Appendix C: Design Principles, Residential Development

Charting a Future Course

(December 2004 Revision)

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The illustrations throughout this appendix were drawn by Jon Regala.

Appendix C
Design Principles: Residential Development

Introduction

This appendix includes general design principles for **both single-family and multifamily** residential development throughout the City. Principles for residential development in the Central Business District (CBD), Juanita Business District (JBD), North Rose Hill Business District (NRH) and Totem Center (TL2) and for mixed-use development throughout the City can be found in Design Guidelines for Pedestrian-Oriented Business Districts, adopted by reference in the Kirkland Municipal Code.

These design principles are policy statements, not regulations. Their main purpose is to provide examples of good design. Not all of these principles will result in design regulations. In the instances where they do, the principles will provide the background information for the design regulations found in the Zoning Code. When necessary, the principles can be used to interpret the design regulations and provide examples of their intent. Zoning Code regulations relating to single-family residential development will be limited in order to provide for freedom of design.

The purpose of these design principles is to encourage residential development that creates livable residential communities and reinforces the positive qualities of the City's existing neighborhoods.

Site Planning and Relationship to the Street

Introduction

Good site design creates developments that respond in a positive way to both the conditions of the site and the context of the surrounding neighborhood. The location of structures and their relationship to the street, incorporation of open space within the development, landscaping, preservation of existing vegetation, and the layout of the parking areas are all part of what makes a development successful. These elements also determine if the development will be a positive addition to the neighborhood.

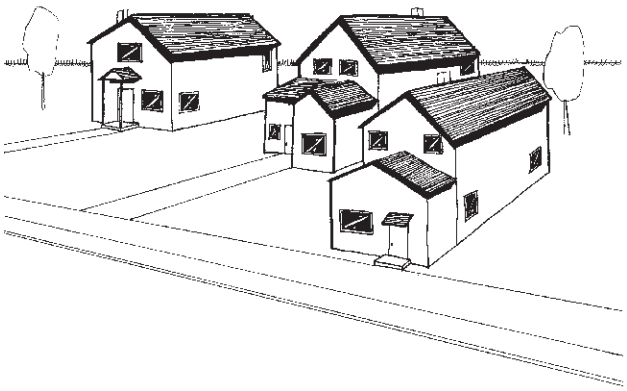
Building Setbacks

Issue

Building setbacks establish a pattern along the street and provide a semi-private space for residents.

Discussion

The setbacks of residences along the street create a rhythm, which adds to the atmosphere of the streetscape. If the setback area between the right-of-way and the residence is designed properly, it will provide a buffer zone for the residents while still allowing social interaction with passersby. If a building is set too close to the right-of-way, it can disrupt this buffer zone.



Buffer zone disrupted by house too close to the street.

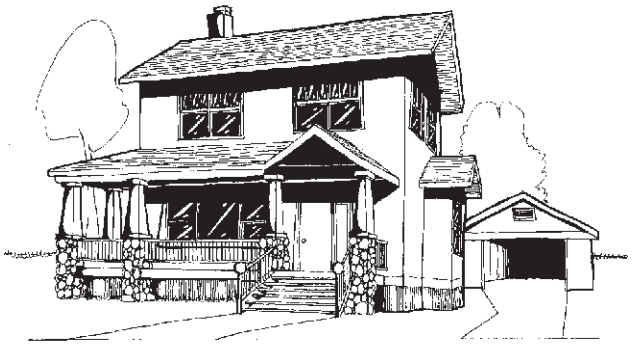
Principle

New buildings should be set back from the right-of-way to provide semi-private areas for residents and open space along the street.

Entries

Issue

Distinct entryways provide a transition between the street and the inside of the residence.



Discussion

The front yard and entryway act as a visual and physical transition leading to the private area of the residence. This semi-private space provides a welcoming spot for guests, a secure area for those who live there, a visible connection between the neighborhood and the residence, and fosters community interaction.

