



# **Bodhi Hill**

## **Summer 2015 Report**

# Project Manager Report

Managing any creative endeavour requires holding lightly to plans, while holding firmly to intentions. This means you have to be open to having plans change as new information comes to hand or a surprised by things that happen along the way. In the four months since our last report, our original goal to start construction in early 2016 has been impacted by the slower than expected formation of the design team and also project's decision to focus on bamboo as a principal construction material. However, Harn's stated intention for Bodhi Hill to showcase non-conventional, refreshing, artistic and enlivening architecture remains on track and even exceeds our highest expectations.

The two things I want to focus on in this report are the outstanding efforts to date of our design team and our initial investigations into the feasibility of using bamboo in Myanmar.

## Design Team progress

**Our design team now comprises no less than eight generous and talented architects (and their support staff) from seven different nations.**

I will introduce each and run through their work to date below. Some started work on the project not long after last report back in January and their work is well developed, managing to meet the targeted deadline of late May to complete Concept Design. Others have come on board much later and their contributions are only now starting to emerge. This pushes out our planned program somewhat, but this is more than compensated for by the quality and diversity of the designs submitted so far.

Before proceeding, a **note of thanks** must go to Greg our IT leader for his hard work getting the collaboration software for this project up and running. We are using Basecamp, a user-friendly project management platform, for day to day discussions and exchange of ideas about different components of the project, while our files are centrally located on our Bodhi Hill Dropbox server.

The (near) effortless collaboration between our architects in Europe and Asia would not be possible without these tools.

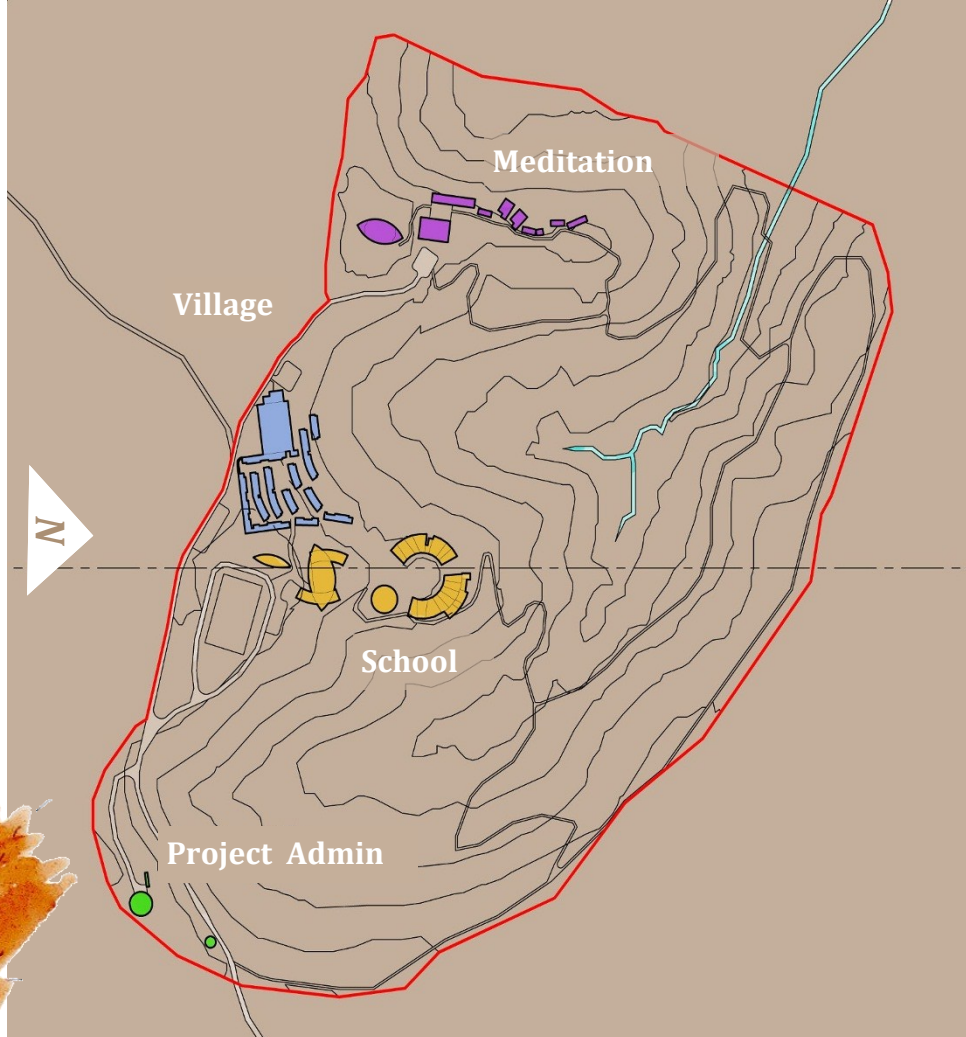
**We are also happy to welcome U Tint Lwin to the Bodhi Hill team.** U Tint is a retired professor of structural engineering from Mandalay Technological University. He has extensive experience in reinforced concrete design and design for local site conditions. As well, he will be a valuable channel between our project and local engineering students, passing on the knowledge we gain in bamboo structural systems to them.

