

Drawings

Architecture should be working on improving the environment of people in their homes, in their places of work, and in their places of recreation. It should be functional and pleasant, not just in the image of the architect's ego.

- Norma Merrick Sklarek



Drawings

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As you develop Drawings for a new home, be sure that you consider what you want based on the way you live. Before deciding on a design, make a list of those features you find most valuable to your own style of living. There is no standard procedure for arranging your ideas: your approach will reflect ***the unique circumstances surrounding your home life and characteristics of your site.***

A good starting point might be rough sketches of a Floor Plan, the most fundamental element in a set of Drawings. Many basic decisions are made while considering a Floor Plan such as site orientation, room layout, wall placement, door types and swings, window types and sizes, electrical and plumbing fixtures, cabinets, and trim package. These are not firm decisions, only a way to **TEASE** ideas onto paper and begin to arrange your thoughts.

There are several ways to acquire a home design. One way is to purchase Stock Drawings from a plan book bought through a mail order service. Another way is to retain the services of an Architect or Designer to produce a custom design. A final way would be to note a house in a local neighborhood then contact the General Contractor to replicate a similar house on your lot. A variation on any of these approaches may prove successful; for instance, develop your rough sketches then hire an Architect to assist in changes to fit your requirements.

No matter what method you use to acquire a home design, the main point to remember is that this is a creative process. Most Designers consider themselves to be **Artists**. Their personal style will dictate how the Drawings are rendered and assembled.

Rather than suggest one method of acquiring a home design over another, it may be best to consider what all Drawings have in common. All Drawings are created through a design process from Schematics, to Design Development, to Contract Documents, to Bid/Negotiations, through Construction Observation. Whether the Drawings are stock or original

design, *there are universal elements common to all Drawings.*

A set of Drawings will include:

First Sheet

Site Plan
 Site Profile
 Soils Data
 Foundation Plan
 Foundation Details
 Landscaping Details
 Material Legend
 Code Compliance
 Sheet Index

Second Sheet

Floor Plans
 Room Schedule
 Door Schedule
 Door Frames
 Cabinet Layout
 Framing Plans

Third Sheet

Elevations
 Window Details
 Window Schedule
 Exterior Finish Details

Fourth Sheet

Cross Sections
 Wall Sections
 Stair Sections
 Handrailing Details
 Fireplace/Masonry Details
 Structural Details
 Miscellaneous Details

Fifth Sheet

Electrical Layout
 Plumbing Layout
 HVAC Layout
 Fixture Schedule
 Symbol Legend
 Appliance Schedule

Drawings

Every life and home style is unique. The Design/Build process itself will have its own special conditions. A set of Drawings will assume the unique characteristics of your situation and the Architect/Designer's approach so the document's sequence **may not appear exactly as just described**; however, to be complete and correct, all elements should appear.

Of course, **the best way to familiarize yourself with the details of your project is to follow the Design/Build Matrix from the very beginning.** However, if you choose a Stock Drawing from a plan book, you've eliminated Schematic and Design Development activities which are important to familiarizing yourself with the many variables which contribute to how the Drawings are created. If you choose a Stock Drawing, your first contact with your design will occur during preparations to submit for a Building Permit. If this is the case, proceed cautiously while reviewing the Drawings and creating Specifications for the design. **Major alterations to your design after Drawings are approved by the Building Department can be costly and difficult.**

After your Drawings are returned from the Building Department, there will be two official sets: one for the Field Inspector and the other for the Owner. The official set should never leave your files; use extra copies of Drawings to circulate among Trade Contractors and Suppliers for bid proposals; watch for any changes by the Building Department on Drawings.

Remember: Look over the whole set of Drawings as you seek proposals from Trade Contractors before beginning the job. Take notes about points that seem unusual or in need of extra study. **Be sure that door, window, electric, plumbing, HVAC (Heating, Venting, Air Conditioning) and trim package Specifications conform to Drawings.** Every piece of material, product, or equipment should appear in respective Trade Contractor's proposal.