The entrance to a residence, or some indication of it, should be visible from the street and should not have to compete with the driveway or garage to be noticed. Since the entry area is as much a part of the semi-private space of the yard as of the private area of the house, it should be allowed to intrude into a portion of the front setback yard.

Principles

Entrances should be located on the front facades of residences and should be clearly visible from the street.

Covered entries and porches should be allowed to project into a portion of front setback yards.

Appendix C
Design Principles: Residential Development

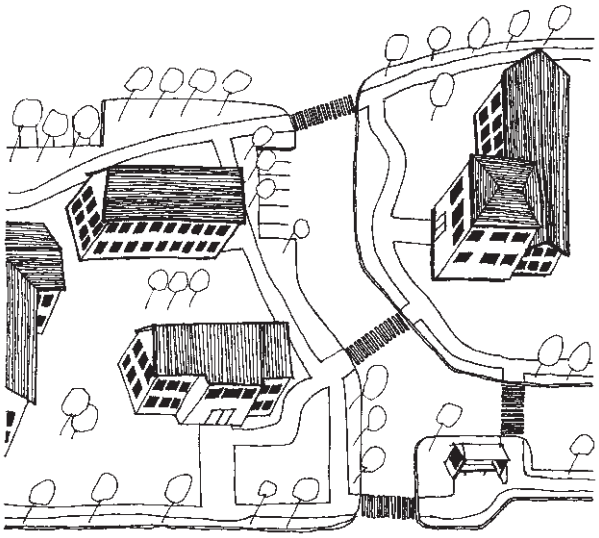
Pedestrian Connections

Issue

Well-defined, direct pedestrian connections from the building to the street are necessary for multifamily residential developments.

Discussion

The ability to walk into a multifamily residential development from the public sidewalk or a bus stop is essential to both pedestrian and vehicular safety. Direct pedestrian connections that are defined by the use of paving and landscaping provide an important link between the building and the street.



Principle

Multifamily developments should have well defined, safe pedestrian walkways that minimize distances from the public sidewalk and transit facilities to the internal pedestrian system and building entrances.

Blank Walls

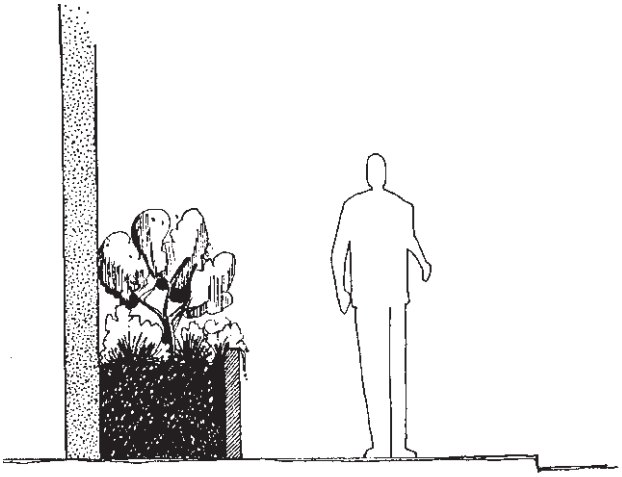
Issue

Blank walls detract from the visual character of buildings.

Discussion

Blank walls detract from their surroundings when they occur on the street front elevations of buildings and pedestrian areas. In situations where a blank wall is a development necessity, the adverse impact on streets, parks, and pedestrian areas can be mitigated through landscaping, seating, or architectural treatment.

Examples of such treatment include installing trellises for plants, providing landscaped planting beds to screen the wall, and incorporating decorative tile or masonry into the wall design.



Blank wall treatment

Principle

Blank walls should be avoided near sidewalks, parks, and pedestrian areas. Where unavoidable, blank walls should be enhanced with landscaping or architectural treatments.

