

DESIGN PACKAGES

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A design package contains two basic components to describe and explain the completed design. These are the written (design report, operations manual, etc.) and the graphic (maps, diagrams, drawings, etc.). Both are necessary to give the most complete and layered expression of the final design, which itself will be a complex and layered document

Depending on the size and complexities of a design, the scale or smaller details of the design may be limited. With larger pieces of land and with more complex designs, especially those with more structures and people, details of the scale relating to exact plant placements and smaller detailed landscaping beds around structures may not be included. Limitations and other design constraints will be articulated, discussed and agreed upon prior to the beginning of any design process.

A Full Design Package is presented first below. Depending upon the needs of the client and our assessment of what we can offer, a less complete package or smaller sections of an overall design are possible. After this is the Basic Design Package, which are the minimal design pieces necessary to be considered a Permaculture design done by my team and myself.

Anything less than these basic design pieces will likely be considered as a consultancy by us. If we are asked to be a member of a team involved in the creation of an overall design we will likely approach this as a consultancy.

Lastly there is the Sub Design, which is a smaller design within a larger more complex one. It could have all or most of the components of a full design, or only those necessary to integrate into the larger design.

BASE MAP

A foundational tool for assessing a site, as well as for recording and communicating information and understanding, is a map. The initial format of a site map, and what will be the starting point for the creation of design overlays and other graphics, is a base map. A base map is made by having a survey done of your site. This survey should include: accurate boundaries, contour lines, infrastructure (roads, major trails, buildings, power lines, etc.), significant features (unique landscape features), water, and anything that will be remaining on the site. The identification of neighboring parcels, who owns them and the shared boundary, is a valuable addition to this base map.

I cannot overemphasize the importance and functionality of this base map. It is the foundation of all mapping that will be done for a design and any other site development needs. It also becomes an important ongoing component of documenting the history and development of the site over the years. Further, as the site is developed with roads, trails, structures, plantings and usages maps based on this initial map become functional tools for managing and navigating the site. It will be one of the means by which new people learn about you and your site.

Our site assessment does not include the creation of this survey map because we are not qualified for doing such, nor would the client get the same quality per rupee/dollar/riel spent from us attempting to do so. Therefore, a prerequisite for us to provide a high quality product with maximum functionality is to have this survey map available for use at the beginning of our site assessment process.

If budget is restricted a survey with less specifics can be done. In this we will map those features not included in the survey. However, be aware that this will *potentially* introduce a small element of inaccuracy into the base map, depending on site size and landscape features. A minimal survey should include boundaries and infrastructure. Contour lines are very important to sustainable design and would be very beneficial to include in the survey. These lines communicate critical information, such as waterways, slope and aspect. Their inclusion, while not absolutely critical, greatly improves the base map, supporting our ability to design and communicate.

It is possible, especially with smaller sites (2 acres or less), to do without an actual survey map. A parcel map, if well done, can at times be used. With smaller sites we can sometimes create our own base map. Depending on site size, the maps we draw will have a very small level of inaccuracy, though this will have no impact on the design or implementation of the design. When the site is over a few acres the scale of this inaccuracy increases to a point where its effects can have a negative impact.

Once we view the site and have an understanding of the client's vision we will discuss the best option for a base map.

FULL DESIGN PACKAGE

GRAPHICS

Base Map

This map is often provided by the client, or is subcontracted out for. This is a map that shows the site in its current state, which may include: landforms, contours, water,

boundaries, existing infrastructure, buildings, and systems. Please refer to BASE MAP above for more specific information.

Overlay's

An overlay is a clear plastic sheet with coloured details of whatever is the subject of that particular overlay. These overlays can be placed on the base map in different combinations to see different relationships and design details, e.g. Structure and Sector Analysis overlays help you understand how these structures interact with their environment. The complete design is shown when the Infrastructure, Water, and Plant overlays are placed on the Base Map.

The full Design Package will include all items in bold lettering. Many of these are broken down into more specific focuses. In general, everything in **bold** lettering will be a dedicated overlay that will include any focuses listed after them. If warranted, some of these focuses may become their own overlay or be incorporated into a companion overlay.