Regardless how complete a set of Drawings should appear, **ambiguities will manifest themselves on the job**, as the Trade Contractors proceed with their work. Too often, Drawings are so crammed and cluttered that Trade Contractors miss information and misread them when preparing bid proposals. The only way to avoid this type of problem is to become very familiar with all aspects of your design and review layout and details with each Trade Contractor **during Bid/Negotiations before work begins.** As

time consuming as this may seem, every competent General Contractor invests this time and effort in preparing for a construction project in order to avoid **material and monetary losses**.

Appearing on the next four pages is a set of overlays which in combination depict a typical Site Plan. The overlays are provided to illustrate how one might "read" information symbolized on a set of Drawings **by separating the layers of information**.

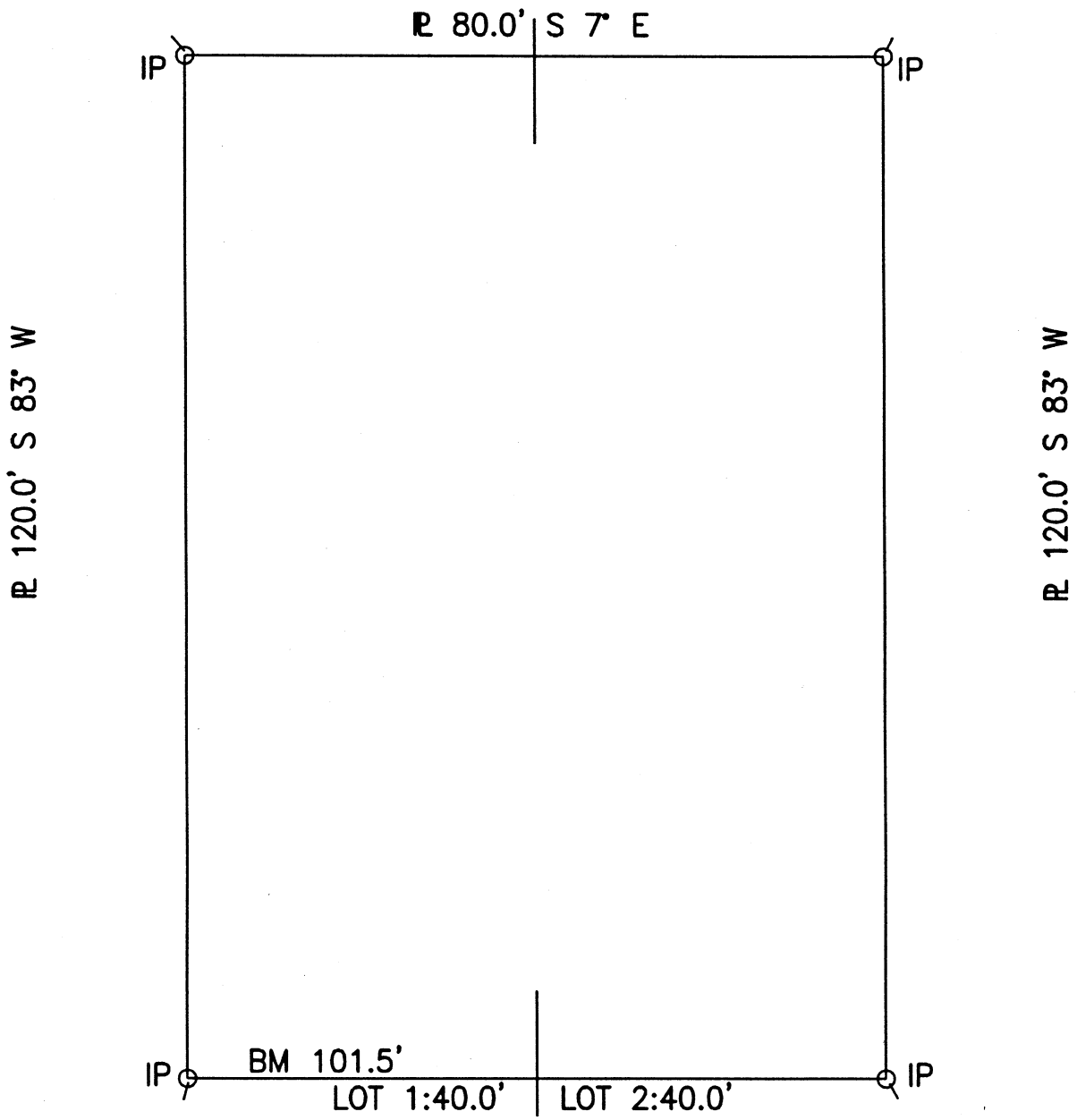
On the first overlay (Page 36), information pertaining to a legal survey is presented. A "North" Arrow, Dimension Scale, and Property Lines indicate bearing and length of boundaries. The "IP" symbol shows the location of an "Iron Pipe" at each corner of the building lot. The "BM" symbol provides a "Bench Mark" elevation in the lower corner of the building lot.

