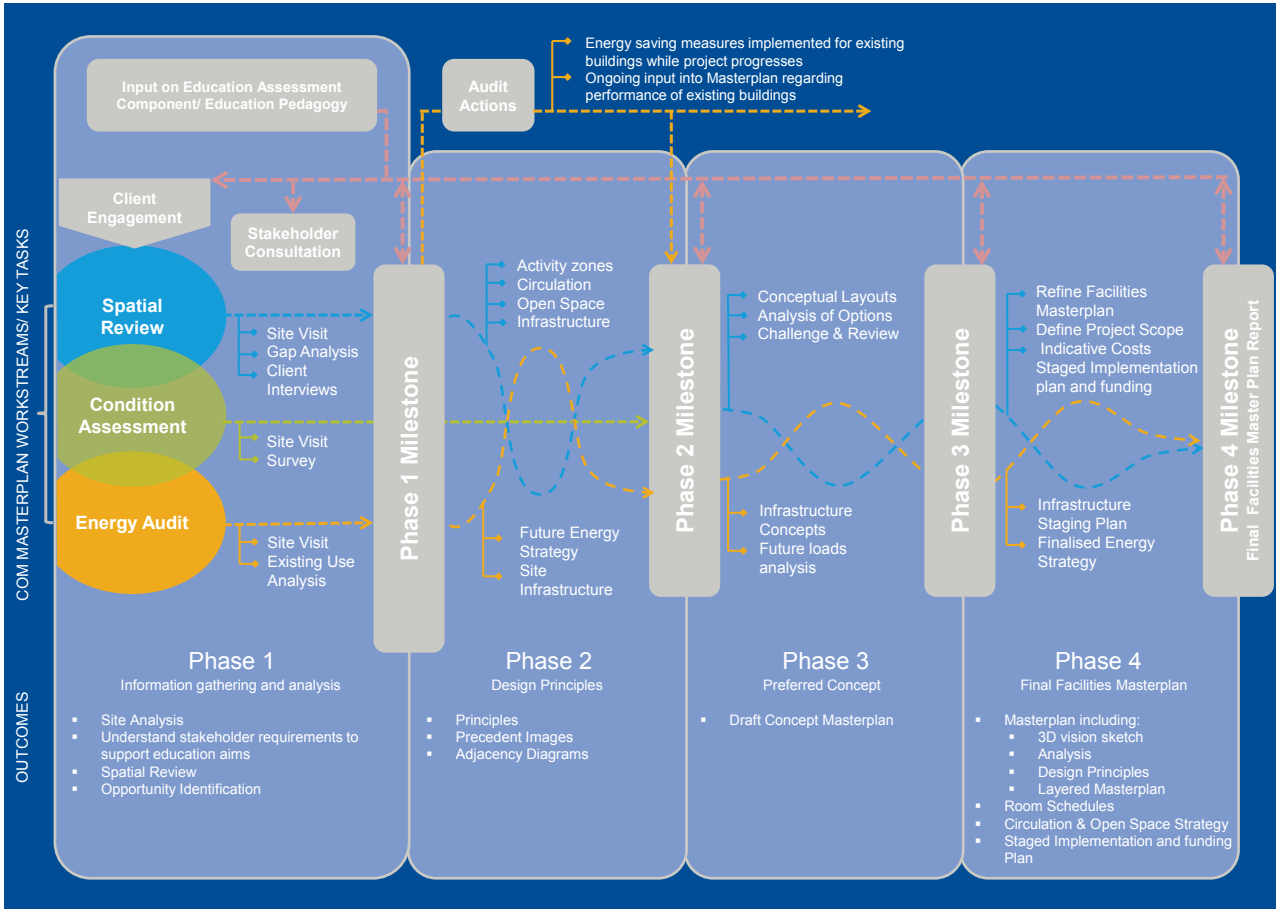
1. Increase rigor in decision making regarding new facilities construction
2. Ensure adequate maintenance of College facilities
3. Provide grounds and campus environments conducive to learning.

To address this, the preparation of the final College of Micronesia Facilities Master Plan is proposed to be made up of three distinct technical work streams, these being a;

- **Spatial review:** A review of all the components that make up the physical environment and how people interact with this environment - this includes the building function and form, open space, character and circulation.
- **Condition assessment:** This is a discrete input into the master plan that identifies the condition of the buildings and infrastructure on site. Initial information gathering focuses on the plans and as builts of infrastructure made available for each campus prior to the site visit. The site visit includes a site inspection and assessment of the existing building condition. The outcomes of this assessment ties in with the spatial review considering issues such as the life of the building, current and future building function and the building location in the future proposed campus context, Outside of the masterplan report and this scope the condition assessment can also be used as the first step in developing future campus maintenance programs, plans and costing options;
- **Energy audit:** This workstream reviews the performance of the site in terms of energy use. The outcomes feed into the development of the Final Facilities Master plan. It can also be used as the first step in developing campus energy optimisation options

These three workstreams are captured in the methodology diagram below.

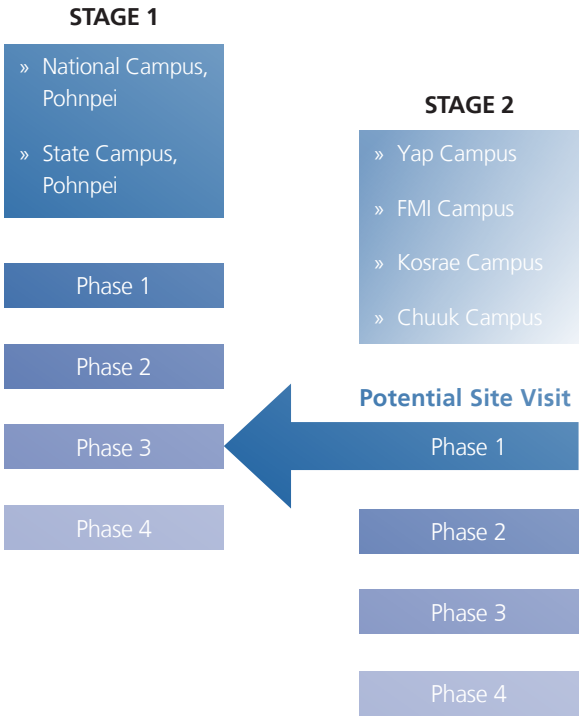
To achieve an integrated Facilities Masterplan information will be shared across the work streams within each phase of the work. There is opportunity within each work stream to target outcomes at different levels of assessment – from high level review to a full assessment. Where an opportunity occurs more detailed inputs and reviews are identified in the task breakdown as an optional item. For example, the energy audit can range from an initial energy analysis and report to a full analysis of energy use with recommendations for improving efficiency along with payback periods.



2.1 What do we propose the Facilities masterplan report will include

The final masterplan report will be a bound document split into two Parts – Part 1, the summary master plan, and Part 2 the appendices containing the supporting assessments and reviews. The intention is that Part 1, the summary section can be read as a standalone document as it captures the vision, overarching principles and key moves.

A separate report will be produced for each campus in the manner described above. Where cross overs exist between different campuses (e.g. a change in the educational focus and curriculum offering in one campus may have an impact on the activities and layout at another campus) this will be covered in an executive summary.



Stage 2 is not included in the scope of this proposal.

In order to fine tune the proposed approach to meet the College's needs we would suggest a two staged approach to this assignment. Stage 1 will cover the National Campus at Palikir and the Pohnpei State Campus in town (with work on each campus proceeding simultaneously). This will allow for "road testing" of the approach, assessment of the data needs and availability, and for progressive refinement of the approach if required, for Stage 2.

Stage 2 would cover the balance of the other State campuses in a single trip as we would envisage no more than a few days being required in each location. The availability of COM staff to contribute to the data collection and assembly will also be considered in Stage 1 to see if the process can be streamlined. Whilst this proposal covers Stage 1, when Stage 2 proceeds, it is anticipated that the timing of the Stage 2 information gathering phase could be arranged to coincide with and by extending the duration of the visit to present the concept master plan options for the Pohnpei campus. This is depicted on the diagram on the left hand side.