## Site Layout Plan

The master plan of Bodhi Hill comprises three main clusters of buildings:

- **Meditation**
- **Village**
- **School**

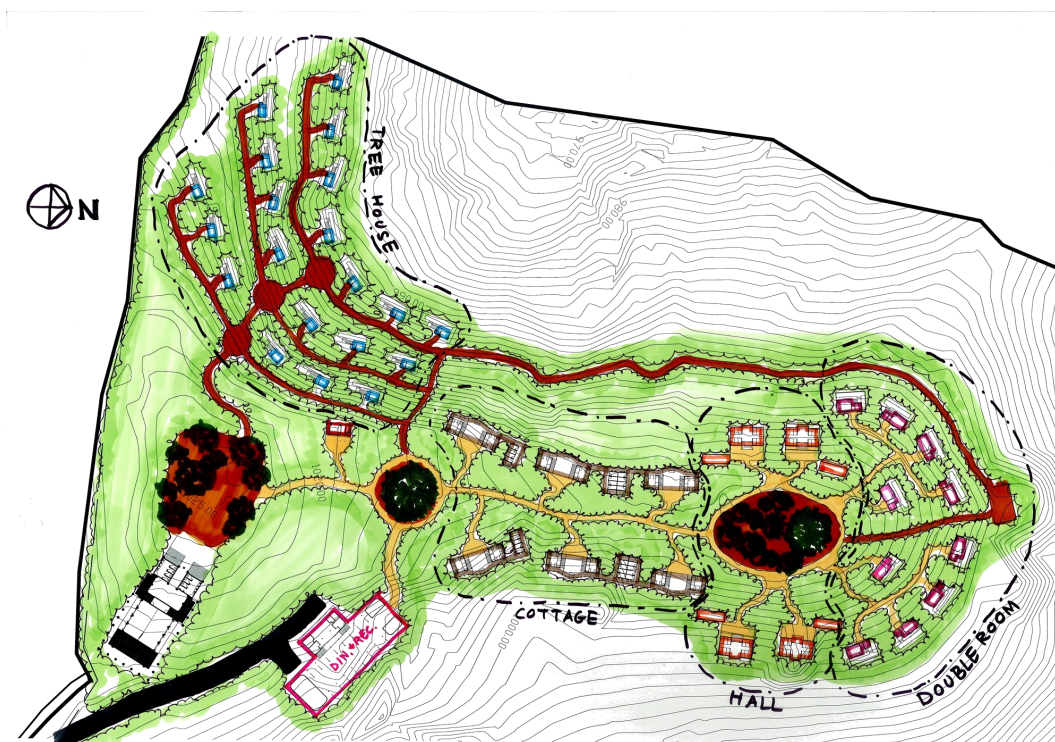
In addition there will be a group of buildings used for the administration of site activities, as well as an Enterprise Cluster, which is still the subject of initial discussions



## Meditation Cluster

This is being designed by a team of architects from Arsom Silp Institute of Arts in Bangkok. In late January this team visited Bodhi Hill, led by the Institute's founder Theeraphon Niyom (an Honored National Architect of Thailand) and project architect Thana Uthairattakoon. The visit included one night spent in local Zee Phyu Yae village as well as a research trip to Hsipaw to study vernacular village architecture, which is sadly absent in the villages close to our site.