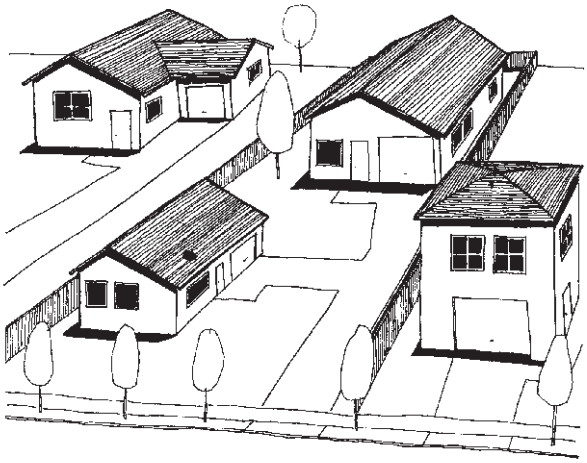
Infill

Issue

Infill development can be designed to protect neighbors' privacy.

Discussion

Infill development can have adverse effects upon neighboring properties if the location and nature of existing development on adjacent lots is not taken into account. Window location, driveway screening, and siting of new buildings are important design issues when trying to protect the privacy of the users of both outdoor and indoor space on adjacent lots.



Principles

Infill development should be designed to minimize the disruption of privacy for indoor and outdoor activities on adjacent properties.

Rear lot driveways should be screened with a fence or landscaping unless the driveway is shared by the affected development.

Accessory Structures

Issue

The design and location of accessory structures can impact the character of the site and the neighborhood.

Discussion

Accessory structures can be designed in a way that will be in character with the primary residential structure on the site. The size and location of an accessory structure such as an accessory dwelling unit, detached garage or storage shed, and the location of the entrance to an accessory dwelling unit determine the extent the structure will impact the neighborhood. An accessory dwelling unit in a single-family zone should be designed to maintain the single-family look of the primary house on the lot.

Principle

The size and design of accessory structures should make them unobtrusive and consistent with the character of the primary structure and the neighborhood.

PARKING LOCATION AND DESIGN

Introduction

Parking is an important part of a residential development. Parking lot location, entrances and circulation, pedestrian safety, landscaping, and parking garage design are all considerations when developing a residential project. Improperly located and poorly designed parking areas can overwhelm the positive aspects of a residential project and make it a detriment to the neighborhood where it is located.

Parking Locations, Entrances, and Landscaping

Issue

Parking lots can have negative impacts on the visual character and pedestrian orientation of residential developments.

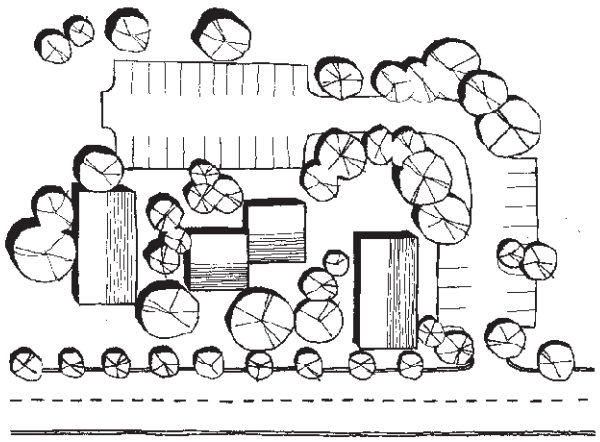
Discussion

Parking lots are typically unsightly and require vast quantities of space, but the adverse impacts of parking lots can be mitigated through sensitive design. It is best to locate lots to the back or side of buildings. Large parking lots can be broken up into smaller lots to serve residents more conveniently and allow for natural surveillance. When this is not possible, landscaping can be used to break up and screen the parking areas as long as clear lines of sight are maintained to increase safety.

Parking lot entrances disrupt pedestrian movement and through-traffic on the adjoining street. Potential conflict is reduced and land is used more efficiently if parking lots are accessed by a limited number of entrances.

Perimeter landscaping that forms a screen can separate parking lots from adjacent uses or the public rights-of-way. Trees along the edges of and within parking lots can effectively soften an otherwise barren space.