On the second overlay (Page 37), there's a graphic representation of the raw land with the location of the largest trees, fire hydrant ("FH"), and several test holes which were dug on site in preparation for construction work. In this case, the fire hydrant becomes the fixed point on which the "Bench Mark" elevation has been established for future use.

On the third overlay (Page 38), a topographical profile describes current and future contours of the landscape around the house. The dotted line represents the current contour, and the solid line represents the future contour after the home is completed. The contour elevations are established in relation to the "Bench Mark" elevation taken from the top hub of the fire hydrant.

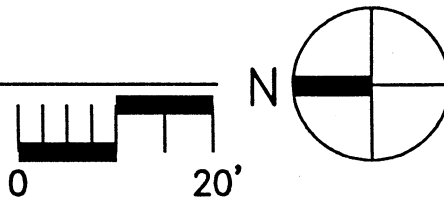
On the fourth overlay (Page 39), an outline of the house and driveway indicate their location on site. Overall dimensions are also provided, and the gutter and downspouts are represented by a series of dashes and dots around the house perimeter. The "F.F.El." symbol gives the "Finish Floor Elevation" in relation to the "Bench Mark" established on site. Access for utilities are indicated by "T" for "telephone," "E" for "electrical," "W" for "water," and "S" for "sewer."

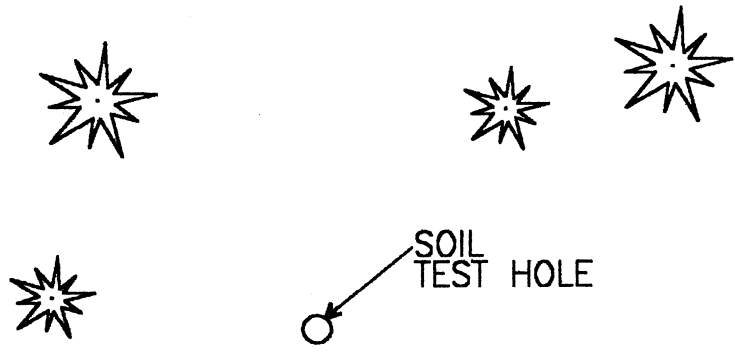
This is a generic example of the "**layered effect**" (Pages 36-39) but there's only one way to learn how to "read" construction Drawings: study, study, study. As you immerse yourself in the details of your project, the lines, dimensions, objects, and symbols will gradually begin to hold meaning. **There's no short-cut.**