This appreciation and interpretation of traditional forms and spaces is a principle for which Arsom Silp is highly respected in Thailand. Hence, this philosophy is now woven into the Meditation Cluster site, which comprises a tranquil meditation hall with separate training space located below, a dining hall (featuring a less-traditional arching bamboo roof structure) and various sensitively-scaled overnight accommodations. Earthen walls and woven bamboo wall and roof panels will blend naturally with this well-wooded part of the site.



## School Cluster

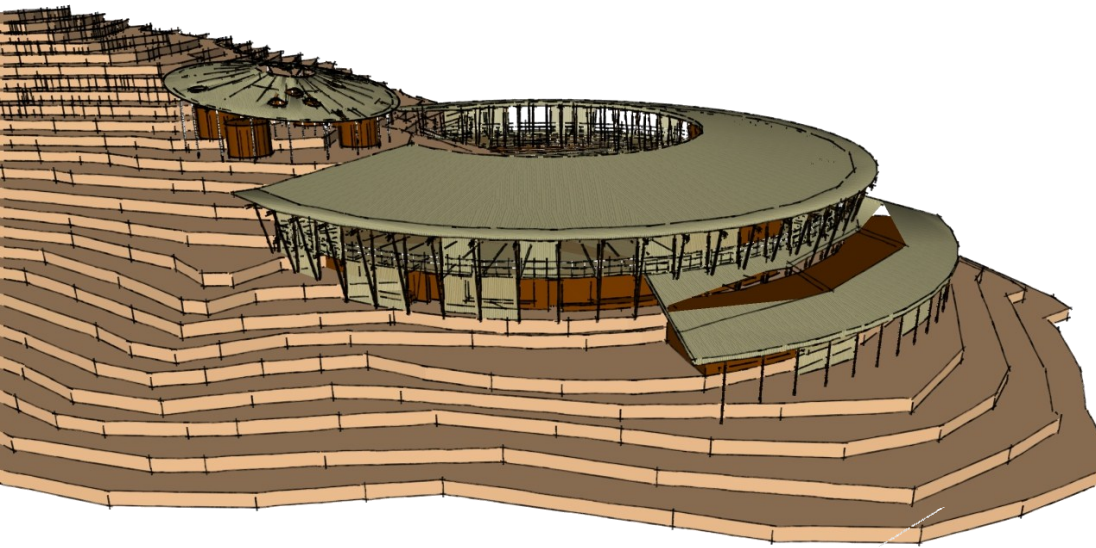
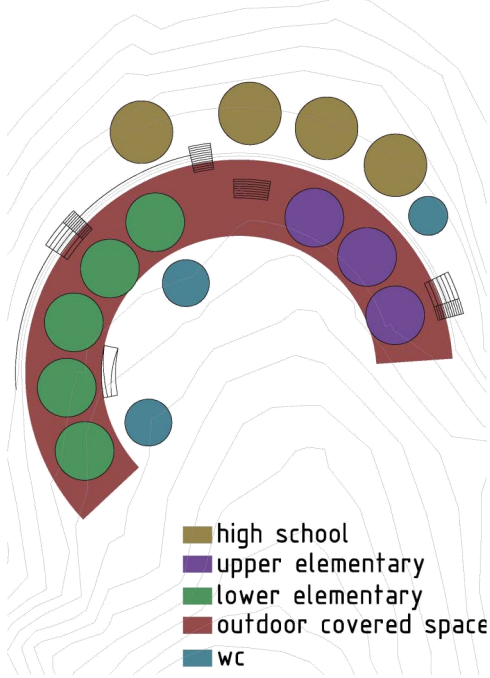
### Classrooms and kindergarten

Spanish architect Pablo Candela has been involved with the Bodhi Hill project from the start and subsequently his proposals for the classrooms and kindergarten are also well developed.

Pablo has previously built earthen architecture in Shan State. His feel for the local area is reflected in the way his two strong circular structures so nicely harmonise with their location on a spur reaching into the main valley of the site.

The use of earthen walls and bamboo roofs will further integrate this structure into the landscape.

The concentric forms derive from Pablo's in-depth study of democratic education principles, providing a range on non-hierarchical and flexible classroom pods and sheltered outdoor spaces, designed to inspire learning and creativity.