Interior plantings can be consolidated to provide islands of greenery or be planted at regular intervals. Use of drought-tolerant plants can improve the likelihood that the landscaping will survive and remain attractive.



Principles

Locate parking areas to the side, to the rear, or within structures whenever possible. Multiple, scattered, small parking areas that are away from the street are also desirable. When large paved areas are necessary, existing vegetation, topography, or new landscaping should be used to break them up internally and screen them from adjacent properties.

Locate parking areas to allow natural surveillance by maintaining clear lines of sight for those who park there and for occupants of nearby buildings within the development.

Minimize the number of driveways and encourage combined parking lot entrances.

Integrate parking lots into the surrounding community and the site by creatively using landscaping to reduce their visual impact. Require less landscaping if existing vegetation is preserved or if the lot is hidden from view.

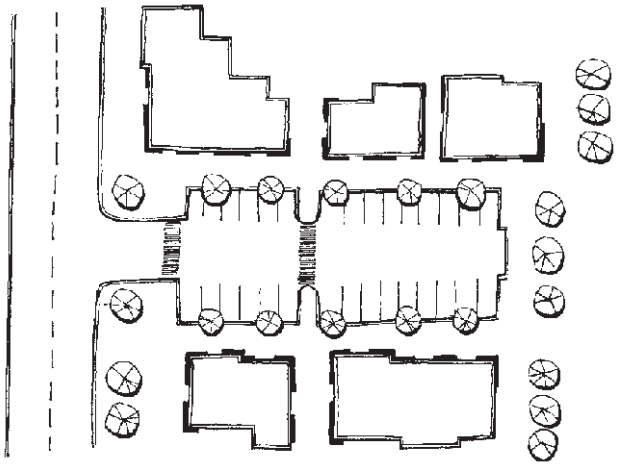
Pedestrian Circulation Within Parking Areas

Issue

Safe circulation patterns within parking areas are necessary for pedestrians.

Discussion

Good pedestrian circulation is a critical element of parking lot design. All parking lots need a clear path from the sidewalk to the building entrance. Large lots also require circulation routes from stalls to building entrances. A separate pedestrian area in front of the main building entrance provides a safe stopping point before entering the building. Where appropriate, pedestrian access to adjacent properties can also be made available.



Principle

Parking lot design should provide clear and well organized routes for pedestrians.

Garages and Carports

Issue

Garages and carports are often unsightly and do not blend with residential development.

Discussion

Single-family garages and carports often dominate the streetscape and detract from the pedestrian orientation of the neighborhood. This can also be true of poorly designed parking garages and carports for multifamily developments.

If alleys are used for access, street character is improved by eliminating driveways and street facing garages. The neighborhood becomes more comfortable for pedestrians when sidewalks are uninterrupted by driveways and front yards are free of driveways, garages, and parked cars.

Architectural elements and landscaping can help screen carports and the bulk of multifamily parking garages. They can also help provide the appearance of a solid base if an open air garage is on the first floor of the building. If garage entrances are minimized, they will not dominate the street frontage of a building.

Principles

Attached garages should not dominate the building front.

The roof forms and materials used for carports should match the residential structures that they are associated with.

Garages should derive access from alleys, where possible.

Architectural elements and landscaping should be used to break up the bulk of parking garages; to visually connect multifamily parking garages to the ground; and to screen multifamily carports.

SCALE

Introduction

The scale of a building is the perceived size of that building relative to a person or the building's surroundings. The term "human scale" is used to indicate a building's perceived size relative to a person, and the term "architectural scale" refers to the size of the building relative to the buildings or elements around it.

Although the actual size of a building makes a difference, the building's perceived size is also important. There are a variety of design techniques that can be used to give a building a human scale, meaning that the size of the building will be perceived as being of a proportion to which individuals can relate.

When the buildings in a neighborhood are all about the same size and proportion, they are said to be in scale with the neighborhood (i.e., architectural scale). Larger buildings can more effectively fit with smaller ones if their form is composed of smaller elements which relate to the surrounding buildings.