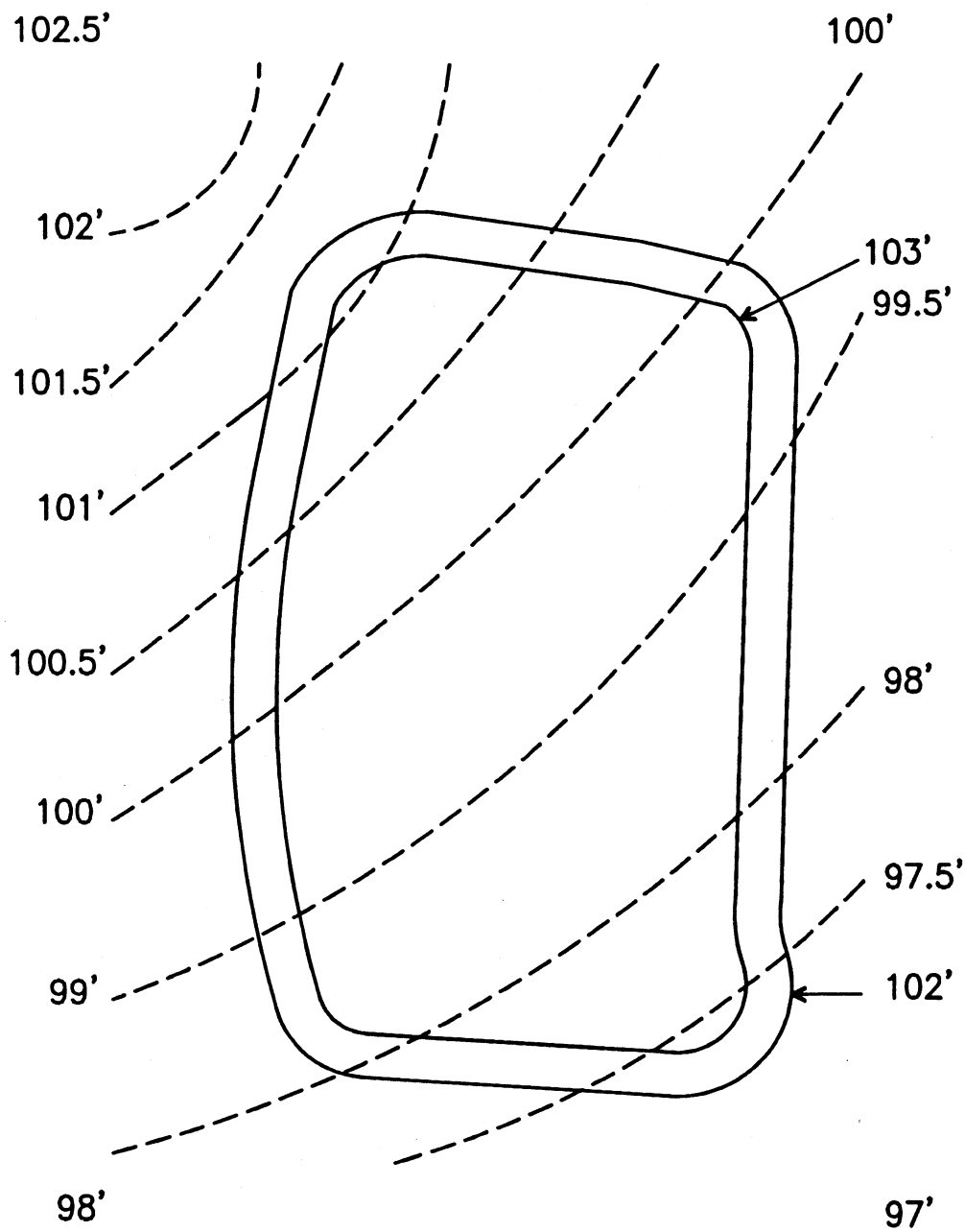