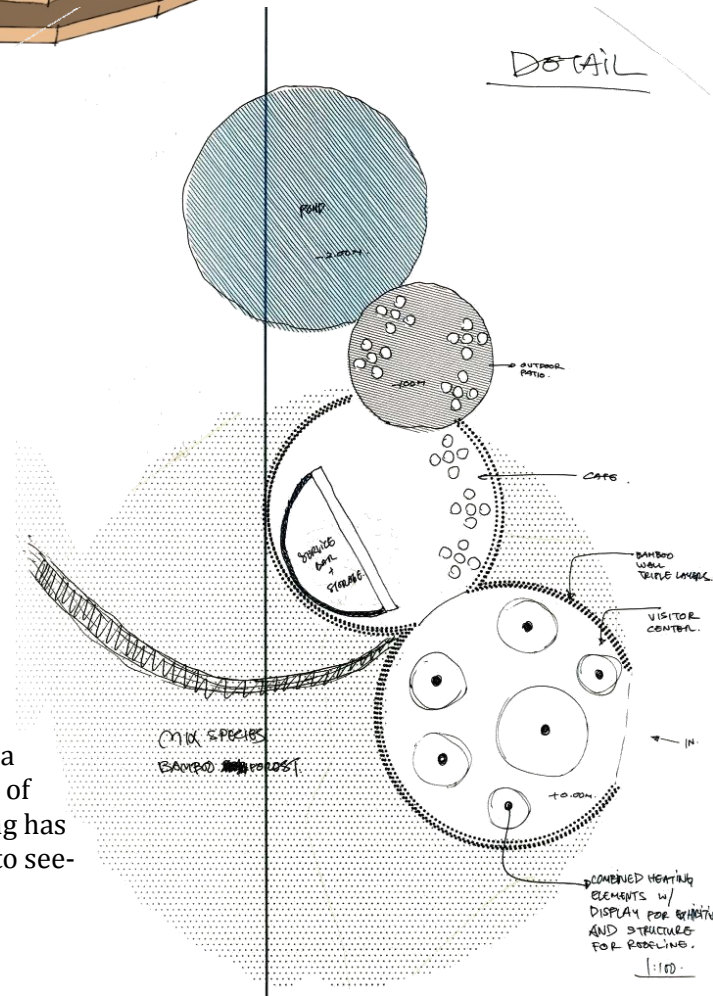
### Café / Visitor Centre

Bangkok-based architect Nopadol Limwatanakul has gone in a completely original direction with his proposal for the café, which will be the first point of contact for visitors to Bodhi Hill.

Instead of a typical free-standing structure, his concept is to celebrate the bamboo plant by carving the café space, literally and architecturally, out of a series of bamboo clumps planted at the summit of the School Cluster hill. The bamboo species planted will comprise the same species to be used for the structure, woven wall and roof panels and flooring planks throughout the project. It will be fascinating to observe the design solution that evolves from this highly original concept.

### Assembly Hall

We are very fortunate to welcome Yangon-based architect U Hla Thaug to the Bodhi Hill team. In early April I visited a number of simple and beautiful training centre buildings that U Hla Thaug has designed for Burmese NGO Metta near Bago. We look forward to seeing his proposals for the Assembly Hall building at Bodhi Hill.



