

SITE & BUILDING EVALUATION CRITERIA

Residential Site Considerations

Introduction

The place we choose to build or buy a home is long lasting and many tangible as well as some intangible considerations exist that can help to guide us in the search. Each place where a house might go is unique, as are the future occupants so, in the final analysis, much of the decision making as to “where” is personal and therefore subjective.

The following list represents some of the considerations that should be thought about prior to making a final decision and commitment on the purchase of land or existing house.

Does site appear to allow for owner space and activity requirements?

Does it meet owner social, business, educational, cultural, and religious requirements?

Does it satisfy owner preconceptions and aesthetic requirements?

Will the site satisfy overall design potential requirements?

Financing

Is site cost within overall development budget constraints?

Is funding method and financing terms agreeable?

Does cost of land unreasonably limit design budget? Is the land cost and design budget compatible and in balance?

Is it a good time financially in terms of owner financial status, interest rates, availability of money, labor, and material costs?

What are probable site and site-building costs.

Are overall project development costs completely considered?

Permits

Zoning- Master Use, PD, PUD, Shoreline, etc.

Building Department- Building Construction Permit, Plumbing, Grading, Electrical, Tree Cutting, Curb Cuts, etc.

County

State

Federal

Other

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Building Code

Is there an affect in a direct or comparative way?

Is planned occupancy allowed.

Are planned structural loads allowed.

Number of exits required.

Stairs- Number, type, access, fire rating, size, minimum distances to reach stairs.

Fire Ratings required of materials, systems.

Ventilation- openings.

Toilets- Number and fixtures of each.

Fire sprinklers.

Alarm system.

Type of construction.

Government and Community Groups

Federal, State, County, City, Neighborhood Master Plan for the area.

Are there design review/approval boards to be involved?

Are there design criteria for the area and does it meet the owner requirements?

Are there any existing or future governmental or private planning projects that might affect the project locations, (schools, businesses, roads, residential, freeways, bridges, etc.)?

Zoning Code

Is present/proposed zoning compatible with proposed use, timing, allowable uses, and minimum lot sizes?

Are set back, height, lot coverage, and open space requirements reasonable with respect to shape of site, neighboring sites, views, sun, slope, and minimum floor areas?

Are parking constraints/requirements reasonable and compatible with owner needs?

Are there any special exceptions, restrictions, or requirements?

Surrounding present and future zoning.

Design review, SEPA, variances, approval process/timing.

Siting Considerations

Open space, heavy growth areas, exposure to sun, exposure to public, wind protection, flat vs. steep slope areas, unique qualities/forms, spaces.

Surrounding Physical Environment

Surrounding zoning, possible development on adjacent and surrounding property, profile (skyline), scale, image, proportion, rhythm, materials, forms, shapes, geometry, density, light, orientation (views of site from other points).

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Landscaping, details, paving patterns, building edges and heights, axes, modules, walls, lighting, textures, scalar changes, harmony, color, tranquility.

Active/passive space, spatial relationships, transitional elements and spaces, general response to context by neighboring projects.

Boundary and Topographical

Owner's responsibility to provide legal land survey to architect. Review with architect and land surveyor for drawing requirements and type of information.

Land surveyor should visit site and perform the following tasks: Notify surrounding property owners and site tenants of surveying activities, provide surrounding property owners' names to owner, confirm legal description provided with proper authorities,

Land surveyor should verify all easements and rights of way information, order title search from owner, research proposed street changes,

Land surveyor should describe availability and location of presiding jurisdictions of gas, electricity, water, sewer, storm, telephone, cable, and fire services, legally record survey

General site description should include vicinity map indicating surrounding main highways, legal description, boundary lines (lengths, radius, bearings), rights of way, easements, encroachments, deed restrictions, curbs, curb cuts, fire hydrants, poles, site area, addresses and block numbers, set of monuments as required.

Show land contours at 1', 2', and 5' intervals, spot elevations along property lines, base of trees, neighboring buildings, streets, curbs, and sidewalks.

Drainage patterns from and to adjacent properties, flood basins, (tides), existing soil boring locations.

Show significant features such as existing buildings, drives, water (ponds, lakes, rivers, streams, creeks, oceans), rock outcroppings, ditches, adjacent buildings.

Show vegetation- existing trees (type, location, trunk diameter, limb spread), shrubs, ground cover, off site trees affecting site.

Location, depths, capacities of all available utilities, gas mains, electricity, water, sewer, storm, telephone, cable, catch basins, manholes, culverts, lines, operating authorities.

Utilities

Are the locations, depth, and distance to site of telephone, gas, electricity, water, sewer, storm, cable, etc., workable and reasonable?