2.1.1 The format of Part 1: Master plan summary

a. Executive summary and the vision

This is presented in the form of three dimensional handdrawn perspective sketches showing the look and feel of the envisaged master plan when implemented. A 'birds-eye' sketch depicts the overall bulk and location while "eye level" sketches provide a pedestrian's impression from key locations within the campus. In addition a summary of key moves to achieve the campus vision is provided as graphic plans. This suite of drawings allows the intent of the master plan to be communicated to a wide range of people in an accessible and easily understood format. These images become the pictures that people take away in their head and that come to mind when they think of the final built vision.

b. Introduction

The introduction covers the purpose, scope and format of the master plan. A summary of the College of Micronesia's vision, aspirations and master plan drivers derived from discussions with the selected stakeholders.

c. Existing situation

What are the components of the campus (Operational and environmental)?

This section provides an overview of the existing built and open space environment, the student and staff numbers, building condition assessment, circulation patterns, space utilisation assessment and infrastructure provision. The existing character of the open space and built form is also discussed along with the relationship of the campus to the surrounding context and location.

d. Data analysis and requirements – issues and opportunities

Where does the campus need to be positioned in 5 years time?

This chapter is divided into two parts (1) function – the operational requirements, and (2) form – the issues and opportunities presented by the current campus environment and condition to meet these requirements.

Function, the operational requirements includes a summary of the educational pedagogy, educational curriculum requirements, schedule of spatial requirements (also addressing the potential for spaces to have flexible or multiple uses), and a space utilisation review.

Form, a high level overview of the issues and opportunities for the campus environment includes the functional adaptation/ reuse of existing buildings, removal of buildings and location of new buildings. A discussion of adjacency requirements and options for energy efficiency are also addressed in the second part of the chapter to enable "form to follow function".

e. Design principles

What are the criteria for the new campus environment?

A series of bullet point statements tailored to the COM outlining guiding objectives which address specific aspects of the desired campus environment. These include (but are not limited to) building form, activity zones, context appropriate design, circulation, carparking, open space, infrastructure services and energy efficiency. Precedent images, referencing best practice solutions, will be provided to illustrate different design outcomes that demonstrate some of these principles.

f. Master plan implementation

How do you get there – the 'roadmap' ?

Through staged implementation plans accompanied by a gantt bar chart illustrating programme against time, the steps to achieve the final facilities masterplan is provided. Each of the staging plans will take into consideration the decanting process (moving of functions to spaces as development occurs) with the projects completed at the end of each stage noted against the plans. The timing of potential funding streams is a crucial input for the staging process.

The previously discussed perspective sketches (one minimum, three maximum per campus) illustrate the completed master plan along with an annotated summary plan identifying the key projects. Open space circulation and site service concepts are also illustrated by way of notated plans.

2.1.2 The format of Part 2: Appendices

Depending on the scale of the campus, the appendices will contain a selection of or all of the following:

i Glossary of terms

ii Gap analysis

iii Survey plans (if scoped)

iv Existing title plans

v Zoning plans

vi Existing room schedules

vii Minutes of consultation meetings

viii Accommodation schedules

ix Building condition assessment

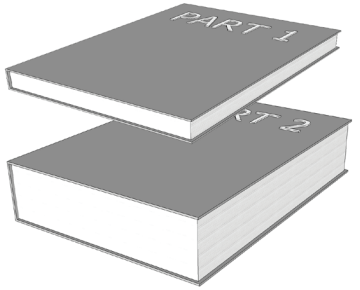
x Summary of classroom utilisation study (separate study supplied by Sandy Pond & Associates)

xi Energy review

xii Concept master plan options

xiii Development staging and programme

Facilities Masterplan Report for Each Campus



Part 1. Summary

The final page masterplan sits in this section

Part 2. Appendices

3 Proposed methodology

3.1 Phase 1 – Information gathering and analysis

Meetings: 1 inception meeting; 4 day site visit (2 specialists)

Overview

Phase 1 is focused on information review and collation. Data is acquired on the existing building condition, energy use and the existing spatial utilisation. Gaining an understanding of the current and future educational requirements forms the initial part of this phase as this provides clear guidance for the desired educational function within each campus. Liaison with Sandy Pond and Associates on the outcomes of the Educational Assessment Component is vital before the site visit occurs.

Key tasks

- Identification of members of the Project Control Group (PCG). The PCG will comprise of key CoM decision makers and the consultant. The group's function will be to make key financial and program decisions, provide the briefing information and other data upon which the accreditation strategy and campus designs will be based, approve strategies and masterplan concepts and generally overview the development of the masterplan.
- Confirm and summarise the College of Micronesia's vision, aspirations and masterplan drivers.
- Gap analysis: Identify the level of existing information available and further information required to progress the review. This will take the form of a specific request for the type of information required by the consultant prior to the initial site visit and will be collated into a register of inputs. An assessment on further information required and a decision whether to proceed with more detailed data capture (i.e. building survey to capture floor plans in a CAD format, overall site survey including contours and site services, geotechnical investigations) will form part of the outcomes in Phase 1.

- Condition assessment: This includes a site survey of all rooms, data capture of room areas and assessment of building condition. The output will be a report identifying the campus buildings with a photo record of each and a building condition register.
- Energy audit: This includes a site visit and data collection on the energy use of existing buildings To complete this task information will be required from each campus. This will include
  - Plans of buildings and where possible as-builts of building services in advance of the trip,
  - Operation and maintenance manual information – this will tell us what systems are installed and how long ago.
  - Energy bills

During the site visit a questionnaire will be completed on the campus energy infrastructure with the maintenance facilitator. This will be on a building by building basis and will cover such things as operational issues. The output will be an "initial energy survey" with the following information:

  - Scope for energy savings
  - Plant which needs immediate replacement
  - Buildings which need a lot of work done to them in relation to M&E facilities and maybe should be replaced medium to long term – feeding into masterplan
- Liaise with Sandy Pond on the outcomes of educational and curriculum interviews with regard to how this influences future space requirements. This input is required pre-trip.
- Interviews with key stakeholders to define spatial requirements (including adjacencies) and desired future campus character.

Outcomes:

- Finalised PCG structure, program and communication plan
- Compilation of available .pdf format campus plans
- Gap analysis summary
- Condition assessment report
- Existing energy use analysis
- Summary of stakeholder interviews
- Review and signoff of the Phase 1 outcomes by the PCG to proceed to Phase 2.

Assumptions:

- Scaled digitised plans are available in .pdf format at a legible resolution to be able to read room names and dimensions.
- An overall site layout plan is available in Cad drawing (.dwg or .dxf) format identifying site boundaries, road location, footpaths, levels, services, vegetation and building footprints.
- A naming convention and numbering system is in place for each campus that provides agreed and generally known building names and a numbered system identifying rooms within the buildings.
- We understand that you are receiving support from a team from Sandy Pond and Associates to assist with future curriculum offerings. We have worked with this company previously on commissions such as this and we would expect to be able to receive inputs from them and yourself to confirm future teaching space requirements and discuss alternative uses of existing spaces. Because of the pre-existing commission that the College has with Sandy Pond and Associates we have not included this company in this scope of work. We are however happy to discuss with the College of the Micronesia and Sandy Pond and Associates further work that may be required to tie this existing piece of work into the development of the masterplan and engage them as subconsultants to Beca if required.
- Feedback to the outcomes will be provided through a one set of consolidated comments issued by the PCG on a commonly agreed template. Responses and/or proposed actions to address points raised will be relayed through one iteration by the consultant.
- Energy audit and condition assessment scope excludes the following (Note: these can all be optional extras):
  - A detailed energy audit
  - Condition assessment of plant (other than assumptions made by viewing photos and reading O&M Manual data)
  - Time spent getting hold of as-builts, O&Ms, bills etc – we assume these will be client supplied
  - Site measurement of buildings and infrastructure
  - Client training on asset management tool
  - A maintenance plan

Optional extras:

- A survey of the existing building(s) to a level to enable CAD plans to be drawn (a level of accuracy option)
- Geotechnical investigation (for areas of importance with potential issues either identified by you or by our visual inspection)
- Site survey capturing in more detail building location, roads, footpaths, vegetation, contours and existing services (a level of accuracy option)
- Compilation and linking of the condition assessment findings to the .pdf campus footprint plans via excel based spreadsheet. The value of this is the ability to visually illustrate by way of colour the condition levels across the campus (thereby easing communication instead of representing information solely in spreadsheet format). An example of this data management is illustrated in Section 7.3. Further detailed study and liaison with Sandy Pond and Associates (identified in the gap analysis) required to inform the development of the masterplan and beyond the existing commission with the College.

Mid-phase Hold Point – Beca cannot proceed further until any required items raised in the gap analysis are signed off by the PCG.

