

The Design Traditions of Carmel



RESIDENTIAL DESIGN GUIDELINES INTRODUCTION AND DESIGN CONCEPT REVIEW



Adopted by City Council May 1, 2001

Table of Contents

| | | |
|-----|--|----|
| I. | Introduction to the Design Review Process | 1 |
| II. | Design Concept Guidelines | |
| | Neighborhood-wide Guidelines | |
| | The Preliminary Site Assessment | 13 |
| | 1.0 Preserving the Forest Character | 14 |
| | 2.0 Neighborhood Street Character Guidelines | 19 |
| | Site Planning Guidelines | |
| | 3.0 Topography | 23 |
| | 4.0 Open Space, Site Coverage and Setbacks | 26 |
| | 5.0 Privacy Views, Light and Air | 29 |
| | 6.0 Parking and Access | 32 |
| | Building Mass & Scale | |
| | 7.0 Building Mass & Scale | 35 |
| | 8.0 Building Form | 38 |

III. Resources

Definitions of Key Terms 43

Appendices

- A. Trees of the Urban Forest and City
Policy Paper C91-05
- B. Tree Rules of Thumb
- C. Measures for Tree Protection
- D. Compatible Plants Under and Around
Oaks and other Native Trees

Introduction to the Design Review Process

This booklet is an introduction to the City's Residential Design Review Process and Guidelines that are used in development review. The guidelines are presented in two booklets:

- Guidelines for Design Concept Review are presented in this booklet.
- Guidelines for Final Details Review are published in a separate booklet.

What are Design Guidelines?

Design guidelines convey community consensus about neighborhood design. As such, they provide a common basis for making decisions about work that may affect the appearance of individual properties or the overall character of Carmel. While guidelines provide direction, they are not intended to be inflexible nor used like ordinances. Instead, they are to be used to promote communication about how design changes can blend into and enhance community character. While the guidelines may suggest methods to achieve design objectives, the City recognizes that there may be other methods.

Why have Design Guidelines?

These guidelines inform the designers, architects and property owners about design objectives the citizens hold for their residential areas. They indicate an approach to design that property owners may use to make decisions about their buildings and to maintain the city's traditional character. The guidelines also provide the city, through the Design Review Board, Planning Commission, Staff, the Forest and Beach Commission and the Preservation Committee, a basis for making informed, consistent decisions about design.

The Scope of the Guidelines

The guidelines address all projects in the R-1 zoned areas of Carmel. Please note that the City of Carmel-by-the-Sea will not issue a construction permit for exterior additions, remodeling or new buildings without design review approval from the Design Review Board, the Planning Commission or Staff. These guidelines also will aid property owners and their architects in developing appropriate designs strategies. The guidelines focus on maintaining the traditional character of Carmel.

Note that other regulations also may affect design in Carmel, including the following:

- The Land Use Code of the City of Carmel-by-the-Sea
- California Environmental Quality Act (CEQA)

A Quick Guide to the Design Guidelines

The purpose of the Design Review System is to assure that alterations and new construction in Carmel will respect the design traditions of the community, while accommodating reasonable development and change. This Quick Guide provides a summary of the fundamental design principles upheld in the guidelines and introduces the basic sequence of issues that one should consider when developing a design concept.

Key Principles of the Design Guidelines

These key principles form the foundation of the guidelines:

1. Respect Carmel's design traditions.

This includes consideration of community-wide features, the character of the neighborhood and of the immediate block.

2. Respond to the context.

The built environment should be in balance with the forest character.

3. Balance design objectives.

Achieve a sense of being integrated with the community, while also promoting diversity of design on individual sites.

4. Develop a design in phases.

Develop broad concepts of site design and basic massing first. Then refine the design with the more detailed guidelines.

The enduring principles of design in Carmel-by-the-Sea are variety, modesty and simplicity. While there is wide diversity in design it is the goal of these guidelines that each house draw from and contribute to its neighborhood by generously providing for open space and preserving the City's traditions of simple homes set amidst a forest landscape.

Planning a Project

When planning a project in Carmel, one should define a basic design approach that will meet the owner's needs and at the same time be compatible with the neighborhood. Follow these steps in planning such an approach.

Consider the context of the project.

1. Consider the character of the city at large:
 - General character of the community
 - General approach to design
 - Sense of open space
2. Consider the character of the neighborhood:
 - Street character & orientation
 - Vegetation
 - Building scale
3. Consider the character of the block:
 - Building setback variations
 - Dominant tree species
 - Public and private views
 - Street edge character
 - Building design, height and size

In considering the context, the design guidelines encourage a continuity of landscape design, especially as seen from the street, while they also promote a diversity in architectural character. Therefore, an objective is to strike a balance between relating to the forest context by using similar landscape elements while also maintaining the tradition of variety in building design.

Consider the resources of the site.

1. Assess the topographic features:
 - Design with the topography and use slopes to create second levels above or below ground.
2. Trees and vegetation
 - Identify trees and vegetation that are important to the urban forest or that add character to the site or neighborhood.
3. If you have a historic building or a building of traditional character, consider an addition rather than a demolition/rebuild.

Consider your program requirements.

1. Define basic functional needs.
2. Balance these with Carmel traditions.
3. Adjust your program to fit the parcel size and site constraints.

Summarize the basic project approach.

1. This should balance considerations of context, site resources and program requirements.

How the Guidelines are Organized

These design guidelines are presented in a sequence that follows the City's design review process. When proposing a project, applicants first should become familiar with the City's design traditions and its goals for preservation of character. Next, applicants should consult with the City's planning staff and the City Forester to develop a preliminary site assessment map. This will aid in understanding the resources of the site and issues that will need to be addressed in the design. Based on these preliminary steps, applicants should then develop concept plans and complete a Design Concept review. After this, a Final Details review is scheduled. Only after this final review can a project proceed to construction.

This first Design Guidelines booklet focuses on broad-scale design issues which should be used during the Design Concept review stage. This includes design principles which apply neighborhood-wide as well as design guidelines for site planning and for the mass and scale of a building.

The second Design Guidelines booklet focuses on specific building and site design issues which should be used during the Design Details review stage. These include design guidelines for architectural character, details and materials. Other general design guidelines, such as solar access, views, energy conservation and utilities are also included.