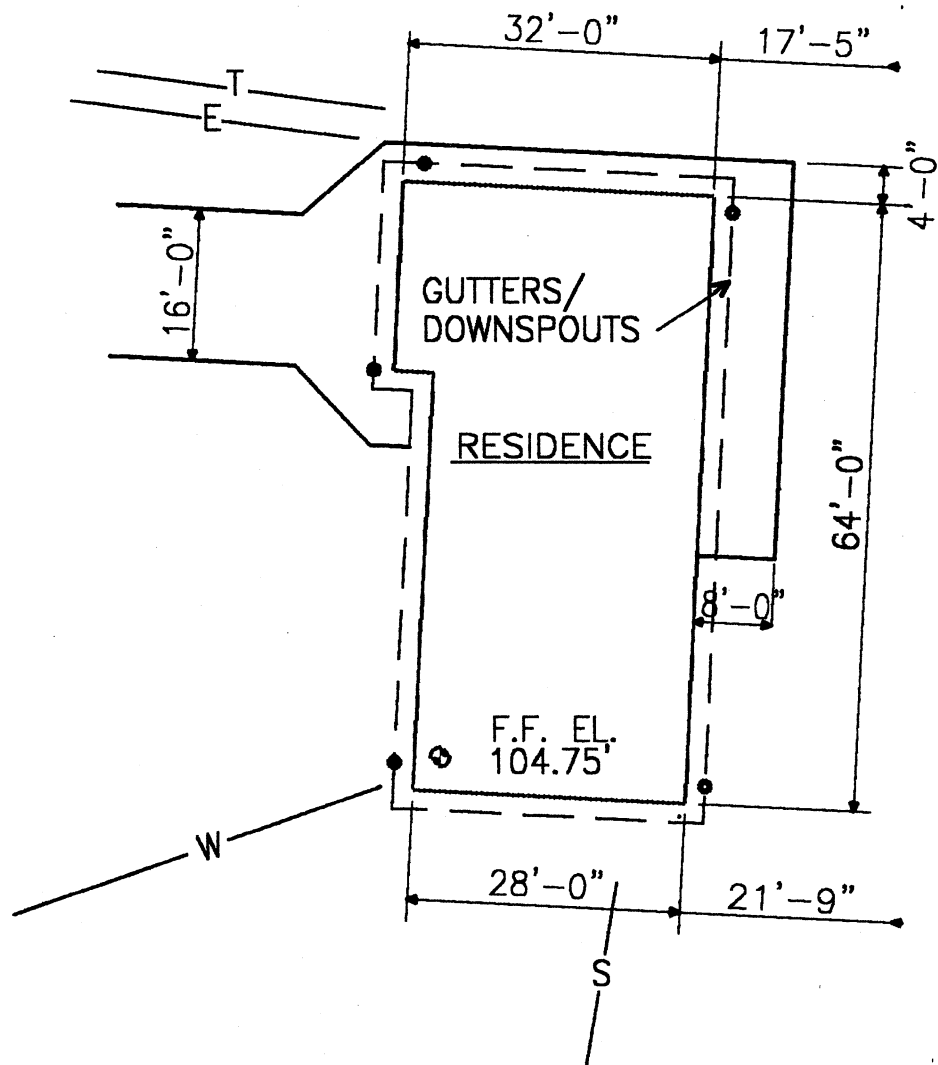
SITE PLAN

SCALE: 1" = 20'-0"