3.2 Phase 2 – Design principles

Meetings: 1x video conference

Overview

Phase 2 is focused on gathering the information from Phase 1 to compile a series of overarching design principles for the future form and character of the campus. These design principles are site specific and their purpose is to describe the qualities that the future campus will have, not the final design solution.

Key tasks

Desktop translation of findings from the site visit into a set of design principles for the following;

- Building form
- Circulation – pedestrian and vehicular
- Context appropriate design - design responds to the climatic factors
- Open space
- Infrastructure services
- Energy efficiency

Outcomes:

- A series of design guideline bullet points illustrated with precedent images – these guidelines to be signed off by the CoM project team
- Concept adjacency diagrams capturing the desired functional relationship between spaces and overall activity zones
- Review and signoff of the Phase 2 outcomes by the PCG to proceed to Phase 3.

Assumptions:

Feedback to the outcomes will be provided through a one set of consolidated comments issued by the PCG on a commonly agreed template. Responses and/or proposed actions to address points raised will be relayed through one iteration by the consultant.

Hold Point – Beca cannot proceed further until design principles and adjacency diagram is signed off by the PCG.

3.3 Phase 3 – Preferred concept

Meetings: 1 workshop; 4 day site visit

Overview

Phase 3 is focused on the development of alternative design concepts that all address the design principles defined in Phase 2.

Key tasks

Development of up to three bulk and location layouts depicting the following;

- Precinct areas
- Building blocks (footprints only)
- Open space and broad landscape concepts
- Circulation – vehicular and pedestrian
- Car parking
- Key focal points

Workshop with the PCG to present and review the developed concept options, evaluation of these options and selection of a preferred concept to develop further into Phase 4, the final Facilities Master Plan.

Liaise with Sandy Pond on the concept options developed with regard to the integration with the curriculum and future student population aspirations outlined in the Educational Assessment Component study.

Outcomes

Preferred concept plan signed off by PCG.

Assumptions:

Feedback to the outcomes will be provided through one set of consolidated comments issued by the PCG on a commonly agreed template. Responses and/or proposed actions to address points raised will be relayed through one iteration by the consultant.

Hold Point – Beca cannot proceed further until preferred concept plan is signed off by the PCG.

3.4 Phase 4 – Final facilities master plan

Meetings: nil

Overview

Phase 4 is focused on the development of the final Facilities masterplan. This will be issued as a draft to the PCG for approval before being issued in a final format.

Key tasks:

Masterplan is refined including an integrated circulation and open space strategy

Outlines for specific constituent projects of the overall development are prepared for costing purposes

Indicative costs (square foot rates) are attributed to projects

Staged implementation plan is prepared showing how the campus remains operational through each of the development stages

Outcomes:

Final facilities master plan visually capturing and presenting the vision through 3-dimensional sketches. Collation of the master plan inputs including;

- Analysis summary
- Design principles
- Room schedules
- Visual depiction of the campus pedestrian circulation and open space strategy
- Implementation plan showing potential staging sequence, costs, funding streams and time program.

Optional extras:

Maintenance plan & or program

Energy saving projects (integrated with masterplan but possibly time independent)

Assumptions:

Feedback to the draft report will be provided through one set of consolidated comments issued by the PCG on a commonly agreed template. Responses and/or proposed actions to address points raised will be relayed through one iteration by the consultant. The outcome of this will be the submission of the final report.

4 Assumptions

We have assumed in preparing this proposal that, as and when required, Beca personnel will have the full cooperation of the various College of Micronesia site based maintenance team who will provide access to all areas of the site and will describe in sufficient detail the existing limitations of the site infrastructure and the history of the site. Specifically, we will expect them to provide assistance to understand the existing systems in place, details of problems that have occurred as well as to actively maintain all existing systems in safe working conditions during the course of the project. For testing, inspection or isolation procedures we will require their attendance to undertake physical works.

This proposal only deals with on-site infrastructure, that is, roading, power, telecommunications, drainage (storm water and sanitary sewer), and water supply within the site.

Beca, together with the nominated Project Control Group will agree an appropriate staging sequence for the works which will form the basis of the final masterplan.

Beca will not assume any obligation as COM's agent, principal contractor or otherwise pursuant to any health and safety legislation and arising out of this engagement. The College of Micronesia and Beca agree that for health and safety purposes Beca is not the person who controls the place of work and work processes.

5 Our team

We are a well-established team whose design process is collaborative and integrative. We work with as many technical specialists as necessary including the full range of engineering disciplines, bringing together different skills to deliver high quality built environments that respond to their environment and enhance community wellbeing.

Our team for this project combines urban design, architecture, infrastructure, cost engineering and graphic design expertise. Senior team members have 10 – 20 years' experience in facilities master plans as well as the development of structure plans, integrated public and private domain master plans, large-scale infrastructure projects, regeneration and revitalisation and also in designing and preparing guidelines for built form. Importantly, we are uniquely positioned to draw on the full range of specialist disciplines within our team to take a project from design concept through to implementation.

5.1 Our Proposed Team

The following Beca personnel will carry out the Services:

- **Fraser Vickers** will be the Job Director and masterplan verifier
- **Annette Jones** will be the masterplanner and lead the spatial review workstream
- **Mark Wilson** will lead the condition assessment workstream and will be the cost engineer
- **Mark James** will lead the energy audit workstream

The principal points of contact in Beca for this project will be Fraser Vickers as Job Director and Annette Jones as Job Manager.

5.2 Project Staffing

This section presents pen portraits of key staff that Beca proposes for the project – a brief summary of experience and the role each will perform. All staff offered are permanent Beca employees and they are available to work on the project until its completion.

Job Director and Masterplan Verifier: Fraser Vickers

Fraser has been practising architecture for 30 years, the last 21 of which have been spent on a variety of projects in the Education Sector. He was responsible for concept layout testing and peer reviewing of the CMI Uliga Campus Master Plan, and he coordinated the design team on the Dormitory, Classroom Blocks and Maintenance/Energy building designs. Since 2003 Fraser has been responsible for the concepts and detailed designs of over $35M of educational facilities in the Marshall Islands and $16M in the Federated States of Micronesia (FSM). Also during this period he prepared a Master Plan for the $40 Million redevelopment of Majuro Hospital and redeveloped two hospitals ($20M) in FSM.

Fraser will be responsible for reviewing all building designs and inputs into the Master Plan.

Senior Architect, Urban Designer and Master Planner: Annette Jones

Annette has over 20 years experience across a wide range of building types, majoring in master planning, architectural design concepts, detailed design and team leading. Her key skills lie in project aesthetics, client brief-taking and the conversion of ideas into building concepts and layouts followed by detailed designs and documentation. Annette has been involved in educational masterplans for the British International School in Kuala Lumpur, Saint Kentigern College, Strathallan College as well as recent urban design projects in the Pacific - the Apia Spatial Plan and the Vanuatu Tourism Infrastructure project, a concept options report for the major public space in Port Vila.

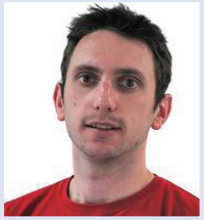
Annette will lead the spatial review workstream. In this role as lead master planner she will make the visits to Pohnpei required for brief taking and client liaison.

Building Condition Assessor and Cost Engineer: Mark Wilson

Mark has over 11 years of Cost Management experience in the Public and Private sector, both nationally and internationally. He has gained extensive technical capability in sectors such as Education, Commercial Retail, Commercial Office, Healthcare, Transport (Rail), Industrial, Entertainment, Government & Civic, Hotel & Resort, etc. A large portion of Mark's experience was gained in the Pacific on the Hilton Resort and Spa project located on Denarau Island, Fiji. This experience has provided Mark with a sound understanding of the logistical constraints and challenges of building projects in remote locations. Mark is also conversant with the processes associated with carrying out Building Condition Assessments and preparing Property Plans for Capital and Maintenance works projects based on his experience of carrying out such tasks in the education sector. Of specific relevance to this assignment is the experience Mark has through being the lead for the College of the Marianas Condition Assessment Report. In this study not only did Mark undertake the assessments and required cost estimates but he also led the integration of these findings into the development of the masterplan. We consider this well honed experience makes Mark an ideal team member for this project.

Mark will lead the condition assessment workstream and will travel to Pohnpei.

Energy Audit Specialist: Mark James



Mark is a chartered Mechanical Engineer with over 7 years of design and site experience. .Before moving to New Zealand in 2009 he was a registered "Low Carbon Consultant" and "Low Carbon Energy Assessor" with the Chartered Institute of Building Services (CIBSE) in the UK. He has worked on a wide range of projects across various sectors in the UK, NZ and around the Pacific. His knowledge of system design, installation and operation makes him ideally positioned to assess the site's current energy usage, provide energy saving recommendations, and input into the future energy infrastructure of the facility.