The following principles illustrate design techniques that help new development blend into existing neighborhoods. For a more detailed description of building scale, see Design Guidelines for Pedestrian-Oriented Business Districts, adopted by reference in the Kirkland Municipal Code.

Size Relationship of House to Lot

Issue

Large houses on small lots look out of proportion.

Discussion

Kirkland has an established pattern of house size to lot size. When large residences cover more lot area than is normally seen in this established pattern, they appear incompatible with their neighbors and disrupt the streetscape. In some situations, this can be mitigated by preserving adjacent open space.

Principle

The size of new residences should maintain a reasonable proportion of building to lot size that fits the established pattern of development in Kirkland.

Building Modulation

Issue

Building modulation can be used to improve human and architectural scale.

Discussion

Vertical building modulation is the vertical division of a building facade through architectural features, terracing, or differing rooflines. By altering an elevation vertically, a larger building will appear to be more of an aggregation of smaller buildings.

Horizontal building modulation is the horizontal division of a building facade through the use of methods such as setbacks, balconies, eaves, and banding of contrasting materials. Elevations that are modulated appear less massive than those with sheer flat surfaces.

Principle

Building modulation should be used to reduce the perceived mass and height of buildings.

Roof Forms

Issue

Sloped roofs and flat roofs with parapets or cornice treatments are on many of Kirkland's historic homes and are representative of the City's residential character.

Discussion

Rooflines are a critical element in the image of a structure since they create the visual edge or top of the building. The type of roof style used can affect the building's individuality, interest, and human scale. Sloped roofs can be a desirable element since they convey a residential image and represent historic Kirkland residences to many people. Flat roofs, with detailing such as cornice or parapet treatments, can also add interest and vertical articulation.

These roof forms can help newer buildings to fit into existing Kirkland neighborhoods.

Principles

Moderate to steeply pitched roofs should be encouraged. When flat roofs are used, they should include parapets or cornice treatments.

Architectural Elements

Issue

Architectural elements such as balconies and bay windows can help an individual relate to a building by giving it a human scale.

Discussion

Elements in a building facade can create a distinct character, for example, bay windows suggest housing. These special elements can be used to give a building a human scale and enhance its surroundings. Requirements for specific architectural features may be overly regulatory, but some features that can be reasonably incorporated into residential buildings include balconies, bay windows, roof decks, trellises, cornices, and prominent chimneys.

Upper-story architectural elements such as balconies, roof decks, and bay windows also improve the relationship between the upper-story living areas and the street or open space below. This relationship provides a people-oriented quality and adds additional security at night.

Principle

The use of architectural building elements such as balconies, roof decks, bay windows, trellises, cornices, and prominent chimneys should be encouraged.

Window Patterns

Issue

Large windows detract from the human scale of a building.

Discussion

The size, location, and number of windows creates interest and can help provide a human scale to large buildings. We look to windows for visual clues as to the size and function of the building. If window areas are divided into units that we can associate with small-scale residences, then we will be better able to judge the building's size relative to our own bodies. Breaking window areas into units of about 35 square feet or less with each window unit separated by a visible mullion or other element at least six inches wide would accomplish this goal. Another successful approach is multiple-paned windows with visible mullions separating several smaller panes of glass.

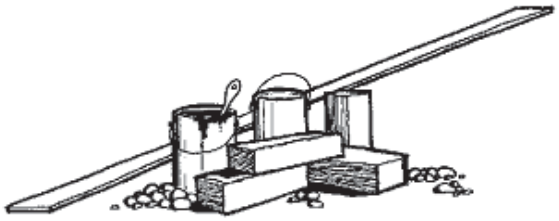
Principle

Large walls of windows should be discouraged and architectural detailing at window jambs, sills, and heads should be emphasized.

BUILDING MATERIAL, COLOR, AND DETAIL

Introduction

From a distance, the most noticeable building qualities are the overall form and color of a building. Details, such as texture of materials, quality of finishes, and small decorative elements, become more apparent close-up. Kirkland features a variety of materials and colors, which provide a stimulating streetscape. The following design principles are intended to support this variety.