The City uses the design guidelines to determine the appropriateness of a proposed project. In doing so, it evaluates each application on a case-by-case basis to determine that the proposed design meets the intent of the guidelines. This often requires careful judgement and a balancing of competing design objectives.

The Format for a Guideline

Each design guideline in this document typically has four components:

1. **Design Objective** - describes a desired state or condition of the design element being discussed.
2. **Design Guideline Statement** - typically performance-oriented, describes a desired design treatment.
3. **Supplementary Information** - may include suggestions on how to meet the objective, additional requirements, or may provide an expanded explanation. This information is listed in bullet format.
4. **Illustrations** - may be provided to clarify the intent of the guideline. (These components are illustrated below.)

It is important to note that all components of a design guideline constitute the material upon which the City will make its determination of the appropriateness of a proposed project.

Section Heading

1 **Roof Form**
Varied roof forms are typical in a block and this tradition should be continued.

2 #. **Simple primary roofs, with subordinate attachments such as dormers, are appropriate.**

3

- For example, basic gable and hip roofs are traditional and their use is encouraged.
- Flat roofs may be used to a limited extent on smaller, one-story structures. They should not be used on large buildings or two-story elements.
- Avoid complex roof forms that call attention to the design or add unnecessary detail.
- Mansard roofs typically add more mass than other forms and are discouraged. A sloping roof "skirt" that conceals a flat roof is particularly out of character. Similarly, a gable roof that is "clipped" at the top adds unnecessary complexity to a design and should be avoided.

4



Simple primary roofs with subordinate attachments, such as dormers, are appropriate.

Sample of the guideline format used in this document

The Three Design Review Tracks

The Design Review System is organized into three separate tracks, which correspond to the complexity of review or to the degree of flexibility that is sought for an individual project.

Review Track 1:

Final Review decision by staff

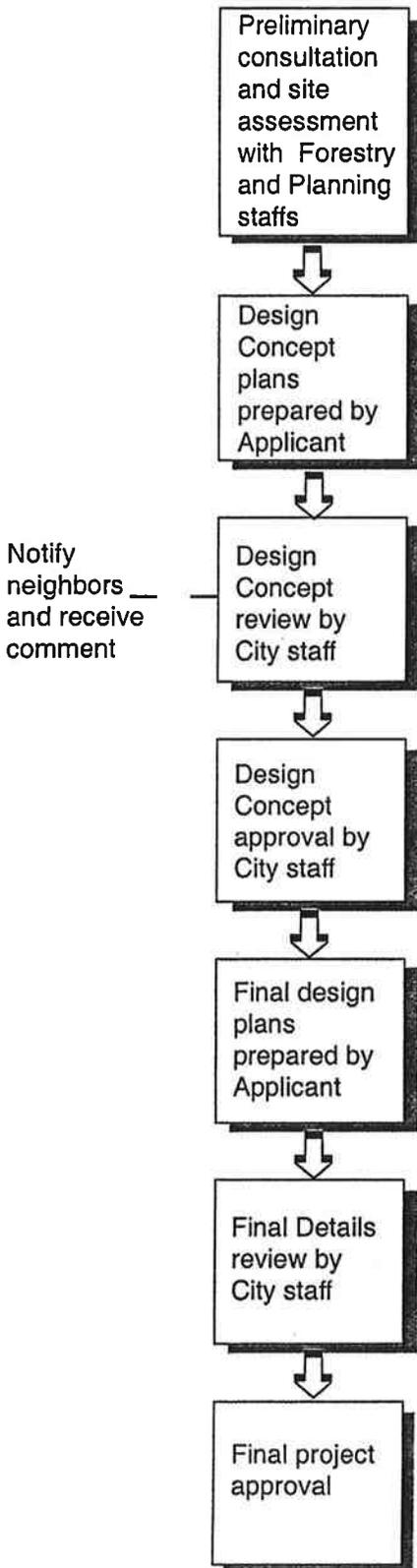
The Track 1 review track is available for additions and alterations that do not involve substantial increases in the size of buildings. Reviews are conducted by staff, and typically involve site visits, plan review and design consultations. For staff approval, all of the relevant Land Use Code provisions and Design Guidelines must be met. Flexibility is available only where clearly defined in municipal code standards that can be measured.

Referrals:

At any time that staff or the applicant is concerned about the nature of the project or the interpretation of the standards and guidelines, the project may be scheduled before the Design Review Board or the Planning Commission for discussion.

This is the most expeditious but least flexible track of review. It is provided for owners with simple projects and for small additions in order to proceed through the process quickly and with a high degree of predictability.

All design review tracks are subject to the California Permit Streamlining Act. This law requires the City to determine an application is complete within 30-days of application submittal. Once complete, the City then has 60-days to take final action. The only exceptions are (1) when environmental review is required or (2) when the applicant specifically requests a continuance.



Track 1 Review Process

Review Track 2:

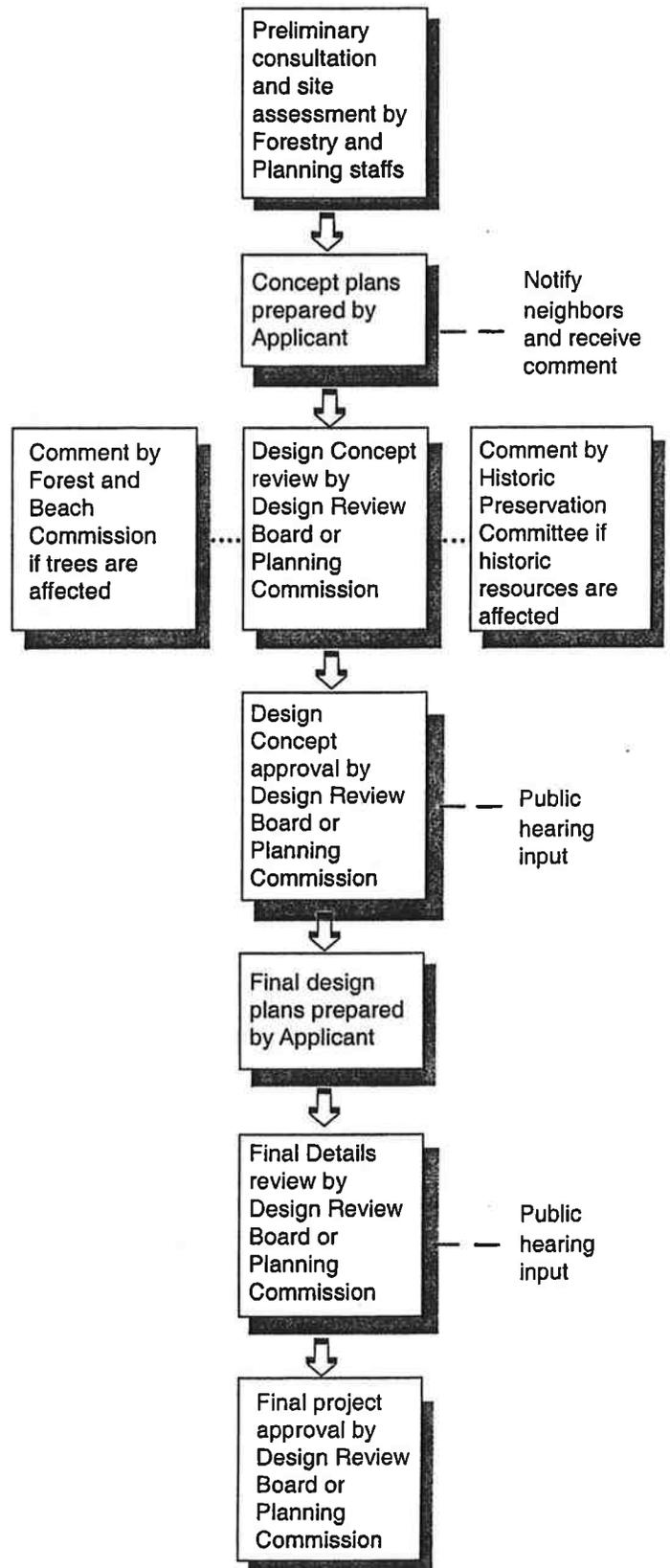
Final Review decision by Design Review Board or Planning Commission

This level of review is designed for projects where (1) it is not clear that the design meets all design guidelines or that (2) could have a significant impact on the neighborhood context or (3) in which the applicant seeks to make use of incentives that are available under conditions that require interpretation of compatibility with the context. This review track also applies to all new homes and to alterations that increase floor area by more than 25%.

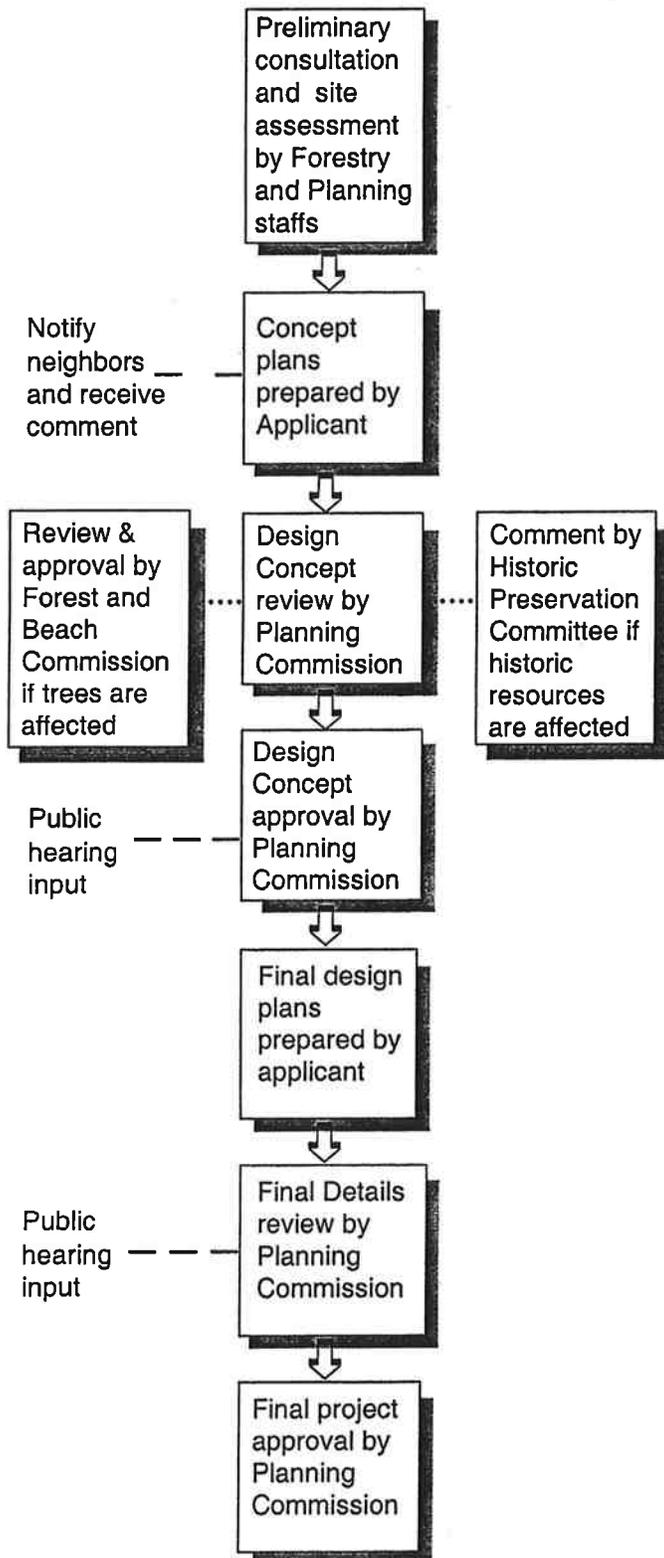
Projects that require a land use permit or environmental review will receive design review by the Planning Commission. All other projects in Track 2 receive design review by the Design Review Board.

Preliminary reviews are conducted by staff and then are referred to the Design Review Board or the Planning Commission for Design Concept review. Final Details review is conducted by the Design Review Board or Planning Commission after concept approval.