Mark will lead the energy audit workstream.

Detailed Curricula Vitae for the Facilities Team are available upon request.

6 Program

Item (Non Beca items in italics)	Duration (weeks)	Beca Deliverable	Comment (Hold Point (HP))
Phase 1 - Information gathering and analysis (7 weeks)			
Project setup	1.0	- PCG structure, program and communication plan	
Desktop study and gap analysis	2.5	- Gap analysis summary	
Review/ approval of gap analysis by PCG and way forward agreed	0.5		*(HP - mid phase hold-point based on gap analysis findings)*
Site Visit 1 – Spatial review, interviews and condition assessment	1.0		Travel + on-site time
Complete information gathering and analysis phase	2.0	- Compilation of .pdf format campus plans - Condition assessment report - Existing energy use analysis summary - Summary of stakeholder interviews	
Phase 2 – Design principles (2 weeks)			
Design principles, precedent development and adjacency diagram	1.0	Bullet point design guidance with precedent images Concept functional adjacency diagrams	
Review/ approval	1.0		*Hold point - signoff to proceed to Phase 3*
Phase 3 – Preferred concept (5 weeks)			
Masterplan concept options	2.5		
Site visit 2 - Workshop with PCG to arrive at preferred concept for development and costing	1.0		Travel + on-site time
Preferred concept	0.5	Concept plan options summary – A3 plans and bullet points	
Review/ approval	1.0		*Hold point - signoff to proceed to Phase 4*
Phase 4 – Final facilities masterplan (4 weeks)			
Draft report with final masterplan	2.5	Collated study outputs including; - Analysis summary - Design principles - Room schedules - Campus circulation and open space strategy - Implementation plan	
Review/Approval	0.5		
Final issue of the facilities masterplan report incorporating feedback	1.0	Final masterplan report (Part 1 and 2)	

7 Financial Proposal

7.1 Validity Period

This proposal is valid for 30 days from the date of receipt by the College of Micronesia.

7.2 General Assumptions

Time inputs, fees and disbursements quoted in this proposal are lump sum and fixed, based on the notification of contract award by 3 November 2012 and the proposed methodology being adopted for the Services.

Note the program indicates task time periods which will be converted to specific dates based on the actual award date, with a minimum of adjustment to reflect national holidays and staff availability.

We have assumed in preparing this proposal that, as and when required, Beca personnel will have the full cooperation of the various College of Micronesia site based maintenance team who will provide access to all areas of the site and will describe in sufficient detail the existing limitations of the site infrastructure and the history of the site.

It is also a critical assumption of this proposal that the College of Micronesia will notify Beca, at the outset, of the appropriate client personnel and procedures to be followed throughout this process so that we are able to correspond and meet with the correct people. This is particularly important for site visits and again we have assumed that the nominated personnel will attend planned meetings and that they will be suitably qualified and authorised to make decisions (including approvals/signoff) at the time of meeting.

Fees will be paid in full and Beca will be responsible for the 3% GRT payments.

This proposal has been prepared on this basis and the fees for all phases rely on these.

7.3 Exclusions

The following are excluded. Note that these are identified as potential optional extras in the phase descriptions in Section 3:

- Energy audit and condition assessment scope excludes the following
  - A detailed energy audit
  - Condition assessment of plant (other than assumptions made by viewing photos and reading O&M Manual data)
  - Time spent getting hold of as-builts, O&Ms, bills etc – we assume these will be client supplied
  - Site measurement of buildings and infrastructure
  - Client training on asset management tool
  - A maintenance plan & or program
- Energy saving projects (integrated with masterplan but possibly time independent)
- A survey of the existing building(s) to a level to enable CAD plans to be drawn (a level of accuracy option)
- Geotechnical investigation (for areas of importance with potential issues either identified by you or by our visual inspection)
- Site survey capturing in more detail building location, roads, footpaths, vegetation, contours and existing services (a level of accuracy option)
- Compilation and linking of the condition assessment findings to the .pdf campus footprint plans via excel based spreadsheet. The value of this is the ability to visually illustrate by way of colour the condition levels across the campus (thereby easing communication instead of representing information solely in spreadsheet format). An example of this data management is illustrated on the adjacent plan.
- Sandy Pond and Associates Educational Assessment Component
- Further detailed study and liaison with Sandy Pond and Associates (identified in the gap analysis) required to inform the development of the masterplan and beyond the existing commission with the College.

Linking condition findings graphically through a data management tool highlighting low scoring room area condition in a red and orange colour

7.4 Proposed Fee

The following is our proposed lump sum A&E fee for the development of a Facilities Masterplan Report for the two campuses (national and state) in Pohnpei, (i.e. Stage 1 only, as outlined in Section 2.1).

Time inputs, fees and disbursements quoted in this proposal are lump sum and fixed, based on the notification of contract award within 30 days of receipt of this proposal and the proposed methodology being adopted for the Services.

Fees will be paid in full and Beca will be responsible for the 3% GRT payments.

Phase	Activities	Time fees (US $)	Disbursement (US $)
1.	Information gathering and analysis	$69,900.00	$17,500.00
2.	Design principles	$16,700.00	-
3.	Preferred concept	$17,200.00	$8,500.00
4.	Final facilities masterplan	$34,200.00	-
	US $	$138,000.00	$26,000.00
	Plus 3% GRT	$4,920.00	
	Lump Sum fee US $	$168,920.00	

7.5 Proposed Payment Schedule

We propose that the fees be paid by telegraphic transfer to a nominated bank account in US Dollars, or alternatively, by cheque in US Dollars made out to Beca International Consultants Limited and deposited into the following nominated bank account, provided Beca is notified of a deposit the same day by an email which includes a scanned copy of the bank deposit slip.

Bank of Guam account no. 0105-042119

Our proposed payment schedule is given in the table on the right hand side. Based on the number of phases this will align with monthly a billing cycle. We would require clearance of milestone payment before proceeding with the next phase.

Milestone	Amount (US $)	Submission date	Payment due date
1. Phase 1 submittal	$90,000.00	Refer program	Refer contract
2. Phase 2 submittal	$17,320.00	Refer program	Refer contract
3. Phase 3 submittal	$26,500.00	Refer program	Refer contract
4. 90% Pre-final report submittal	$17,600.00	Refer program	Refer contract
5. 100% Finalised masterplan report	$17,500.00	Refer program	Refer contract
Total US$	$168,920.00		

8 Glossary of terms

COM Facilities Master plan

An overarching concept and long term plan for multi-campus development which includes contextual analysis, staging and guiding design principles in areas such as built form, architecture, open space, infrastructure, operational efficiencies, materials, planning requirements, and landscape that will be used as a basis for further concept elaboration and detail design.

Spatial review

A review of all the components that make up the physical environment and how people interact with this environment - this includes the building function and form, open space, character and circulation.

Condition Assessment

A survey of the buildings and utilities to determine remaining life, potential for renovation or demolition, maintenance costs for buildings to be retained. The condition assessment forms an input into identifying the opportunities for functional reassignment of spaces and the adjacency relationship of future functions.

Energy Audit

An energy audit is a review of the current energy use with a view to optimising building operation. This can be conducted concurrently with the spatial review and condition assessment to inform the development of the final master plan.

Gap analysis

A review of the existing data available for buildings, infrastructure and open space. Once the quality of information is known a decision is made either to proceed based on the existing available or to prepare an outline on the further work required to obtain suitable information.

Educational Assessment Component (EAC)

This is a review of the academic and administration requirements with the outcome being to provide a projection for space utilisation to inform the accommodation schedules developed as part of the spatial review. This is a separate input by Sandy Pond and Associates who are a higher education consulting firm with extensive experience with accreditation, planning, and assessment.

Design principles

A series of bullet point statements outlining guiding objectives for the desired campus environment. These address specific areas including but not limited to building form, context appropriate design, circulation, open space, infrastructure services and energy efficiency. Precedent images referencing best practice solutions demonstrate different design outcomes.

Accommodation schedules

An input into the spatial review. These are the result of discussions with users on the spatial requirements to deliver the curriculum. Development of the accommodation schedules is interlinked with the condition survey identification of spaces that will be retained and also forms an input into the development of the concept adjacency diagrams and bulk and location studies which give initial definition to future buildings i.e building footprint.