Building Materials and Color

Issue

Materials and color can add to or detract from a building's exterior appearance, the streetscape, and the community's identity.

Discussion

There are a variety of materials and colors used in Kirkland, which help to bolster a sense of place and community identity. The selection and use of these exterior colors and materials are key ingredients in determining how a building will look. Some materials such as stone, brick, stained or painted wood, and tile can give a sense of permanence or provide texture and scale that will help a new building fit better in its surroundings. Other materials such as mirrored glass and cinder blocks can have negative impacts.

Principles

Construct building exteriors from high quality and durable materials that are attractive when viewed from a distance or up close. Materials that suggest permanence, or have texture and pattern, are encouraged.

Natural colors of brick, stone, and tile, and stained or painted wood are desirable.

The materials and colors chosen for new buildings should be compatible with those of existing neighboring buildings.

Lighting

Issue

Attractive lighting can be designed to provide security without producing glare on neighboring properties.

Discussion

All building entries and parking areas require lighting for security and to provide an inviting space. However, security lights on building facades or in outdoor areas can be overpowering to neighboring properties unless they are properly located and designed. Well-placed lights with light sources that are hidden by fixtures maintain sufficient lighting levels for security and safety purposes, but do not produce glare.

Principles

Lighting should be adequate to provide security for building entries, parking lots, pedestrian areas and walkways. Light sources should be hidden by fixtures and not produce glare on neighboring properties.

Screening of Dumpsters, Utilities, and Mechanical Equipment

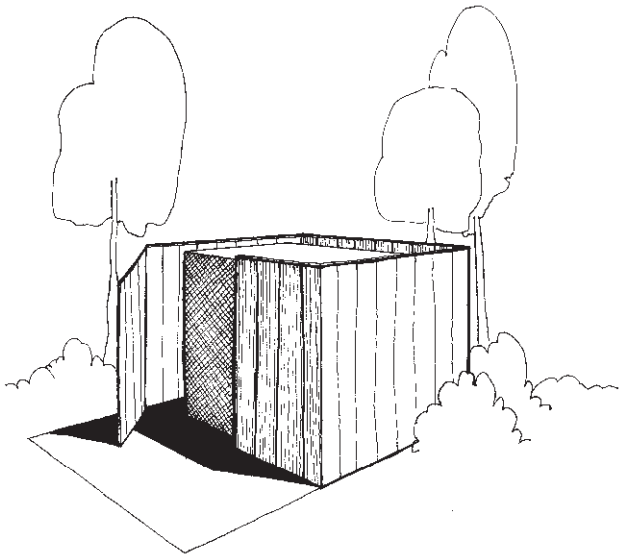
Issue

Service elements can be screened or located so that they are not visible from the street and adjacent properties.

Discussion

Unsightly service elements, such as dumpsters, utility meters, and rooftop mechanical equipment can detract from the appearance of residential projects and create hazards for pedestrians, bicyclists, and automobiles.

These service elements are best located away from the street front and adjacent properties when possible. When such elements cannot be located away from the street front, they can be situated away from pedestrian paths and screened from view.



Principle

Locate service elements for multifamily residential development so that they are not visible from the street, pedestrian paths, or adjacent properties when possible, or screen them from view.

LANDSCAPE DESIGN AND SITE ELEMENTS

Introduction

An important aspect of any building is its physical setting. The natural features of a place are key to residents' and visitors' perception. This section lays out principles that serve to merge the design of structures and places with the natural environment. It discusses the concepts behind new landscaping as well as the maintenance and protection of existing natural features.

Visual Quality of Landscapes

Issue

There is an important relationship between landscaping, site design, and architecture.

Discussion

A well-designed site has a strong relationship between natural vegetation, new landscaping, and architecture. The plant materials add to a building's richness, while the building points to the architectural qualities of the landscaping. Foliage can soften the hard edges and improve the visual quality of the built environment. It can also be used to screen elements on- or off-site that are not visual assets. Drought-tolerant plants can help to ensure a natural, long lasting and low maintenance landscape design.