Sector Analysis

Flow Chart (may be incorporated with Sector Analysis)

Zonation

Water

- Source to Sink
- Water bodies
- Riparian
- Harvesting Structures and Access points
- Irrigation

Infrastructure

- Structures
- Roads and paths
- Irrigation
- Energy

Plants

- Food production
- Plants, Crops, and Cropping
- Field crops
- Food Forests
- Complex Orchard
- Guilds, Hedges, Windbreaks
- Jungle/wild

Other Possible Overlay's

Usage Areas
Environmental data
Implementation Phases

Complete Design Map

This is a drawing/map from the same perspective as the Base Map, i.e. an aerial or bird's eye view. It is from a view point directly above the site, which is good for seeing special relationships and flows. As such this map gives a sense of what the completed design will look like once it has been installed and matured. Trees and cropping, structures, fences, water bodies, paths and roads will be things that are shown. Pipes and underground or interior systems will not be shown. Similarly, elements within a dense vegetative covering, such as a Jungle Garden, will not be visible.

Additional Maps may include

Planting

A set of smaller maps detailing plants, cropping area and planting patterns.

Structures

An individual structure or a cluster of structures will have detailed maps placing them in their environmental context, as well as giving more details about their relationships with each other. They will include; paths, planting, water, and land-structure systems. Completeness of these maps will depend upon having complete structure(s) design and placement.

Drawings, Diagrams and More

These may be structural drawings, systems diagrams, or other explanatory graphics. Systems diagrams could include energy (PV, Mini-hydr, Etc.), grey and blackwater, water harvesting (both structural and broadscale), soil improvement (various composting and micro-organism systems), and Integrated Pest Management.

WRITTEN

Design Report

This will be an extensive written description of the full design plan. This report will give more understanding and depth to the graphic portion of the design, as well as, giving

another approach to understanding the complexities and layers of the final design. Much of this report will be referenced to the design graphics.

Site Operations Manual

This will include all necessary information for the operation and maintenance of all component systems within this design, including; water, soil, cropping, composting, energy, waste management, structures.

Implementation Sequencing

This will include a detailed sequencing to describe all the steps necessary for the implementation of the final design plan. Some detailed aspects of the sequencing process may present some challenges for us due to our limited understanding of the way things work in India. As these aspects become apparent we'll communicate with client or necessary persons to achieve clarity.

BASIC DESIGN PACKAGE

GRAPHICS

Base Map

Overlay's

All items in **bold** lettering will be included in an overlay, either individually or in combination, along with the listed focuses.

Sector Analysis

Flow Chart (may be incorporated with Sector Analysis)

Zonation

Water

Source to Sink

Harvesting Structures and Access points

Infrastructure

Structures

Roads and paths

Energy

Plants

Food production

Plants, Crops, and Cropping Cropping Patterns

Complete Design Map

WRITTEN

A Basic Design Report

While not an outline, this report will be a scaled down description of design points and basic relationships in the design. It will incorporate aspects of the Site Operations Manual. A basic Implementation Sequence will also be included.

SUB DESIGN

This framework is a combination of a Consultancy and a Design Package, with an emphasis on the latter. Within this framework we provide a design for a component of a larger site design. This could be a 3 acre school cluster, a housing complex, or agricultural production system within a larger 100 acre site design. It could also be a water harvesting or greywater system within a residential design.

While we will approach this as a design package, with the same options as mentioned above for these, there will also be aspects of a consultancy with its needs for interaction and integration with the larger design and people involved on that level. Though seemingly of a simpler nature than a larger complete site design, there can easily and likely be a level of complexity in integrating and harmonizing this smaller design to the specifics of the overall site design.

The fee would be a one-time charge within a specific timeframe.

POSSIBLE SUB DESIGNS INCLUDE, BUT ARE NOT LIMITED TO:

- Composting and Soil building
- Plant selection and Cropping Patterns
- Animal systems
- Aquaculture
- Water Harvesting
- Irrigation systems
- Black and Greywater systems
- Energy systems and cycling

Resource flow, cycling, and management

Structures: Design, Siting, Systems, and Integration with landscape

Land Restoration