Staged implementation plan

A programme illustrated through a gantt bar chart breaking the development into stages. The staging of the development and decanting (moving of functions to spaces as development occurs) is also illustrated by staged plans identifying the projects completed at each stage. In this way the master plan is depicted as a series of overlays with the final layer being the completed master plan.

The timing of potential funding streams is a crucial input for the staging process.

9 Terms and Coniditions of Engagement

Beca would propose to carry out the services offered (above) under the terms and conditions of contract set out in the Federation Internationale des Ingeniuers – Conseils (FIDIC), Client/Consultant Model Services Agreement, 4th Edition 2006 with the addition of the "Additional Conditions" as attached to this proposal. A copy of this is attached.

These conditions of contract for the above-mentioned scope and services are the normal terms used by engineering consultants for international work and will form the basis of this engagement.

The Conditions of Contract require the Agreement of a number of "Conditions of Particular Application". The detailed wording of each clause would be included in a draft document for your consideration at the time of acceptance. The following is proposed for this commission.

Language	English
Limitation of Liability (in contract, tort or otherwise)	2 x fee
Duration of Liability	2 years
Applicable Law	New Zealand
Health & Safety (on site)	Client Responsibility

Additional FIDIC conditions are contained in Appendix B.

Appendix A

Company Information

Capacity

Company Experience

Relevant Project Experience / Track Record

Company Information

Beca International Consultants Ltd	
Registered Name and Trading Name	Beca International Consultants Ltd
Postal Address	PO Box 6345, Wellesley Street, Auckland, 1141, New Zealand
Registered Address / Street Address	21 Pitt Street, Auckland, 1010, New Zealand
Company website address	www.beca.com
Company Registration Number	253847
Date of Incorporation	28 September 1984
Registered Address	21 Pitt Street, Auckland
Country of Registration	New Zealand
DUNS Number	760044560
Type of organisation	Limited liability company
Is Parent Company (registration number and registered office)	Beca International Holdings Limited Registration number: 69188 Registered address: 21 Pitt Street, Auckland
Key Contact	**Fraser Vickers** Technical Director - Architecture Telephone DDI: +64-7-5780896 fraser.vickers@beca.com

Company Structure

Beca International Consultants Ltd is a member of the Beca group of companies, one of the largest employee-owned engineering and related consultancy services groups in the Asia Pacific region.

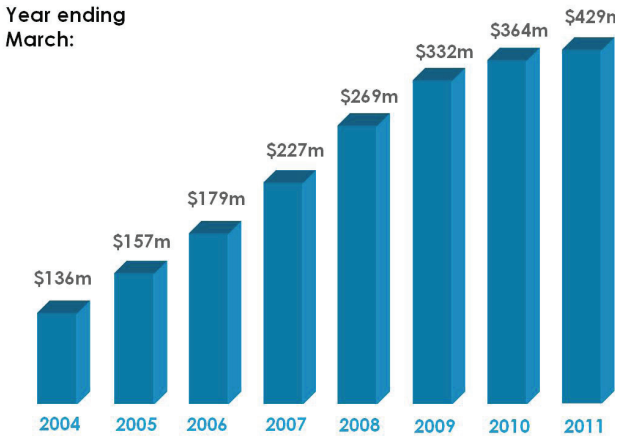
The Board of Beca International Consultants Ltd (Last updated 15.03.12)		
Ian Bull	**Jonathan Barwick**	**Jo Wright**
Andrew Wilson	**Mike Kelly**	

Capacity

Financial strength

Beca is a company of sound financial standing. The development of four strategies has ensured the continued strength of our business. These are growing our employee ownership model, partnering with leading international firms, expanding internationally and pursuing technical excellence and innovation. Commitment to these strategies has seen Beca grow, diversify and cement its place as a significant Asia-Pacific engineering and project management consultancy with an acknowledged and growing international footprint.

Beca now designs and supervises projects with a total value of more than NZ$2.4 billion annually, and we are ranked 74th in the top 200 international design firms (Engineering News Record 2008). Beca has won more than 50 awards in the last five years alone; and a growing number of these are for excellent international projects. We plan to continue to maintain a high level of service to all clients, in all our markets.



Resources

As a global, multidisciplinary organisation, Beca is well resourced both technologically and systematically. Our well embedded systems have allowed us to develop process that lead to the successful delivery of high quality projects. Key resources frequently utilised on projects such as the Waterfront Foreshore Development are identified below:

Enterprise Resplan: This system, developed in house, provides the Job Manager with a resource planning tool at the project level. It allows group-wide resource identification to facilitate resource sharing, integrated work package planning and resource allocation, easy recognition of those people who are light or heavy with work for forecasting, and links to other enterprise systems to eliminate duplication of data entry.

Revenue Table

Year	Total Revenue ($NZ)	Export Revenue ($NZ)	46%
Year end 2011	$429,000,000	$196,000,000	46%
Year end 2010	$364,000,000	$141,000,000	39%
Year end 2009	$332,000,000	$108,000,000	32%
Year end 2008	$269,000,000	$69,000,000	25%
Year end 2007	$227,000,000	$78,000,000	34%
Year end 2006	$179,000,000	$59,000,000	31%

» Beca Project Management System:

- Beca uses the Beca Project Management System (BPMS), developed by Beca from the internationally recognised 'Project Management Body of Knowledge' standard, in order to deliver our clients projects in a rigorous and staged framework of principles, actions and objectives.
- The success of our project delivery is our integrated approach. From Planning and Feasibility investigations, through the Development phase, Detailed Design, Implementation and Delivery and ongoing Monitoring and Review of the Project, Beca's recognised discipline leaders work closely with our Clients to develop a strategic approach to ensure the success of your projects.
- We have a strong focus on optimisation, proactive management of communications and identification of appropriate innovations. Our approach is to develop practical, innovative solutions which balance cost, time and sustainability to unlock value for money.

» Document Management Systems:

- Beca operates a Deliverable Status Register for the management and control of project deliverables. It allows drawings and documents to be tracked through the production process and can provide reports which show the Job Manager how complete each deliverable is for programming purposes. It is linked to our CAD platform and generates drawing transmittals.
- Meridio is an enterprise wide knowledge management system that allows Beca people to easily store, locate and share their working documents. Its purpose is to enable all Beca people globally to collaborate on work and share knowledge. This has the advantages of improving efficiencies by not duplicating work done in the past, sharing knowledge and ensuring consistency between offices and being able to find existing documents without needing to know where they are stored.

» Beca Best Practice: As part of Beca's commitment to quality, we have shared our best practice design through the preparation and use of in-house technical Design Guides. These design guides allow us to control the design standards and procedures on a project.

» BST: This is our web-based financial information management system. It allows Job Managers to track the financial performance of our jobs and manage costs. It also provides a comprehensive tool to allow the cost of any agreed variations in scope to be tracked for client reporting and billing purposes.

» Quality Management:

- Beca is committed to recognising quality standards in all aspects of our operations. In particular, this includes dedication to the experience of our employees and the principles of quality of products and services, the efficiency of work processes and the effectiveness of management systems. An essential element of our policy is a strong focus on and commitment to our clients and their requirements. Management systems are implemented and subjected to continuous review for consistent quality and ongoing improvement. We seek ongoing certification to the International Quality Standard ISO 9001 to provide confidence in our systems and provide opportunity for added value through external appraisal.

» Technical Software: Our technical software is extensive, but includes:

» AutoCAD, drafting platform

- REVIT MEP, 3D drafting and building Information platform
- IES, Lighting and Mechanical load modelling software
- CYMAP, Electrical design software
- E20, Mechanical load modelling software
- AGI and Dialux, Lighting design software
- Adobe Creative Suite CS5.5 (Illustrator/ Indesign/ Photoshop),
- Sketchup, 3D Studio max and rendering engine packages
- Vray and Mental Ray

Staffing Resources

As a multi-disciplinary, global consultancy, Beca has a wide and varied pool of talent from which to draw on, ensuring we deliver tailored, client specific services on all our projects. The table below depicts are staffing current numbers by discipline.