Principles

The placement and amount of landscaping for new and existing developments should complement the architecture on the site. Large, mature plantings should be used to mitigate the scale of large structures.

When possible, significant natural vegetation should be preserved and incorporated into the site design, and drought-tolerant plants should be used when new landscaping is required.

Open Space

Issue

Residential projects can be designed to maximize open space.

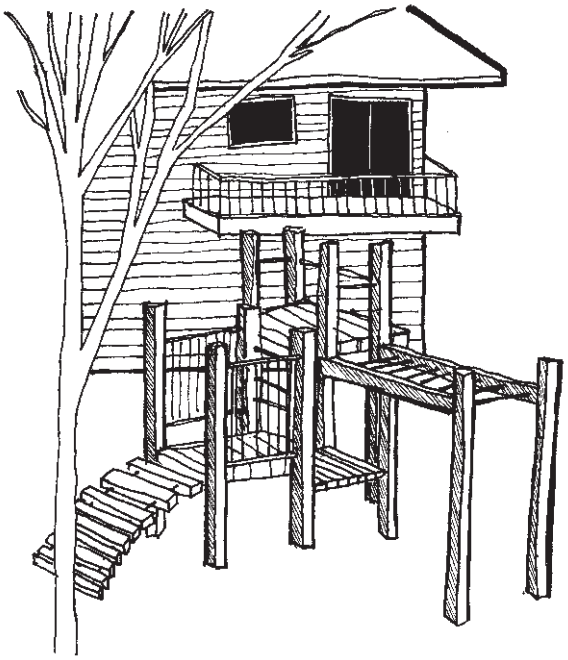
Discussion

Well organized outdoor spaces are created by the grouping and orientation of buildings and building elements. These outdoor spaces can provide buffering, preservation of natural areas, and active and passive recreation space. They can also provide for important hydrologic functions, and preserve or enhance views.

Principles

Site residential projects to maximize opportunities for creating usable, attractive, well-integrated open space.

Site recreational areas to allow for natural observation by the residents of the development.



Retaining Walls

Issue

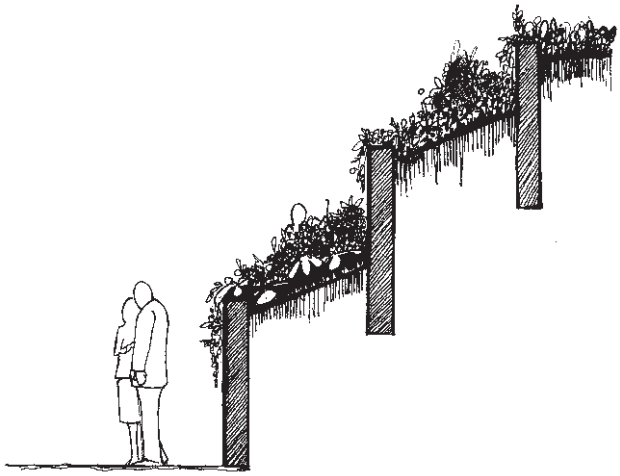
Retaining walls can have a negative impact on adjacent properties.

Discussion

Retaining walls are often necessary when developing a residential site.

The following are examples of techniques that can help reduce the impact of retaining walls on adjacent properties:

- Terracing and landscaping the retaining wall;
- Substituting a stone wall, rockery, modular masonry, or other special material in place of a concrete retaining wall;
- Locating hanging plant materials above and climbing plant material below the retaining wall;
- Installing trellises for vines;
- Putting in a landscaped planting bed that screens at least half of the wall.



Principles

Avoid retaining walls that extend higher than eye level (about five feet) when possible. Where high retaining walls are unavoidable, terrace the wall so that no single run is higher than eye level, and design them to reduce the impact on pedestrians and neighboring properties.