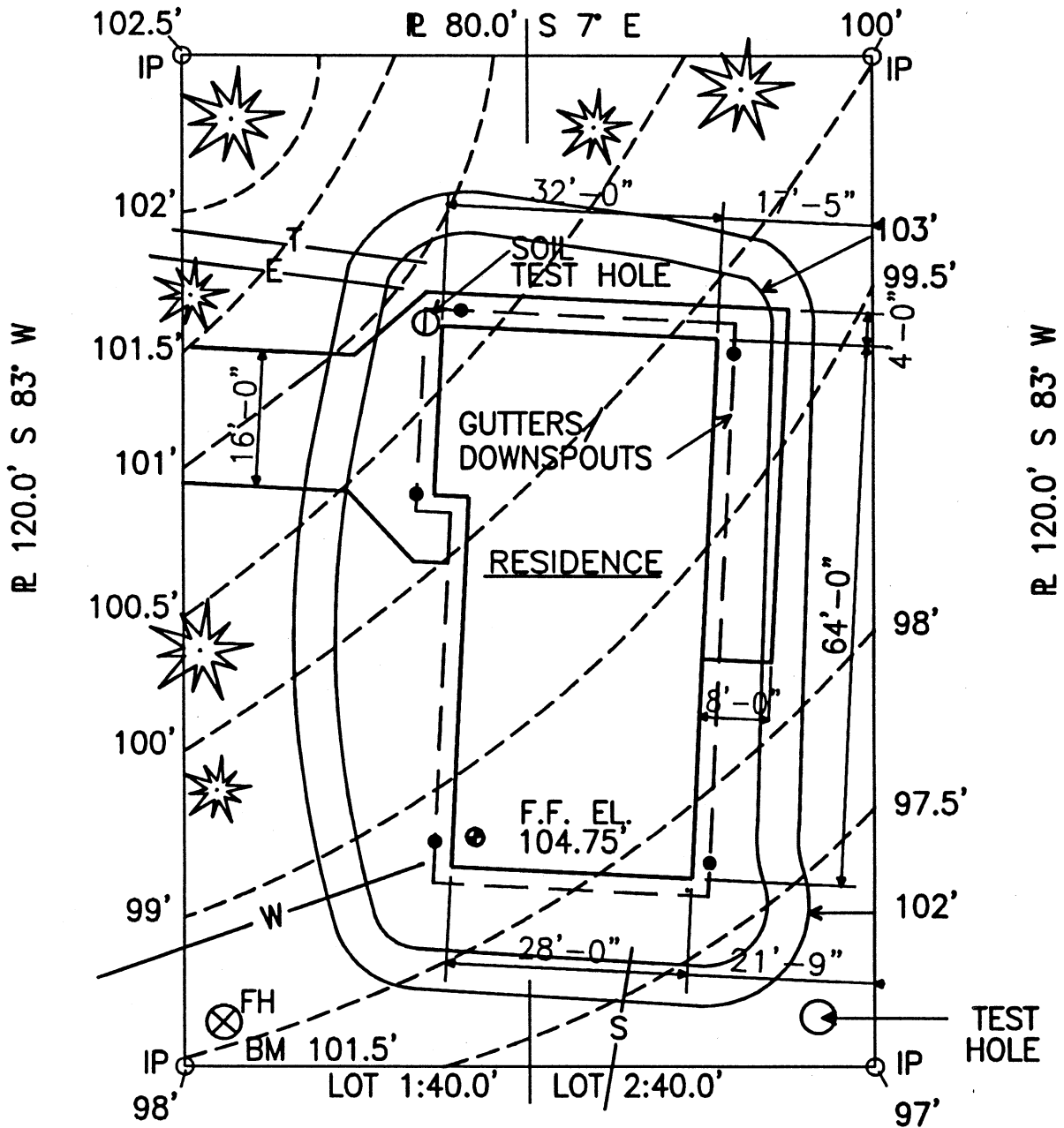






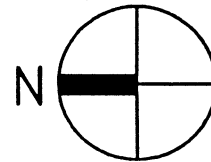


SITE PLAN: LAYERED EFFECT



SITE PLAN

SCALE: 1" = 20'-0"



Remember: Your role is to define a homestyle which matches your living pattern and unique site characteristics. Ideally, every design will be created individually, and an appropriate response developed for each situation.

Your first impulse may be to memorize the icons and mimic the drawing techniques of the design profession. **Resist this impulse.** There's no need to purchase design software or drafting equipment for doing just one house. Architects, Designers, and Plan services are ready to offer this technology to you but you can't go to them empty handed. Your job is to **DEFINE** how you intend to live and **CHARACTERIZE** the best place in which to do it.

Let's consider the principal element of a design.....the floor plan. An enormous amount of thought and coordination must go into the floor plan so rely on your instincts and allow the the design to gradually evolve (See "*Design/Build Collage*" on Page 126). Take advantage of the "**layered effect**" by grouping your ideas on separate sheets of paper without worrying about how they might go together. Rest assured: your mind has the capability of self-organizing, a natural means of comprehending the unified whole, which will eventually bring together the disparate pieces.

Ask yourself: "**How will I approach the house?**" Your response to this question will raise issues relating to car garage, parking, pedestrian pathways, deck, front door, vestibule, and foyer.

Next question: "**How will I arrange the living spaces?**" Your response to this question will raise issues relating to floor levels, stairways, activity areas, privacy, public centers, and family functions.

Now consider: "**How will the interior/exterior relate to one another?**" Your response to this question will raise issues relating to windows, doors, views, sounds, roof, climate, geographic factors, topography, and vegetation.

The adage "**form follows function**" will generally hold true. By responding to these questions and preparing rough sketches, the Architect, Designer, or Plan Service has a basis for understanding your needs. **Collaborate with a professional.**