	Auck		Wgtn		Regional Offices[1]		Overseas[2]		Totals
	Prof	Tech	Prof	Tech	Prof	Tech	Prof	Tech	
Administration	21	76	2	17	10	43	12	51	232
Architecture	9	6	0	0	10	3	7	2	37
Asset Management	2	0	0	0	0	2	0	0	4
Chemical Engineering	20	2	0	0	8	2	40	1	73
Civil Engineering	87	38	36	10	74	42	104	25	416
Electrical Engineering	54	28	11	9	23	25	99	15	264
Environmental Engineering	8	3	1	0	16	0	12	0	40
Finance	42	19	0	0	0	1	18	15	95
Fire Engineering	8	3	1	0	3	0	13	1	29
Geotechnical Engineering	22	11	2	1	8	2	7	0	53
GIS	7	2	2	1	0	0	0	0	12
Human Resources	9	3	0	0	1	0	16	4	33
IT	67	44	10	4	1	2	14	4	146
Legal	5	1	0	0	1	0	3	0	10
Management	9	4	1	0	2	0	18	4	38
Marketing	12	7	1	0	2	0	6	1	29
Mechanical Engineering	64	32	18	8	30	12	162	47	373
Mechatronics	0	0	0	0	0	0	2	0	2
Planning	25	15	20	2	25	9	4	4	104
Plumbing	1	1	0	1	0	0	0	0	3
Power Engineering	8	1	4	1	3	1	23	3	44
Project Management	50	15	8	5	19	6	81	12	196
Quality	1	1	0	0	0	0	3	1	6
Quantity Surveying/Cost Management	10	5	3	1	5	2	5	0	31
Science	19	4	2	1	9	1	0	0	36
Structural Engineering	54	23	30	15	36	17	41	19	235
Surveying	9	10	10	4	10	12	0	1	56
Valuations	5	2	0	0	1	0	0	0	8
Sub total	628	356	162	80	297	182	690	210	2605
TOTAL	984		242		479		900		

Includes BCHF, Beca Corporate Holdings Ltd, Beca Infrastructure Ltd, Beca AMEC Ltd, Beca Applied Technologies Ltd, CH2M Beca Ltd, Envirolab Geotest and Beca Valuations.

[1] New Plymouth, Tauranga, Hamilton, Dunedin and Christchurch

[2] Australia, Singapore, Indonesia, China, US and Overseas Projects

Company Experience

About Beca

Established in 1918, Beca is a consultancy with offices across the Asia-Pacific region and is one of Asia-Pacific's most respected and leading professional services organisations, specialising in the design and management of projects.

As a multi-disciplinary organisation, we have the capability to work in a diverse range of sectors. Our employees number over 2500, operating in more than 70 countries worldwide. With such a spread of resource, Beca can tap into a rich pool of specialist knowledge and experience. We work closely with our clients with a view to delivering award-winning solutions as a single collaborative team. The Beca group is an employee-owned company, focused on providing our clients with independent and impartial advice. We are committed to building strong and lasting relationships by responding to the needs and aspirations of our clients and our communities.

Beca in the Pacific

Beca has been working in the Pacific region for over 30 years in many of the island states on a wide variety of projects. These include new buildings to suit the tropical climate, storm and waste water solutions, electricity generation and distribution, survey and geotechnical work, coastal protection, reclamations and environmental impact assessments. We are proud to be working in association with our Joint Venture in Fiji – Erasito Consultants Ltd, our Affiliate Office in Papua New Guinea – Gure Kule Konsultants and through our office in New Caledonia – Beca Nouvelle Calédonie.

Through our regional focus, we have gained valuable experience in the provision of consulting services in developing countries of the Pacific including Samoa, Fiji, American Samoa, Kiribati, New Caledonia, Papua New Guinea, Solomon Islands, Tonga, Tuvalu, Niue, Cook Islands, Tokelau, Nauru, the Republic of the Marshall Islands, Vanuatu, and the Federated States of Micronesia. It is also Beca's philosophy to encourage local involvement by including local personnel in our project teams in the many countries in which we operate.

Awards

Beca's achievements have been recognised by a wide range of professional bodies from around the world. Among a wealth of accolades, awards have been received from the UK-based Institution of Structural Engineers, Singapore's Building and Construction Authority, the Project Management Institute of Australia and the Institution of Professional Engineers New Zealand.

Beca was named New Zealand's Most Reputable Organisation in 2011 by the Hay Group/Management magazine, New Zealand Company of the Year in the 2010 Deloitte Top 200 Awards, and International Business of the Year by New Zealand Trade and Enterprise in 2009. Beca also won the large business category in Fairfax's Sustainable 60 Awards in 2011.

Northern Marianas College Masterplan concept

Relevant Project Experience and Track Record

Through a regional focus, Beca has gained valuable experience in the provision of consulting services in a number of countries in the Pacific. It is our philosophy to encourage local involvement and up-skilling by including local personnel in our project teams in the many countries in which we operate. A selection of relevant masterplanning and education projects Beca has been involved, are outlined below:

Commonwealth of the Northern Mariana Islands, Saipan, 2010

The Northern Marianas College in Saipan is a Masterplanning project led by Beca Architects that investigated the proposed options for improving the college facilities under a variety of building and refurbishment scenarios. Beca architects and surveyors carried out the essential first steps of the analysis, user consultation and preparation of existing and proposed accommodation schedules prior to investigating plan options.

As part of the masterplan a Building Condition Audit report was prepared to assess the current condition of the school buildings and site infrastructure. The Building Condition Audit was used as a basis for determining which buildings should be demolished and for estimating the cost of refurbishment should the existing buildings be kept.

College of the Marshall Islands – Republic of the Marshall Islands 2005 – August 2012

In late 2005 Beca prepared a Campus Master plan, implementation strategy and cost plan for the development and expansion of the existing Uliga campus. This resulted in government acceptance and sponsorship of the project, which led to the ongoing redevelopment project and regaining of full WASC accreditation. The master plan has subsequently been updated to reflect development and further college initiatives.

Beca Architects completed the Master plan and prepared detailed designs for six stages of redevelopment: a dormitory, three classroom blocks, faculty offices, a maintenance building and energy center, the administration building plus student and learning centre. Design and construction commencement in October 2006 and all buildings have now been completed.

Federated States of Micronesia - 2007 - ongoing

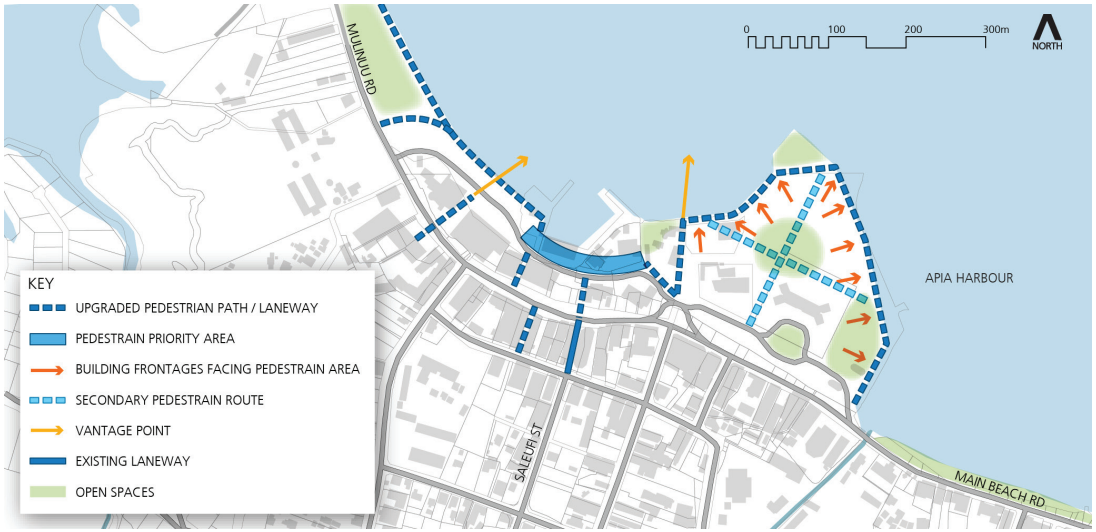
Beca Architects are currently carrying out a number of projects in FSM with Fraser Vickers as Project Director. These include:

Yap State:

- College of Micronesia, Yap Campus – new Student Centre and Teaching Block… under construction.
- Early Childhood Education Building – new 2 storey facility accommodating 80 preschoolers on the lower level and office/ conference/training/ancillary facilities above for Yap state early childhood providers… under construction.
- Memorial Hospital refurbishment site masterplan and redevelopment of all facilities (except mental health) plus site and building services… under construction.
- Tomilang Elementary School – new 2 storey eight classroom block… under construction.
- Yap High School – masterplan plus stage 1 implementation (new vocational center and two 2 storey classroom blocks, plus administration building redevelopment)…under construction.