## Village Cluster

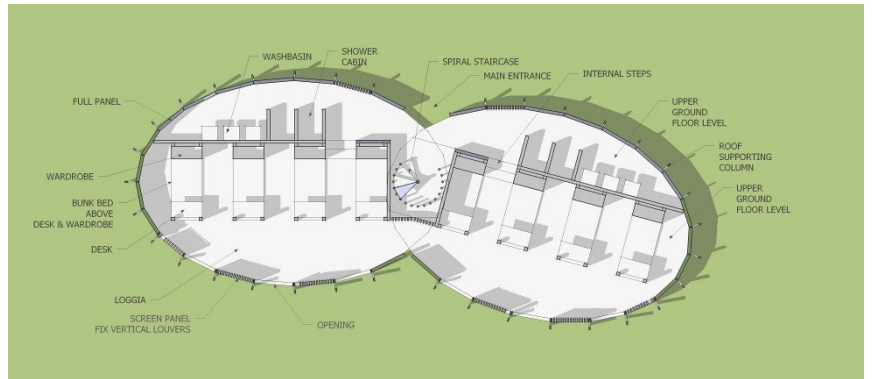
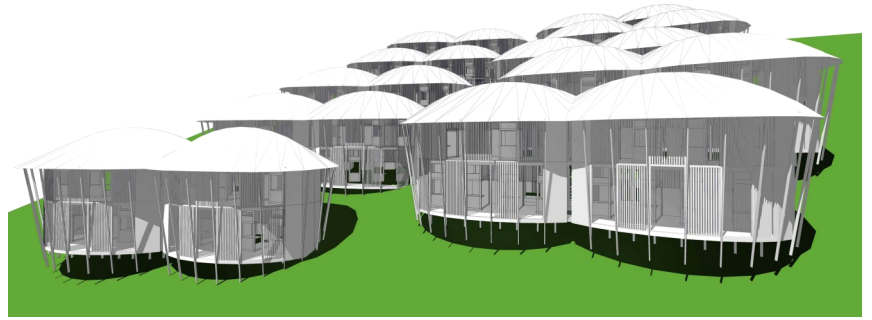
We are looking forward to having all three of the Village Cluster architects visit the Bodhi Hill site over the weekend of June 05-07.

### Children's Housing

Adam Broztek is a Polish architect based in Dublin whose is responsible for providing happy, healthy living spaces for the children at Bodhi Hill.

The concept for the Children's Housing is organic-shaped two-storey pods that contain four to six centrally-located bed spaces (older children's rooms naturally requiring more space). Each bed space combines a bunk bed, desk and wardrobe, providing a private zone for each child. By locating the beds in the centre of the space, natural light is allowed to flood the residual break-out spaces inside the ellipse.

The pods are clustered close together on this sloping part of the site, giving an intimate village feel, with kitchen gardens interspersed with laneways and buildings.

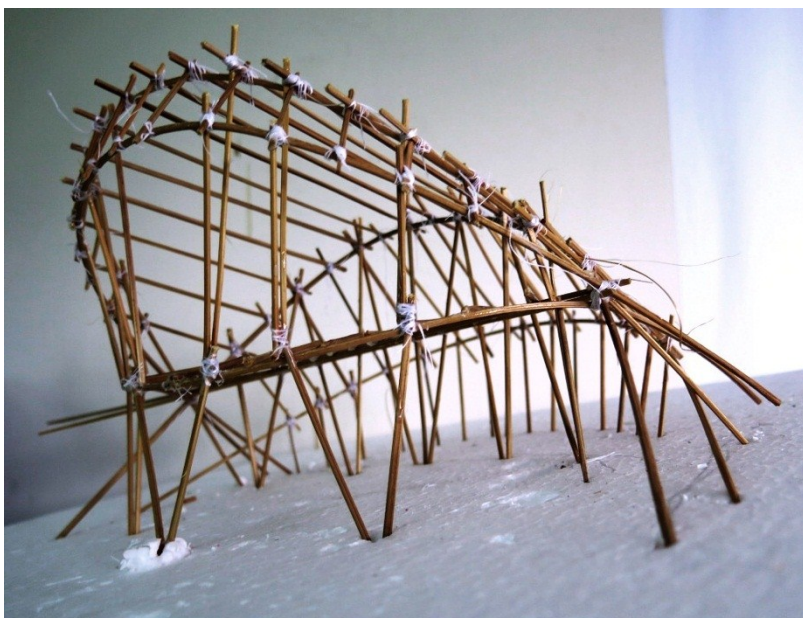


### Teachers' Housing

The concept for housing Bodhi Hill's teachers is for their housing to wrap protectively around the children's housing, like a village wall.

The teachers' housing will be designed by Nripal Adhikary, a Nepalese architect highly experienced in both earthen and bamboo architecture. Clearly Nripal has been preoccupied with earthquake recovery work in his native land, where his company Abari ([www.abari.org](http://www.abari.org)) is carrying out heroic work indeed.

We are delighted Nripal has confirmed his commitment to work with us on Bodhi Hill and we are interested in exploring possibilities of partnership between our project and a counterpart endeavour in Nepal.