Greater flexibility in interpretation of the guidelines and in the application of incentives is available in this track, as compared with Track One. While it may take some additional time, the outcome, at least in terms of minimum standards, is relatively predictable.



Track 2 Review Process



Track 3 Review Process

Review Track 3:

Final Review decision by Planning Commission

This review track is the most flexible process and is included to accommodate innovation and diversity while still respecting the City’s design traditions. This track is designed for complex projects and for those in which the applicant seeks special exceptions from certain standards and guidelines because of unique circumstances of the site or in which they believe the overall design will be compatible with the context even though it does not directly meet some of the standards and guidelines. This is a “Planned Development” process.

The objectives in the ordinance and design guidelines and the background text in the guidelines serve as the basic principles or performance standards for determining appropriateness of any proposed work. Except for floor area and volume standards, most dimensional standards such as heights, setbacks, coverage and number of stories could be relaxed by the Commission.

Planned Development Requirements:

Since the Track 3 review potentially allows for significant deviations from design standards, it is important to provide enough information to the public and to decision-makers. Depending on project scope, the following may be required:

- Model of site and project
- Neighborhood-block plan
- Special notice to neighbors explaining the project
- Narrative explaining how City objectives are met
- Higher fees to offset longer processing costs

Design Concept Guidelines

This section contains guidelines for the design and review of concept plans. The guidelines focus on broad design considerations that relate to the basic organization of uses on a site, treatment of the urban forest and the massing of buildings. A primary consideration is that a design be compatible with the design traditions of Carmel, including maintaining the urban forest character and promoting buildings that are in scale with the context while encouraging diversity in individual houses. An accompanying booklet addresses Residential Design Guidelines Final Details Review.

Neighborhood-wide Guidelines

The Preliminary Site Assessment

Each site is considered part of a larger neighborhood and should contribute to neighborhood character. Important elements of neighborhood character include the local forest and open space resources, the character of the street edge, the massing, arrangement, and materials used in other homes nearby and the local patterns of topography, access and views.

However, each site is also unique and will present its own design challenges and opportunities. Therefore, the first step in developing a plan for a project is to assess the context of the neighborhood and the resources and constraints of the site. A plan showing existing conditions on the site and in the immediate vicinity should be prepared by a licensed surveyor or engineer. This site plan will show topography, drainage features, existing trees and structures, the edge of the street and other features useful in developing a design concept for the project.

This plan must be reviewed in the field by the City Forester and a planner. During this field review, qualitative assessments will be made regarding the health and importance of each tree, whether above-or below-ground areas should be avoided and whether specific existing structures may qualify for incentives offered to preserve traditional or historic buildings. Observations about the neighborhood design context, street and right-of-way character, views or other conditions will be noted as well.

A copy of the site assessment will accompany the project through the design review process to aid in the evaluation of the project by decision-makers. This site assessment should be used by the architect or designer to develop both the design concept for the project and a forest enhancement/maintenance plan for the site. The forest enhancement/maintenance plan will be required during the concept phase of design review and should address the following issues:

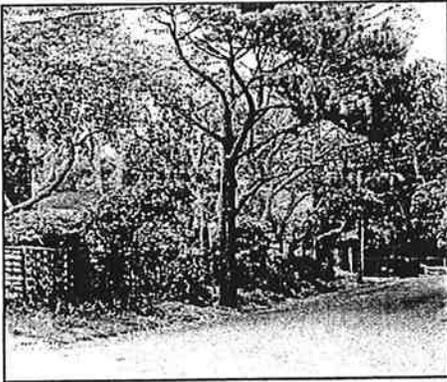
- Which trees will be retained, removed or pruned due to the project?
- Will new trees be added (where, how many, what species)?
- Which trees are considered most significant to the site and why?
- How does the proposed project relate to these significant trees (set-backs, pruning, screening)?
- How will the remaining and proposed trees on the site relate to the composition of the forest in the immediate neighborhood?
- Are there any significant belts of native or planted vegetation that are important to the character of the site? Will they remain or be removed?
- What is the character of the adjacent right-of-way? How will it be preserved or enhanced by the project?
- Are any special protective measures planned that go beyond the minimum City requirements for tree protection?



The first step in developing a plan for a project is to assess the context of the neighborhood as well as the resources and constraints of the site.



Prior to submittal of design plans for projects that will alter the building footprint, add a second story or involve excavation, the City requires preparation of a preliminary site assessment.



Each site should contribute to the urban forest by saving significant trees and planting new ones that are consistent with the context.

Note:

See the City Forester to determine the condition and significance of existing trees.

The Forest and Beach Commission will comment on the effects any proposed work will have on significant trees during project review.

See also the City's Policy Paper C91-05, "Tree density per lot," in the Appendix which establishes recommended tree replacement ratios and suggests trees species. Note that these ratios may be adjusted by the City Forester based on individual site conditions.

1.0 Preserving the Forest Character

The urban forest is one of the most significant and remarkable characteristics of the community. In most neighborhoods, the forest has a combination of upper canopy trees and a lower story of smaller trees. In most areas, the upper canopy traditionally was Monterey Pine, while the lower canopy trees included a mix of multi-stem varieties, often coast live oak. Other neighborhoods have a different forest character established of Monterey cypress or redwoods. Protection of existing healthy trees should be among the highest priorities in any project. Trees that are especially significant due to their size, character, location or species should be identified through consultations with the City Forester at the beginning of a project. This applies to trees on site and abutting properties as well as in the right-of-way. Each site should preserve or add trees to perpetuate and enhance the urban forest context of the neighborhood.

Understory trees are those that establish a lower scale than the upper canopy trees. These often have multiple trunks that are useful for screening, and softening building mass. Established, healthy understory trees should be preserved when feasible. In sites lacking sufficient trees, new ones should be planted to supplement the urban forest.