Chuuk State:

- Iras Elementary School – masterplan and concept design for complete redevelopment of existing school… on hold pending land issues.
- Chuuk Hospital Redevelopment – assessment of current facility condition (buildings and services)
- Dispensaries – model design and construction booklet for typical outer island health clinics… completed and first group of clinics are currently being bid out.
- Kosrae State:
- Kosrae State Hospital – complete redevelopment of existing hospital and site, starting with the assessment of community health needs and a site masterplan… detailed design in progress.
- Lelu and Utwe Elementary Schools – design and construction support for remdial work required on two schools with construction problems… construction almost complete.



Apia Spatial Plan, Apia, Government of Samoa, 2011

For the Samoan Ministry of Natural Resources and Environment, Beca prepared a spatial plan to support development and investment decisions that will ensure climate resilience and provide environmental, social, cultural and economic benefits for the wellbeing of the Apia community. The urban design / master planning inputs included place-based analysis, identification of the important elements that contribute to a sense of place, and guidance about the future street types, land uses and built form that will help maintain the character of villages within the centre while supporting viable economic development.

Vanuatu Tourism Infrastructure Project, Vanuatu, NZAID, 2012 - ongoing

The Port Vila seafront is a place that is frequented by tourists and local people. MFAT is seeking outcomes that will provide functional, safe and attractive portside and seafront precincts so that tourists leaving cruise ships can report a "quality experience". Our approach is to identify a clear programme of improvements, both for physical works (new or upgraded infrastructure) and for managerial or operational activities. Analysis, issues and concept options are being prepared first in consultation with the client, multiple stakeholders in Government and the private sector, and considering the needs of local people. This work will lead to a definition of the scope for further detailed design and implementation.

Otumoetai College, Tauranga – 5/10 Year Property Plan, 2009

This project consisted of the preparation of a 5/10 Year Property Plan for the Otumoetai College to forecast Capital and Maintenance upkeep costs for the school and for the purposes of obtaining funding from the Ministry of Education over the next 5 years. Typical Cost Management roles and duties undertaken for this project included for:

- The formation of the Property Plan model to calculate asset replacement and maintenance cycles
- The translation of all Building Condition Audit information into the 5/10 Year Property Plan
- An assessment of funding available from the MOE, the school and other charitable bodies.
- Preparation of the 5/10 Year Property Plan at working level to provide a useful tool to the school for programmed asset replacement and maintenance
- Preparation of the final 5/10 Year Property Plan in accordance with the designated MOE templates to support the schools application for 5YA funding.

Fiji Institute of Technology (FIT), Samabula Campus in Suva, 2003-2004

In 2004 Beca prepared a detailed master plan, implementation strategy and cost estimates for the planned expansion and upgrade of the existing 8.25ha Campus.

The expansion is planned double the number of full time equivalent students within 20 years from about 4000 to 7500. Floor area will increase from the current available 17,000m^2 to about 50,000m^2 by way of a 12-staged development which includes 8 new major buildings.

Beca provided all the required consulting services in house with assistance from our local partner Erasito Consultants.

RMI Infrastructure Development and Maintenance Plan, 2003

In 2003 Beca Architects won this major commission, against stiff competition from the USA and Japan, to survey and review all the education and health assets on the twenty six atolls of the Marshall Islands and prepare an Implementation Plan to construct eight new schools and a number of medical facilities over a three year period. Of note is the fact that Beca won this commission on the strength of our project approach and fully detailed methodology.

The study was a success and Beca Architects and Engineers have completed the implementation stage in which Beca managed contracts with a budget of US$35 Million and over 25 buildings designed by Beca architects.

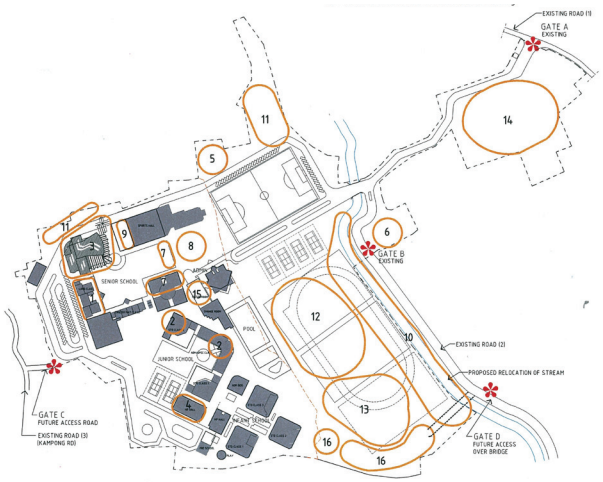
British International School, Jakarta, 1992 - ongoing

Beca Architects won a commission for the planning of the relocation of the existing primary school to a new greenfield site that would also cater for a new secondary school with a total roll of 1400 pupils.

Beca Architects then managed the design and construction of the complete school with the help of local architects on the 12-hectare site finally selected in Bintaro. Project value $10M.

The infant, junior and senior schools were completed on time, within budget and ready for the September 1993 academic year. In 1996, Project Director the master plan was reviewed for Stage 2 of the school's development – a Cafeteria, an Art and Technology block and a Performing Arts centre.

In 2004 Beca Architects carried out a second review of the Master Plan for the new Board and the new Headmaster. A $5M Performing Arts Centre was completed in 2007 and a new campus center piece, the Library completed in 2010.



King's College, Auckland, New Zealand, 2003 - ongoing

Beca has a long standing working relationship with King's College and in 2003 the College commissioned Beca architects to carry out a high level review of the whole campus and prepare a Master Plan for twenty years out along with specific development plans for the next five to eight years. This masterplan is currently undergoing review after an 8 year period to cross check that it is still aligned as a document that will guide the implementation of the College's vision.

Parnell College, Auckland, New Zealand for the Academic College Group 2002-2006

Beca was the lead consultant for this new, 16,000m^2, NZ$ 21million, 1,000 pupil, secondary school in Parnell, Auckland. The new school was completed in 2006.

The architectural design had to meet stringent standards and comply with local authority and heritage agency requirements as it is situated in a Historic precinct.

Strathallan College, Auckland, New Zealand, 2000 - ongoing

Strathallan College, is a 1500 pupil school for the Academic Colleges Group, Karaka, Auckland. Beca carried out the master planning for the new school, which provides facilities for students from age 0 to age 17. Beca has been, and still is, the lead consultant and has just completed the documentation phase of the 3000m^2 new Art & Technology building. Beca is responsible for all engineering services except for the underground sewerage and storm water designs, which are being carried out by a small local firm.

Bethlehem College, Tauranga, New Zealand, 2000 – 2003

In 2000, Beca architects were requested to prepare a full Masterplan for this existing school. The school had acquired some neighbouring land and wished to plan for the doubling of the school roll and to start a teacher training college and 8 other degree programs. After the acceptance of the Master Plan, senior architect Fraser Vickers designed the buildings, catering for 400 students.

Alice Smith , Kuala Lumpur, 1996 - 2001

After the successful completion of Stage 1 of the British International School in Jakarta, Beca was introduced to another international school in Kuala Lumpur. Beca Architects secured a commission with Alice Smith School to develop a brief, find a site (12 ha) and develop a master plan for a 1400 pupil school from 5 years olds to Form 7 (18 year olds).

Saint Kentigern College Masterplan, Auckland, New Zealand

In 1997, Beca architects prepared the Master Plan for an existing boys college to also include a girl's college allowing for an increase from 1000 pupils to 2200 pupils on the 30ha site. Beca then carried out the design of a new sports center and No 1 sports fields for rugby, hockey and football. Beca was the lead consultant and provided full architectural, engineering and project management services. The sports centre was completed in 2003.

*Additional Education and other project data in the Pacific Region is available upon request.

Referees

We have contacted the following referees, who represent clients on recent projects delivered by the proposed project team. They are happy for you to contact them to discuss our performance and delivery of any relevant projects as listed below.

Carl Hacker,

President, College of the Marshall Islands, RMI

chacker@cmi.edu

+692 (625) 3394

Robert A. Westerfield, III, P.E.

PMU Resident Engineer, Yap, FSM

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+691 350-6195

Appendix B

FIDIC Additional Conditions

B. Additional Clauses

1. Clause 1.6.3 Assignment and Sub-Contractors: Insert the following words at the end of this clause 1.6.3 after the word "Client":

", unless the sub-contractor forms part of the Beca group or is a joint-venture with a Beca group company".