Soil/Geotechnical Conditions

Owner is responsible to provide geotechnical information as required or deemed necessary to the architect and engineering consultant. The exact nature of geotechnical information required and at what stages of project development should be reviewed with the architect and geotechnical consultant prior to ordering information

Geotechnical requirements include continuous coordination with owner, architect, and engineering consultants throughout project, site visitations/investigation, sampling, testing, analysis, reports, and recommendations and proposal for future testing.

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Sampling and testing- establish benchmark locations, establish boring locations, depths, drilling techniques, and sampling methods, and execute the same. Protect property above ground and below and return/repair to original state.

Field and laboratory reports- Classification, properties and characteristics of rock and soil types, evaluation of subsurface soil bearing capacities, lateral displacement and settlement expectations, permeability of soil, soil moisture content, drainage and frost action, underground water table and drainage patterns, unique geologic considerations, seasonal influences and changes, graphic presentations of plans, sections, and profiles, drilling, testing, and analysis criteria and descriptions, soil sample storage and disposition.

Foundation engineering evaluation and recommendations to include soil bearing and elevations, foundation design recommendations, anticipated settlement, ground water control recommendations, lateral earth pressures, backfill, compaction and sub drainage conditions, retaining wall and walls below grade design recommendations, soil material and compaction requirements for site fill, construction backfill and structure/pavement support, pavement design, temporary measures (excavation sheeting, underpinning and temporary de-water systems, stability of slopes, seismic activity, frost penetration depth and effect, effect of construction/weather activities on soil, soil analysis to determine presence of deleterious, chemically active, expansive or corrosive material/conditions or presence of gas.

Land Contours

Does extent and direction of slope work for or against potential design solution in terms of view, access, light, privacy, drainage, view blockage?

Does a good building location seem to be available?

Are natural drainage patterns within property and from and to adjacent land a consideration? Is there flooding potential?

Vegetation and Features

Probable implications of existing trees with respect to location, type, limb spread, root structure, height, view blockage.

Existing ground cover that, if disrupted, might affect drainage patterns.

Implications on existing animal and bird life in the area.

Probable implications of any rock outcroppings, existing buildings, ditches, streams, water.

Wetlands and animal species.

Acoustical and Olfactory

Existing noise sources, direction, intensity, frequency, duration, patterns, and probability of continuance and potential increase.

Future potential noise sources/impacts, (freeways, manufacturing plants, bus lines, etc.).

Does site provide a potentially tranquil environment?

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Existing and future odor problems- Direction, intensity, duration, (animals, bakery, fast food, manufacturing).

Visual Environment

Considerations with respect to views of site from distant points, (roads, neighbors, water bodies, and orientation, glare).

Considerations with respect to views from the site outward, orientation NESW.

Considerations with respect to immediate views of surrounding neighborhood, orientation NESW.

Potential for future view obstruction by other projects, tree growth, other.

Potential view blockage by project.

Orientation

North, east, south, west, up, down, over, under, on above, in, out, through, distant/close.

Light

Existing and future access to the Sun- 5AM to 9AM, 9 AM to 3 PM, 3PM to 10PM.

Present and future shade/shadow patterns on site from existing trees, adjacent buildings, and hills.

Negative light sources (neighbor porch lights, streetlights, headlights, and business districts).

Privacy

Privacy from road, (acoustical, visual, olfactory)

Potential of seclusion and tranquillity.

Privacy from neighboring sites, walkways, water.

Privacy from distant points.

Security

Is the area reasonably safe for people from other people?

Is the area secure against material theft and break-ins?

Crime incidence and types, police security, access/escape, projections, fire hazards. Fire department distance/response time.

Neighborhood

Desirability and location of public and private schools.

Availability of houses of worship, parks, playgrounds, golf, tennis, tracks, running area, recreation, swimming, biking, etc.

Fire department and police service.

Trash, recycling, postal service.

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Future growth and change in the immediate vicinity.

Future growth and change at a distance which may affect desirability of site.

Surrounding development in terms of scale, materials, patterns, images, forms, details, geometry, and landscaping.

Climate

Wind- seasonal breezes, direction, intensity, velocity, extremes.

Air/ventilation patterns (seasonal and geographic).

Humidity- seasons, levels, extremes, percentage relative humidity.

Snow- seasons, volume, patterns, duration, frequency.

Temperature- seasons, extremes.

Natural catastrophes- earthquakes, flood, hurricane, tornado, volcano, tidal wave (tsunami), typhoon, insect or animal infestation.

Sunlight

North/south/east/west, transition (light to dark, hot to cold, season to season), geographical location, temperature, direction, azimuth/horizontal.

Swing, altitude/vertical, intensity of brightness, duration.