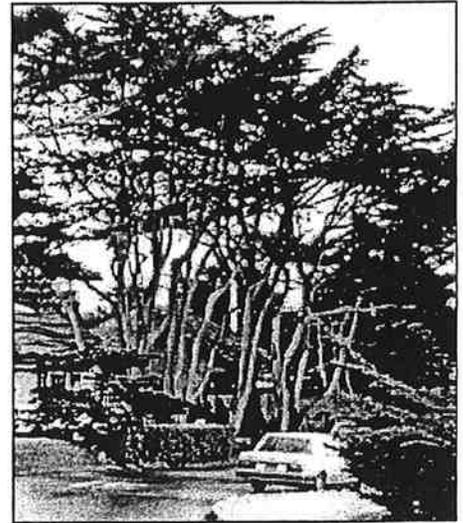
Buildings and other site structures should be located to minimize the removal, pruning, or damage to existing significant trees, on and adjacent to the site. The "Preliminary Site Assessment" map should be consulted when designing and locating new structures and additions to determine which trees are significant and should be protected. When new trees are planted they should be selected to enhance the forest character of the neighborhood.



The forest landscape is prevalent along the road edge in most neighborhoods and overhangs most streets to create the appearance of a forested lane.

Objectives:

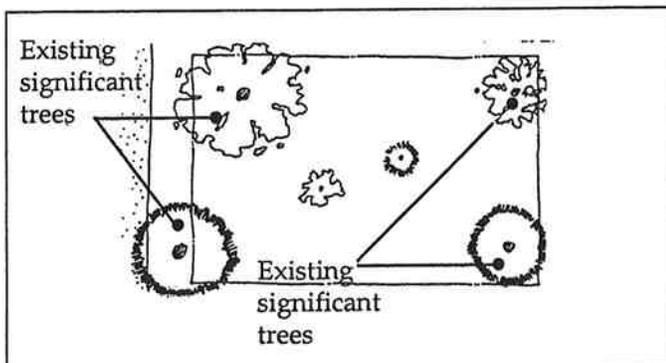
- To maintain and enhance the urban forest as a distinctive feature of Carmel
- To establish continuity of landscape elements throughout each neighborhood
- To maintain the forest character of each neighborhood, which typically includes a mix of upper canopy and lower canopy trees
- To filter views of houses with lower story trees and reduce perceived building scale or prominence from the street
- To promote preservation of established trees that contribute to the forest character of the neighborhood
- To promote planting of new trees that will contribute to the urban forest character



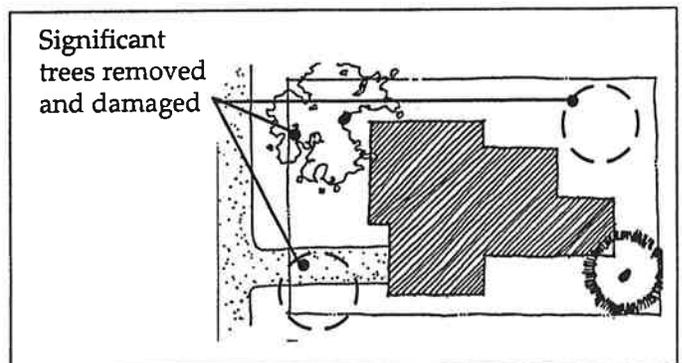
Existing significant upper canopy trees should be preserved as neighborhood assets.

Key principles:

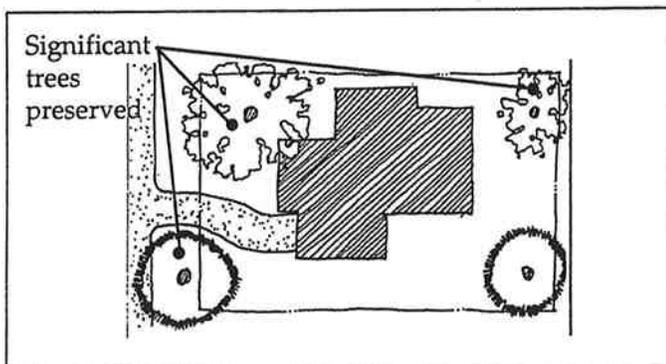
- Identify the forest character of the neighborhood before considering site design.
- Preserve established significant trees.
- Plant new trees to supplement the urban forest.
- Provide a compatible landscape setting to reinforce the forest character.



Site evaluation: Identify significant trees.



Undesirable: Trees removed and heavily pruned



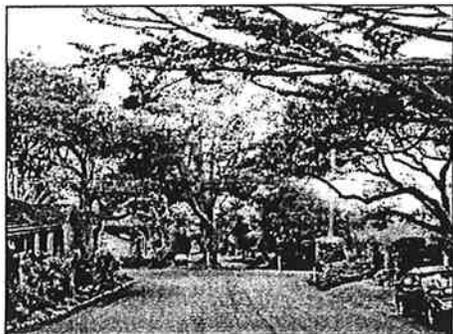
Preferred: Significant trees preserved



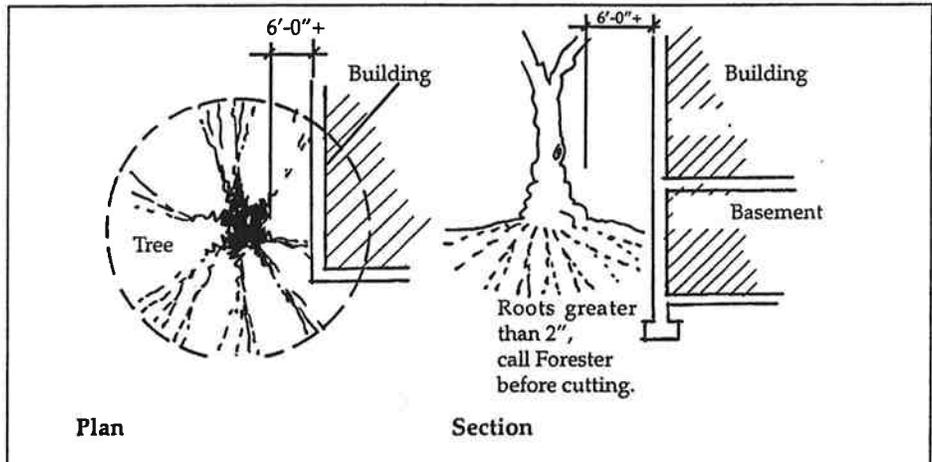
Excavation work should be planned to avoid significant impacts to root systems. As shown here, cutting into major roots systems without City approval will weaken or even kill a tree and is unlawful.