### Dining Hall

Dr. Andry Widjowijatnoko is an architect, researcher and lecturer at the School of Architecture, Planning and Policy Development, Institut Teknologi Bandung, Indonesia. His specialty field is bamboo construction.

Due to academic commitments Andry has so far only been able to give limited attention to Bodhi Hill. Despite this he has come up with an exciting preliminary concept for the Dining Hall – the building which will essentially be the heart of the Bodhi Hill community.

We look forward to seeing how Andry and his students develop this dynamic form over the weeks ahead

## Bamboo & Bodhi Hill

Our last report in January mentions that bamboo was at that stage just being looked at as a potential construction material for the Bodhi Hill project. This was initiated by Harn's interest in bamboo architecture, and my subsequent visit to Green School Bali in December.

**Since then the relevance of bamboo to the project has increased radically.**

The significance of this is that bamboo, despite being grown widely and used as a material for cheap, temporary shelters, is not considered a serious building material in Myanmar. To use bamboo in our project as a beautiful, economical, sustainable and permanent construction material is therefore quite groundbreaking. Some local knowledge, for example beautiful traditional woven bamboo panels for walls and roofing, will be incorporated into the buildings. But new knowledge relating to all-important preservation treatment and robust structural detailing will be seen here for the first time in the country.

**While this is an extremely energizing notion, it is not without considerable risks.**

It is one thing to design beautiful bamboo structures (which the combined experience of our architectural team can deliver), but it is another matter to ensure the material used is of suitable quality to ensure safe and long lasting structures. Helping us to offset this risk and realize our ambition of making Bodhi Hill a beacon of bamboo architecture in Myanmar was a visit to our site in late February of an internationally recognised expert in bamboo architecture and the subsequent feasibility work carried out by our local construction manager.



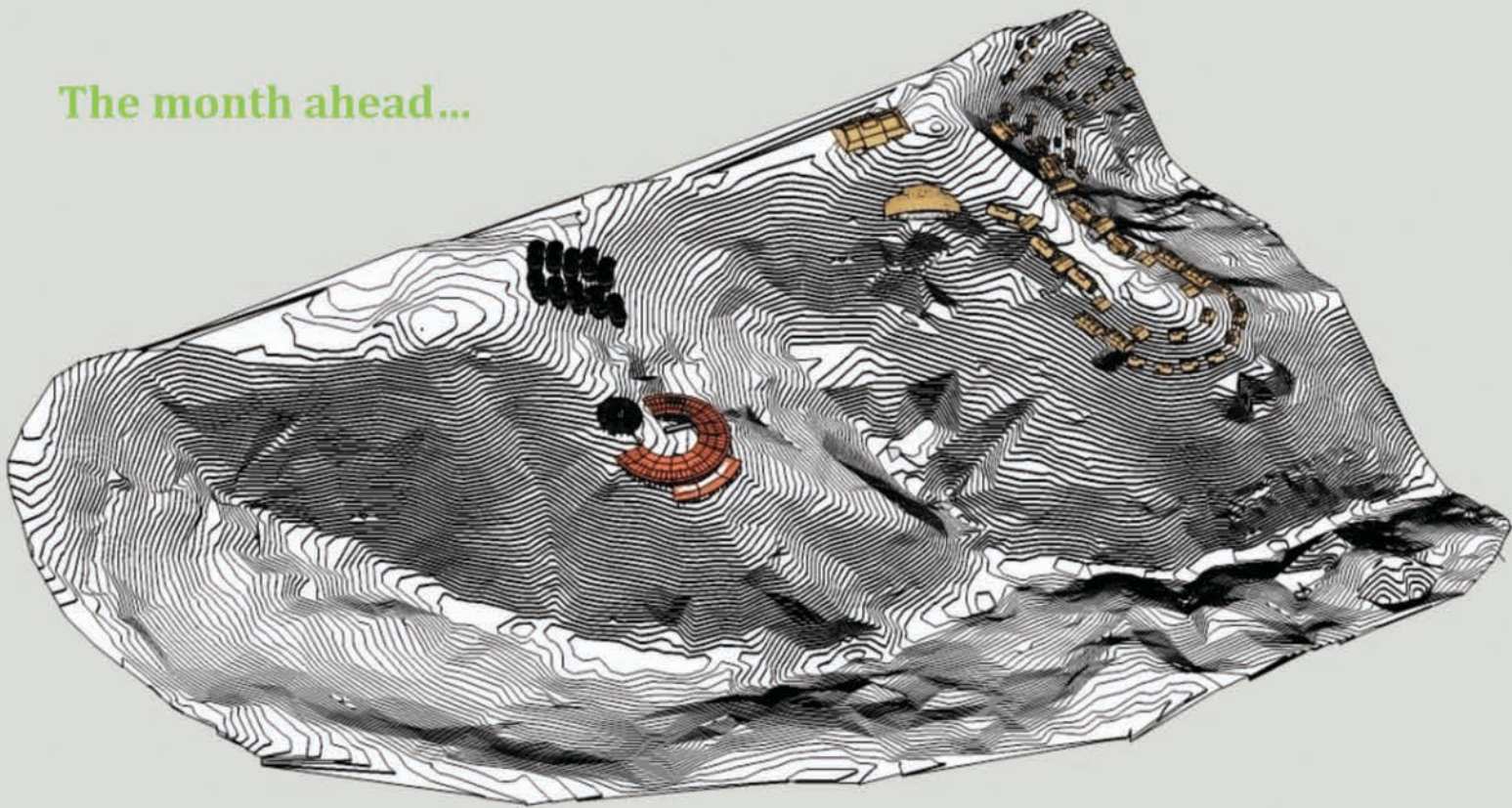
Jorg Stamm has been designing and constructing bamboo buildings and other structures around the world for over twenty years. Based in Colombia, which is historically the international centre of excellence for bamboo construction, Jorg was also responsible for most of the signature bamboo structures at Green School Bali. He is also an adviser to the United Nations Industrial Development Organization, with whom he has developed bamboo construction enterprises in Africa. Of critical importance to our own project, Jorg was able to confirm locally-grown bamboo species as being suitable for heavy structural use. He also provided insight into earthquake-resisting bamboo structural systems that could be employed on Bodhi Hill's predominantly sloping building sites.