Availability of sunlight- hours per day, times, existing and future blockage /interruptions.

Shadow patterns on site, (trees, adjacent buildings).

Moonlight and Starlight

North/south/east/west, transition (light to dark, season to season), geographical location, direction, azimuth/horizontal. Swing, altitude/vertical, intensity of brightness, duration.

Availability of moonlight (hours per day, times, existing and future blockage /interruptions).

Shadow patterns on site, (trees, adjacent buildings).

Stars, planetary bodies visible, galactic and nebular occlusion by light pollution.

Pedestrian

Pedestrian patterns within and around site, site access points, volume of people, direction, frequency, patterns, time of day, continual, intermittent, projected changes (increase/decrease), pattern changes.

Pedestrian access on to site from road, walks, water.

Pedestrian access to schools, houses of worship, shopping, playgrounds, parks, work places, food, etc.

Are street systems safe and pleasant walking environments with or without sidewalks?

Pedestrian volume, location, and frequency around site.

Do bikes, buses, taxis, train/mass transit impact pedestrian activity?

Vehicular

Is the nature of the surround vehicular activity (present and future), in terms of volume, location, frequency, direction, patterns, and noise acceptable to the owner?

Is the distance to work acceptable?

Type (car, truck, bus, other mass transit)- convenience in approach and access, Existing streets and proposed changes.

Projected changes in major highways, roads.

Is the distance to worship, shopping, friends, cultural, educational, etc., acceptable?

Convenience of access onto site in terms of location and grades.

Present and projected parking needs, area/relationships required, drop-offs required at entry, on site circulation potential, points of access/egress (auto, van, truck, moving vans, service, repair, fire, bikes, motorbikes, recreational vehicles, boats).

Off site parking potential (number, distance, convenience, cost, land/development).

Volume and frequency statistics, patterns of approach from various points and distances, entry potential, lighting requirements/problems, signage requirements/problems, zoning requirements, soil constraints.

Are existing road conditions and entry approaches desirable.

Is public transportation available within convenient walking distance?

Social

Are the social makeup, patterns, and relationships within the neighborhood compatible with the owner requirements?

Identifiable patterns of the surrounding social environment, ethnic groups and values, relationship between groups, religious facilities, libraries, schools, service facilities, entertainment, recreational facilities.

General Building

Are there signs of settling?

Does building sit level on the its foundation?

Does roof ridge appear to sag?

Does chimney lean or tilt?

Are there obvious signs of decay?

Does ground water collect around the foundation after a rain?

Is yard free of trash and overgrowth, particularly around the foundation?

Exterior Foundation and Basement Walls

Is the foundation wall cracked? Small hairline cracks may be okay. Large open cracks may get worse. Active cracks can be determined only by observation over several months.

Does the foundation tilt or lean?

Does any masonry have loose or crumbling mortar?

Is there proper drainage? Is ground sloped away from the foundation? Do the downspouts channel water away from house to a drywell or drainwell?

Do basement window wells collect water?

Exterior Walls

Is wood siding or trim warped or swollen?

Are there any open joints in siding?

Is aluminum siding warped or dented?

Are there signs of decay under windowsills?

Are there signs of insect damage along the lower edge of siding?

Is any paint chipped, peeling, or blistered?

Does masonry have cracks or loose mortar?

Roofs

Are there signs of wear indication a need for replacement?

Are composition shingles curled or losing their surface granules?

Are wood shingles ragged, rotting, or broken?

Is built-up roofing blistered, brittle, or soft in spots?

Are joints around chimneys, dormers, plumbing vents, and along valleys cracked? Are there signs of leaking?

Is roof flashing rusty, decayed, or loose fitting?

Is roof structure sound? Does it feel springy or spongy when walked on?

Are soffit boards loose?

Are there adequate vents along eaves, ridge, or gable ends?

Are gutters loose, corroded or sagging?

Are gutters clean and free of debris? Do gutters slope properly to down spouts?

Exterior Doors

Are doors warped? Can you see daylight around or under them when closed?

Are doors weather-stripped? Are joints around door frames caulked?

Are any thresholds worn, weathered, or decayed?

Is hardware secure and operating well?

Do doors have deadbolt locksets for security?

Windows

Are windows drafty when closed? Are they weather stripped?

Does glass fit securely in sashes?

Are there gaps in the glazing putty. Is putty brittle?

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Are wood frames decayed?

Do windows have security locks?

Is at least one window in each bedroom operable and large enough to serve as an emergency exit?

Porches

Is porch pulling away from house? Are stairs and railings secure?

Do wood members and supports show signs of decay? Wood should not be in contact with the ground.

Is there a porch light for safety?