1.1 Existing significant upper canopy and understory trees should be preserved.

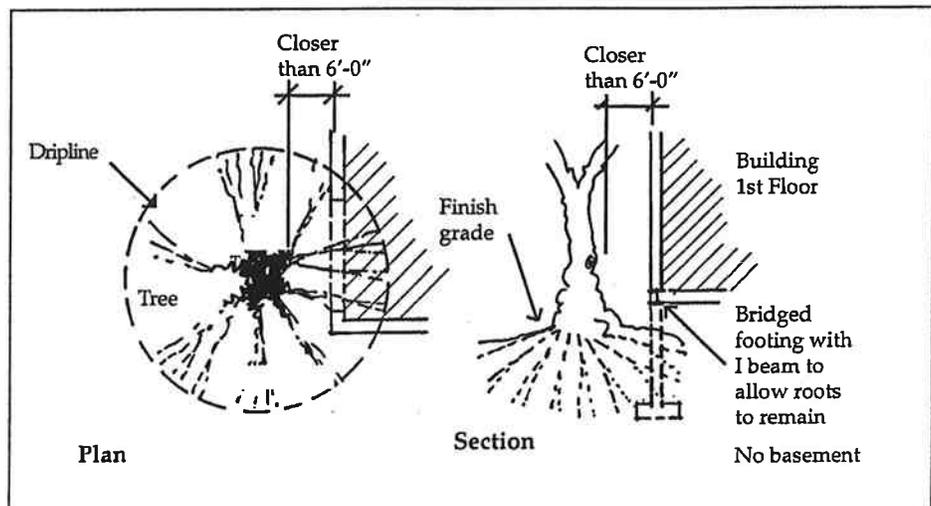
- First, consult with the City Forester to evaluate existing trees in the right-of-way and on site for their significance and condition.
- Plan to protect trees during construction as provided in the Land Use Code and by planning access and site development around trees.
- Trees in the right-of-way should not be removed to provide parking spaces.
- Position building masses and roof forms to avoid cutting into the canopy of established trees. (See also the following section on site design.)



Trees in the right-of-way should not be removed.



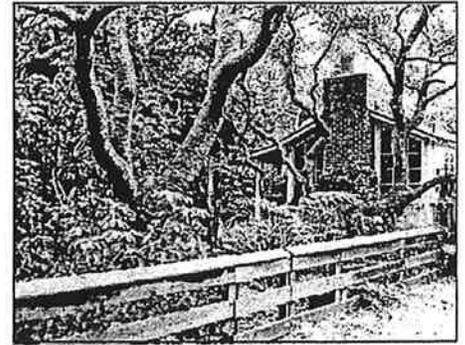
Acceptable Tree to Building Relationships



Bridged Footing for Close Trees

1.2 Locate new construction to minimize impacts on established trees.

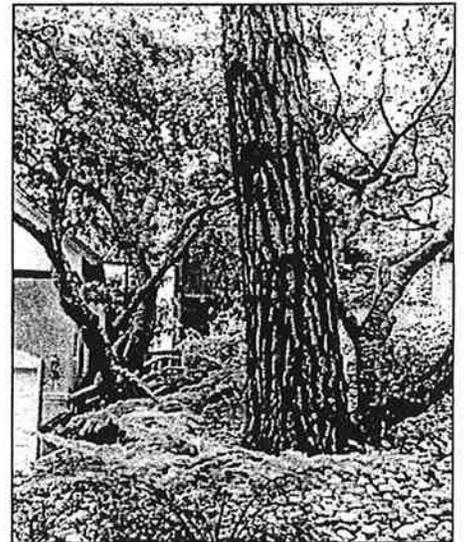
- Structures with foundations, such as buildings, walls and excavations, should be set back a minimum of six feet from the base of any tree to be preserved in order to adequately protect tree roots. In some cases, a greater distance may be required. In other situations, it may be acceptable to build closer than 6 feet, when other design objectives are met and a bridged footing is used. (See illustration, page 4.)
- Avoid a building design or roof design that would require extensive pruning to tree limbs and canopies.
- Adequate open space should be provided on each building site to retain, and plant anew when necessary, upper and lower canopy trees.
- Plan building masses and excavation in areas that will minimize the impact on trees and their root structures.



Maintain established understory trees that provide character and screening.

1.3 Protect root systems of all trees to be preserved.

- Plan excavation work to avoid root systems of all trees on site and of trees on abutting properties.
- Avoid excavations or foundations that would cut into more than one-third of the root zone or drip-line around any significant tree.
- Plan curb cuts, paving and drainage systems to maintain air transport and water percolation to root systems.
- Grades should not be raised or lowered around tree roots.



Maintain a forested image on a site.

1.4 Maintain a forested image on the site where it is consistent with the neighborhood context.

- Plant new trees to reinforce the existing urban forest character on sites in each neighborhood where this character exists.
- A tree removed for construction should be replaced unless there are numerous trees on the lot. A mix of upper and lower canopy trees should be used, as determined by the City Forester.
- Appropriate tree species and a table of recommended replacement requirements are listed in the City's Policy Paper C91-05, which is attached as an appendix.
- Select trees that are characteristic of the neighborhood context.

Protect significant trees from damage during construction. See Appendix B and the Land Use Code requirements for fencing and other protection mechanisms.

Also note that new trees that are planted as a condition of design approval must be maintained in place. If one of these trees is removed, it must be replaced.



The informal, vegetated, character of open space in the right-of-way should be maintained.



On most streets, pedestrians share the lanes with motorists. This contributes to the quiet, informal character of the street and should be continued.

Right-of-way character

In most neighborhoods, the edges of the public right-of-way are unpaved. In early years, it also was unplanted, resulting in an informal character of volunteer plantings, packed earth and pine needles. In other areas, however, this “unimproved public right-of-way” was planted in indigenous species that conveyed a forest appearance. Both approaches contributed to the urban forest. This forest character of the right-of-way is an important feature that varies with each neighborhood and should be perpetuated.

