

General Guidelines for Site Planning and Building Design

Site Planning

Site Reconnaissance

The first step to developing your architectural proposal is to get a handle on the physical constraints of your chosen site. Essentially, you want to get the “feel” of the place. Drive around the area looking at surrounding landscape and development. Walk the site and take note of anything which strikes you. Take lots of photographs: panoramas, details, views from the site and views onto the site. Finally talk to folks who live and/or work in the area about their impressions of the site.

Site Conditions and Issues to Explore

The following is a list of some characteristics and constraints to note during your site visits in preparation for site planning. While the nature of a building project will determine site criteria, there are factors/elements common to all site selection. Keep in mind, you need to acquire a sense of “development fit.” As you gather information, form ideas about appropriate development models/architectural approaches for the site, take notes and jot down your impressions.

- Existing Physical Conditions:
Slope and drainage, trees and vegetation, micro-climate, views (positive and negative) and solar orientation, natural resources (creek, wetlands, rock outcroppings), existing surrounding buildings/building types and development patterns, historical resources infrastructure (streets, sidewalks, street lighting, utilities). Outstanding local developments
- Other influences and Amenities:
Site access, vehicular and pedestrian circulation, existing parking, traffic (if any), public transit access, highway access, etc...
- Zoning Regulations:
General planning and zoning regulations
Setbacks (front, side, rear: corner lot condition)
Height limit
Parking requirements
Design guidelines, if any
Historical district guidelines, if any

Building Design

What is the “Big Idea?”

- There should be one principal concept you are trying to express in your design (i.e. “the high tech building”; The building as an energy producer; or, “Neo-Historicism”: a new building respecting Fort Cronkhite’s historical/military past and architectural heritage; or, “Sustainable Design”: a building which defers to the natural resources and beauty of the site; or, “Organic Architecture”; or, whatever you want).
- Test your design solutions continually against this “Big Idea”. Do your decisions support or detract from it?

The Design Process:

1) Plan

- Bubble diagrams – establish adjacencies for the floor plan layout.
Think of first impressions: How do you find the front door? What greets you? Is there a hierarchy of spaces and can you find your way around (clear circulation)? How does the inside relate to the site/views/outside spaces?
Consider accessibility, egress and life safety.
- Working to scale – consider working at $1/16" = 1'-0"$ scale at first; gloss over the details at first.

2) Section

- Quality of the space and day-lighting. Proportions: the larger the room, the higher the ceiling. Controlling and balancing light and heat gain/loss: sunshades, windows and skylights, multiple orientations to avoid glare. Daily sun pattern and shadows cast.

3) Elevation

- Materials, look and feel of the building, scale, transparency vs. solidity.
- Massing: the building’s envelope and relationship to the site.

4) The Design Concept takes form as a Building

- The structural system