Basements and Crawl Spaces

Check for settlement cracks, ground water leakage, the condition of floor joists, and the mechanical and electrical.

Are there signs of settling? Are there large, open unaligned cracks in walls?

Do basement walls bow inward?

Do basement walls have damp spots or show scaling?

Is any untreated wood in direct contact with soil?

Has concrete been poured around untreated wood?

Are there signs of decay or insect damage on wood posts, sill plates, beams, or joists?

Is crawl space well ventilated? Does it have an effective soil vapor barrier?

Interior Rooms

Is there deterioration due to wear, structural distortion, or the presence of moisture.

Are there signs of settling?

Are there cracks in walls or ceilings? Cracks that increase in size or number may indicate settling in the house structure.

Do floors feel springy or appear wavy or tilted? A marble placed on a floor will help indicate a sloping floor surface.

Are concrete slabs badly cracked?

Are there signs of moisture?

Do walls or ceilings bulge or have water stains, especially below bathroom or along exterior walls.

Kitchens – Also see Plumbing Section

Look for water tightness around the sink and for fire safety.

Are joints along the countertop and splashboard buckled or separated?

Is sealer around sink loose or cracked?

Is exhaust fan and filter clean and free of grease?

Is a fire extinguisher, rated B/C to handle grease, flammable liquid and electrical fires handy?

Bathrooms – Also see Electrical and Plumbing sections.

Check for dampness and mildew.

Are there open joints where water can seep through in wall coverings or along the floor?

Is caulking loose or missing around the tub, shower, or lavatory sink?

Is any ceramic tile cracked or broken? Is any grout loose or crumbling?

Is bathroom adequately ventilated?

Stairways

Are stairs structurally sound and safe to traverse?

Do stairs, railings, and supports feel sturdy?

Does the framing around the stair opening show evidence of sagging?

Do wood member show signs of decay?

Are stairways safe? Are they too steep or narrow?

Is there adequate headroom clearance?

Are there sturdy handrail supports?

Is there a light and light switch at both the top and bottom of stairs?

Are there smoke detectors properly located in the hall leading to bedrooms?

Fireplaces

Check for proper operation, condition of masonry, and fire safety.

Does fireplace draw properly? Chimney should draw smoke from a lit newspaper at least within a minute.

Is there a damper? Does it close tightly?

Is any masonry cracked or loose? Is any mortar crumbling or missing?

Is flue lined? Is there a heavy coat of soot or creosote in flue?

Does chimney have a rain cap?

Attic Spaces

Check for roof leakage and weakening of the roof structure.

Are any rafters or sheathing sagging or loose?

Are there signs of moisture leaking around the chimney, plumbing vents, skylights, or along walls and valleys?

Are there signs of dampness along the eaveline or in the insulation?

Is the attic space properly ventilated?

Is there sufficient thermal insulation?

Electrical System

Is system wired to meet your demands? Are there any safety hazards?

Is the main electrical service panel large enough to handle house loads? A 100 amp minimum service is recommended for a three bedroom house: a 200 amp service if there is electric heating.

Are any circuits overloaded? Do any fuses blow or do circuit breakers trip regularly. Do any lights dim or flicker when an appliance is turned on?

Are there enough outlets in each room? Are they conveniently located? Rooms should have at least one outlet on each wall.

A Ground Fault Interrupter (GFI) should protect bathroom outlet.

Is any insulation on wiring, cords, or plugs worn, cracked, brittle, or split?

Do all switches and outlets have protective plates?

Are extension cords for appliances heavy duty rated?

Are any extension cords used unsafely, e.g., run under carpets, punctured by tacks, etc?

Is the electrical system properly grounded?

Plumbing System

Look for proper flow and drainage.

Are there any signs of leaking? Are there signs of rust or crusting along pipes and fittings?

Do any faucets leak?

Do drains empty rapidly without bubbling?

Is water flow adequate? Can two or three fixtures be turned on without noticeable loss of flow?

Is there a hammering sound when a faucet is turned on and off rapidly?

Does not water heater operate properly? Is temperature setting too high? A setting of 120° F is usually sufficient (140° F if you have a dishwasher). Noise in hot water pipes when hot water tap is turned on may indicate setting too high.

Is there sediment at the bottom of the hot water tank?

Is there a pressure relief valve installed on the hot water tank?

Do all fixtures have individual shut off valves and functioning traps?

Heating System

Has the heating systems' fuel or energy consumption increased over the last several years?

Can you smell fumes from the furnace?

Is heat distributed evenly through the house?

Is the thermostat centrally located out of the way of drafts?

Do supply register dampers operate properly?

Are there dust coatings in the filters, air duct system, or outlets?

Are flammable materials stored close to furnace?

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