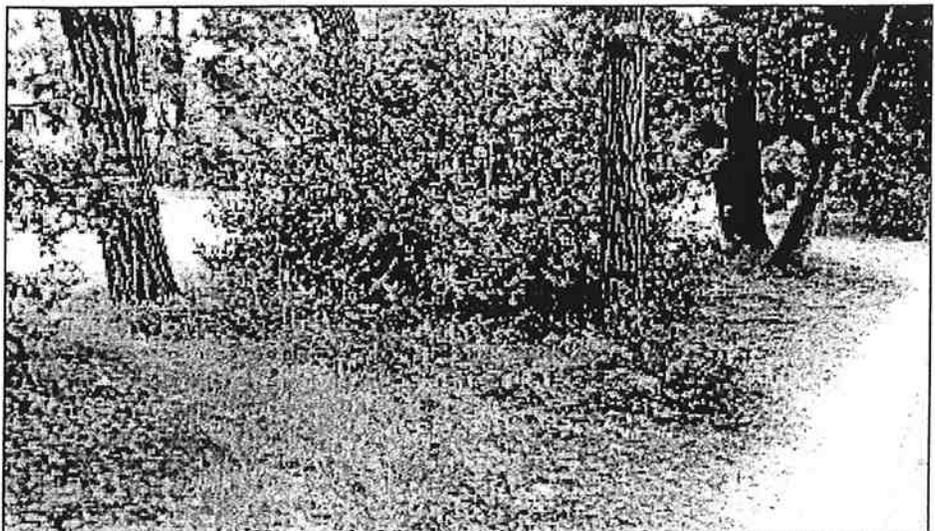
Carmel’s streets are designed for walking. On most streets, pedestrians share the lanes with motorists. This contributes to the informal character of the street and should be continued.

1.5 Maintain and enhance the informal, vegetated, open space character of the right-of-way.

- Use simple planting plans when right-of-way landscaping is proposed.
- Emphasize native plants.
- Do not add paving or boulders to the right-of-way.

1.6 Maintain trees and naturalized vegetation in the public right-of-way and around the periphery of the site.

- Exceptions may be necessary to provide safe access to the site.
- Preserving existing belts of vegetation around a site can contribute to the forest character of the street and help screen buildings.
- Trees with canopies that arch over the street are particularly important to community character.



Trees that abound in the public right-of-way and the periphery of the site should be maintained.

Parking in the Right-of-way

Parking has become an increased use in the right-of-way. This threatens the character of the street while at the same time, it meets a functional need. Therefore, street parking must be balanced with the objective of maintaining a forest edge. In general, parking in the right-of-way should only occur in a manner that maintains the informal, open space character.

With the exception of driveways, new paving in the right-of-way is prohibited. When paving already exists in the adjacent right-of-way, this should be removed unless required for drainage/runoff control. The right-of-way may still be used for parking but should not present a hard-surface appearance or impermeable barrier to water. (Some of these parking guidelines apply when a property is altered, at which time parking must come into compliance.)

1.7 Where a parking area in the right-of-way is to be defined, use a design that will reinforce the forest image.

- Natural soil, shredded bark and wood chips are preferred surface materials. Gravel is prohibited.
- Separate an existing parking space in the right-of-way from any driveway with plantings.
- Only the city is authorized to add paving or boulders in the public right-of-way, except in the cases of driveways and authorized encroachments.



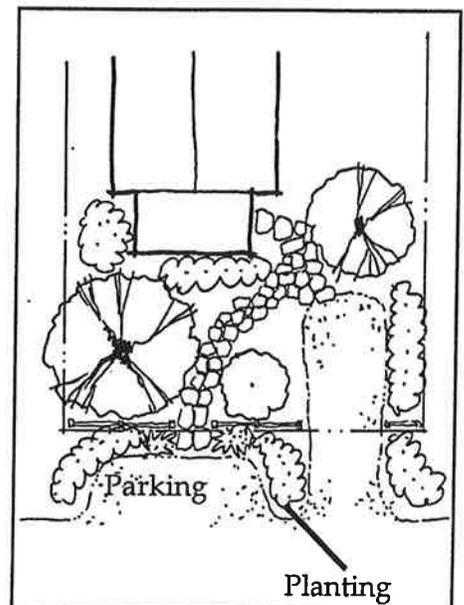
Where a parking area in the right-of-way is to be defined, use an informal unpaved design that will reinforce the forest image.

Note that no new paving for parking may be created in the right-of-way and, when development occurs on a site, any existing paving in the right-of-way must be removed unless specifically authorized through an encroachment permit.

2.0 Neighborhood Street Character Guidelines

The informal image of residential streets in Carmel is one of the most distinctive features of its design traditions. This character should be maintained. Designers for both private and public projects should respect the established street character along a block face and blend any proposed right-of-way changes into this context.

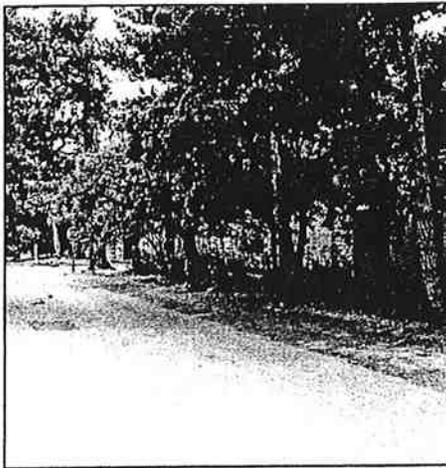
Note that any paving in the Right-of-Way must be executed by the City and that in doing so, it will apply the City's adopted Policy and Standards paper, "Public Way Design."



Separate an existing parking space in the right-of-way from any driveway with plantings.



The informal image of the residential streets in Carmel is one of the most distinctive features of its design traditions.



Maintain the informal edge of street paving.

Objectives:

- To maintain the informal, meandering character of residential streets
- To retain the existing width of paving in the street
- To maintain a rustic character to street drainage systems

Street layout/grid

Streets are laid out in a rectilinear grid for most of the town. Exceptions, however, occur in steep canyons, where roads meander along the contours of the steep slopes. However, even where the grid exists, it does not appear formal, due to the meandering edges of the streets, the rolled curbs and vegetated edges. This traditional layout contributes to the character of the community and should be maintained. The *traditional narrow width* of the paved travel lanes also should be maintained. They should not be expanded.