2. Clause 1.7.1 Copyright: This clause 1.7.1 is replaced with:

"The Consultant retains copyright of all documents prepared by him. After making full payment for the documents to the Consultant the Client shall be entitled to use them or copy them only for the Works and the purpose for which they are intended, and need not obtain the Consultant's permission to copy for such use."

3. The following new clause "2.10 Health and Safety" is added:

"The Client is the organisation who controls (and is therefore responsible for all health and safety at) the place of work. The Consultant shall have no obligation for health and safety, or responsibility for personnel other than its own, and shall not be responsible for hazards or activities that are outside its control."

4. Clause 3.1 Scope of Services: If the Agreement is subject to NZ law under clause 1.4.1, insert an additional clause 3.1.2:

"The Client and the Consultant agree that the services are acquired for the purposes of a business and that the provisions of the Consumer Guarantees Act 1993 are excluded in relation to the services."

5. Clause 4.5 Changed Circumstances: Insert the following words at the end of this clause:

"The circumstances under this Clause 4.5 which entitle either the Client or the Consultant to suspend the performance of the Services and to extend the time for completion of those services include (but are not restricted to):

- Acts of God
- War
- Civil disturbance/unrest
- Coups
- Riots
- Earthquakes
- Fire
- Volcanic eruption
- Cyclones/typhoons/hurricanes
- Tsunamis
- Strikes
- Electrical interruption
- A pandemic, a major disease outbreak or threat of outbreak
- Terrorism, being any act of any person or group of people, involving the use of or threat of force or violence where the purpose of the act by its nature or context is to further a political, religious or ideological aim and/or to intimate or influence a government (whether lawfully constituted or otherwise), a body corporate or the public or any section of the public.
- For clarification, when the services are resumed the Consultant shall be entitled to an extension of time equal to the period of suspension to enable the Consultant to complete the Services."

6. Clause 6.3.1 Limit of Compensation: This clause 6.3.1 is replaced with:

"The maximum amount of compensation payable by either party to the other in respect of liability in contract, tort or otherwise is limited to the amount stated in the Particular Conditions and the Consultant shall in no circumstances be liable or responsible for special, consequential, or indirect loss, loss of profit, loss of production or loss of use. This limit is without prejudice to any Agreed Compensation specified under Clause 5.2.2 or otherwise imposed by the Agreement."

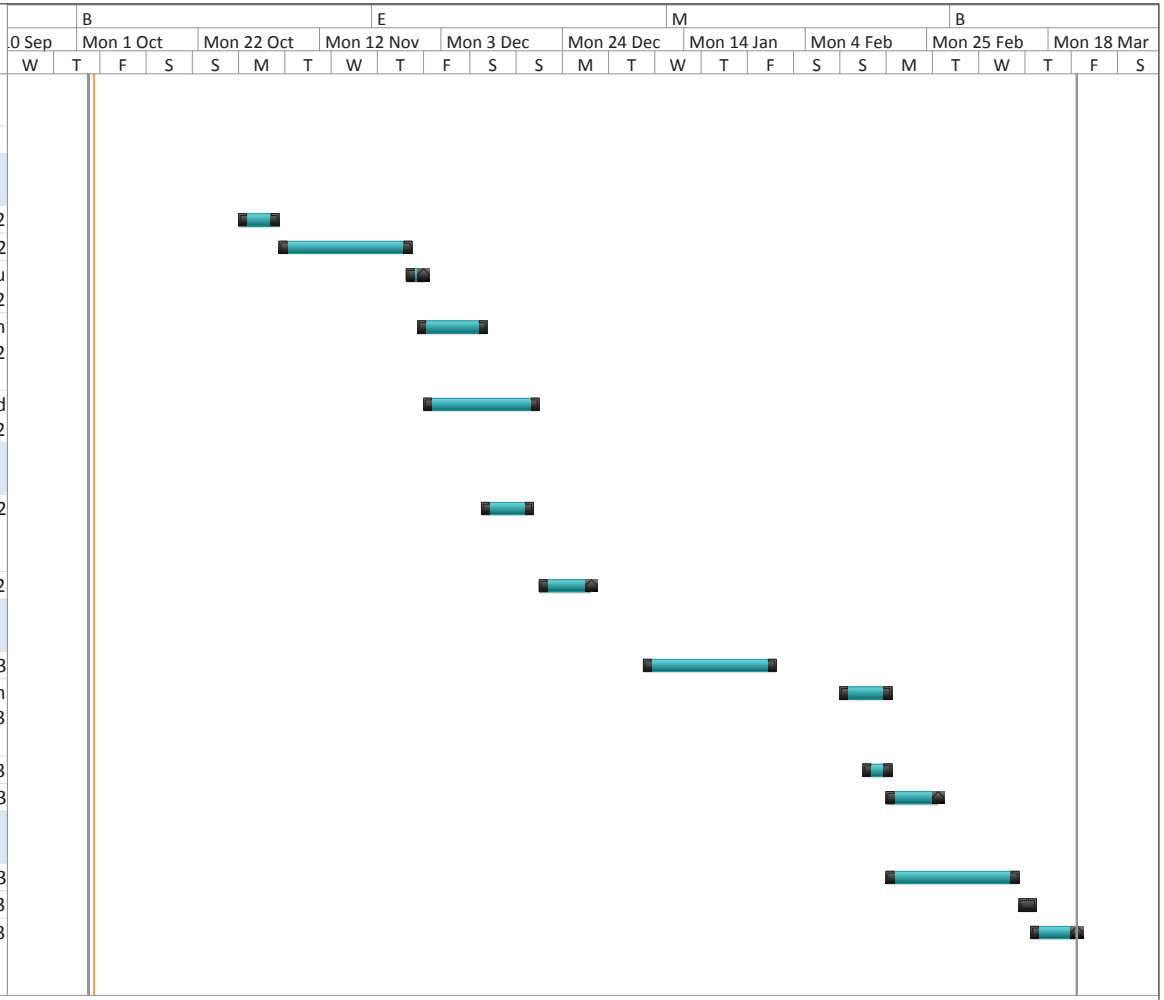
7. Clause 6.5.1 Exceptions: Insert the following words at the end of clause 6.5.1(a):

" (in which case, clause 6.3.1 will apply, but the aggregate amount of compensation payable by the Consultant in respect of liability arising under this Agreement (whether under this subclause (a) or otherwise) shall be double the amount stated in the Particular Conditions up to a maximum of NZ$10,000,000); or"

Appendix C

Critical Path Program - Provisional

ID	Task Name	Duration	Start	Finish
1	CRITICAL PATH PROGRAMME _ PROVISIONAL			
2	Project Award			
3	Phase 1 - Information gathering and analysis (7 weeks)			
4	Project setup	6 days	Mon 29/10/12	Sun 4/11/12
5	Desktop study and gap analysis	17 days	Mon 5/11/12	Tue 27/11/12
6	Review/ approval of gap analysis by PCG and way forward agreed	3 days	Tue 27/11/12	Thu 29/11/12
7	Site Visit 1 – Spatial review, interviews and condition assessment	8 days	Thu 29/11/12	Mon 10/12/12
8	Complete information gathering and analysis phase	14 days	Fri 30/11/12	Wed 19/12/12
9	Phase 2 – Design principles (2 weeks)			
10	Design principles, precedent development and adjacency diagram	7 days	Mon 10/12/12	Tue 18/12/12
11	Review/ approval	7 days	Thu 20/12/12	Fri 28/12/12
12	Phase 3 – Preferred concept (5 weeks)			
13	Masterplan concept options	17 days	Mon 7/01/13	Tue 29/01/13
14	Site visit 2 - Workshop with PCG to arrive at preferred concept for development and costing	7 days	Sun 10/02/13	Mon 18/02/13
15	Preferred concept	3 days	Thu 14/02/13	Mon 18/02/13
16	Review/ approval	7 days	Mon 18/02/13	Tue 26/02/13
17	Phase 4 – Final facilities masterplan (4 weeks)			
18	Draft report with final masterplan	17 days	Mon 18/02/13	Tue 12/03/13
19	Review/Approval	3 days	Wed 13/03/13	Fri 15/03/13
20	Final issue of the facilities masterplan report incorporating feedback	6 days	Fri 15/03/13	Fri 22/03/13



Project: College of Micronesia.mp
Date: Thu 4/10/12

Task	External Tasks	Manual Task	Finish-only
Split	External Milestone	Duration-only	Deadline
Milestone	Inactive Task	Manual Summary Rollup	Progress
Summary	Inactive Milestone	Manual Summary	
Project Summary	Inactive Summary	Start-only	