Following Jorg's visit, our construction manager Soe Win Zaw has dedicated considerable energy to identifying potential sources of the appropriate bamboo species. He has visited large markets around Myanmar selling bamboo on a commercial scale. However, this bamboo is not treated and there is no control over the harvesting of the bamboo. Both are critical factors that Bodhi Hill will need to take full control over in order to procure construction quality bamboo. At time of writing Zaw has delved further up various bamboo supply chains and is now in discussions with the farmers actually growing the bamboo.

Even once we secure arrangements with local bamboo growers, there are still hurdles left to traverse. For example, once we get the right bamboo to site, we then need to fund and construct the appropriate treatment and drying facilities. These details are being worked through at present. And as mentioned above, the harvesting, treatment and drying process will have an impact on program.

**But so far we are extremely encouraged with the progress made.** The considerable cost savings and design flexibility, as well as the broader societal benefits that this construction material could bring to Myanmar, are strong reasons behind our resolve to make bamboo a prominent part of Bodhi Hill's design.

## The month ahead...



**Site Visit (05-07 June)** - Nripal, Andry and Adam's visit to site will coincide with a community engagement evening with villagers from nearby Zee Phyu Yae village.

**Remaining buildings to be designed** - Worker's Housing, Project Admin and Enterprise Cluster – we are currently talking to more talented architects about them joining our team and developing these remaining buildings. The Concept Design program for these buildings, as well as the Assembly Building, will hopefully be firmed up during June, allowing us to better project a construction start target date in 2016.

**Permaculture** - we must urgently address the appointment to the team of a local permaculture advisor. While we have been lucky to have New Zealand-based expert Cheryl Noble comment on the site layout plan, it is critical that ongoing local input is now fed into the Concept Design and also that strategic planting gets underway

**Design integration** – once all concept designs are completed there needs to be a holistic review of the overall Bodhi Hill concept design proposition. The images on this page show the first time a collective view of the Meditation Cluster, Classrooms & Kindergarten and the Children's Housing. Once all the concept designs are developed to this level, an exciting challenge for the team will be to review the project holistically, along with the permaculture manager, to create a design synergy across the entire Bodhi Hill site