2.1 Maintain the traditional street layout.

- Where it exists, the grid system should be maintained.
- Those streets that are laid out to follow contours and avoid significant trees or land forms also should be maintained.

Street edges, curbs and gutters

While the street grid is well-established, in most neighborhoods it appears more like a series of meandering forest roads. This is a result of the informal edge of paving, in combination with the informal plantings, trees and rustic character of the unpaved portions of the right-of-way flanking the travel lanes. In neighborhoods where it exists, the ragged, meandering character of the street is an important feature that should be preserved.

The design of a street edge should be sensitive to the neighborhood-context. Although most street edges are informal, this varies from place to place throughout Carmel. These guidelines require that during the preliminary site assessment for each project, the characteristics of the street edge be identified. This established character should then be perpetuated, or enhanced, in the proposed design. Projects should "fit in" and not introduce new elements that are foreign to an established pattern.

2.2 Maintain existing patterns of street edge design and street paving.

- Avoid adding new pavement at the edge that would widen the street or create a parking space.
- Maintain an informal unpaved and/or landscaped edge where it exists.

In most neighborhoods, drainage follows street grades and then is collected in a limited number of open gutters. These are typically lined with local rock. This detail contributes to the forest road character and should be continued.

2.3 Maintain the existing character of street gutters in each neighborhood.

- A rolled gutter made of asphalt is typical of most neighborhoods.
- Where more formal gutters are used, they should be faced with rock.
- A plain concrete curb is usually inappropriate in all neighborhoods.



Maintain the existing character of street gutters in each neighborhood.

Site Planning Guidelines

These guidelines address the placement of buildings on an individual site and they also cover the organization of open space and landscaped areas.

Site plan designs should relate to and take advantage of the site's topography and slope, as well as significant trees and vegetation. Designs should recognize the constraints of the land and work within these limitations, rather than ignore them or override them.

Objectives of the Site Planning Guidelines are:

- To promote building placement that will protect trees
- To promote variety in the way buildings are set back along each street
- To encourage the positioning of buildings to frame open space
- To protect privacy and views for neighbors

Note that some variations in site planning principles exist between uphill and downhill sites. In general, secondary structures are located uphill, away from down hill views. Similarly, a driveway appears to "fall away" from the street edge on downhill sites, which reduces its visual impact.

3.0 Topography

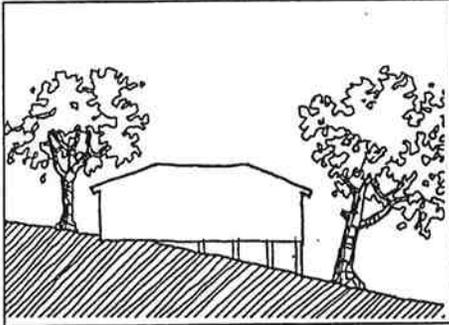
The natural slopes of each residential neighborhood are some of the most important features in the community. They contribute to the distinctive character of development here and should be maintained. The manner in which a site is excavated for a building foundation and the way in which grades are treated are therefore important considerations.

Objectives for this section are:

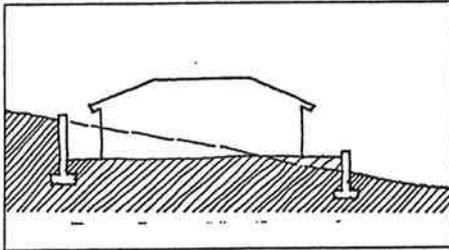
- To maintain the natural topographic character of Carmel
- To encourage site development that preserves natural slopes, avoids significant exposed cuts or fills and protects trees
- To promote grading designs that will retain water on site, enhance percolation into soils, and minimize runoff onto adjacent properties
- To promote the use of natural slopes and stepped floor plans in building design so that houses hug the land.



Where construction is necessary on a steep slope, step the foundation and building forms to follow the contours or locate the long axis of a building to lie parallel with natural contours.



Discouraged: This structure rises above the slope, which increases its mass.



Discouraged: Extensive excavation and exposed cuts impact tree roots and disturb natural contours.

While a key principle is to maintain the sense of natural topography, this must be balanced with the objective of minimizing the mass and scale of a building. This can be achieved by locating some floor area partially below grade or fully below grade in a basement. In such a situation, more extensive excavation may be necessary.

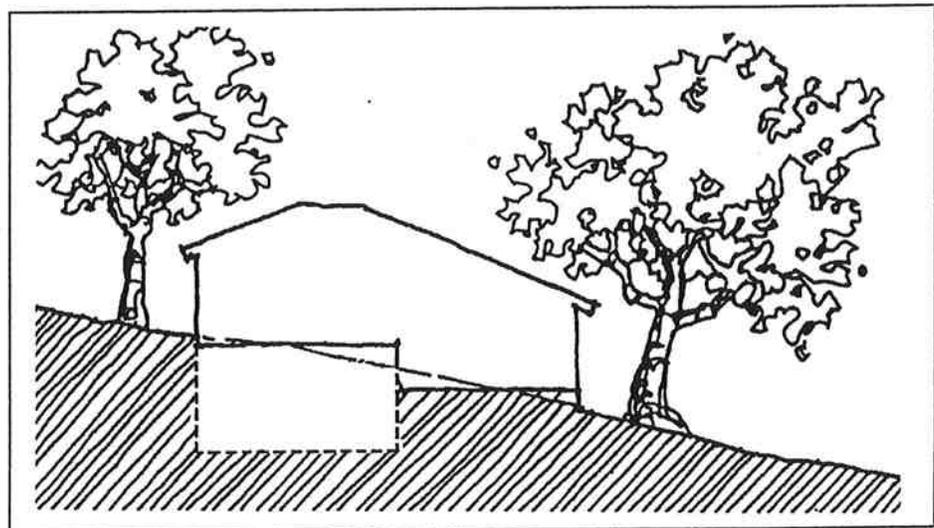
Another consideration is the objective to preserve significant trees. Minimizing a building footprint can provide more room on site for trees, but if excavation is included, it can impact existing root systems. Conversely, if a basement and/or two-story design is not used, floor area is distributed over a larger footprint. Excavation may be shallower but more widespread and root systems may still be affected.

These objectives to preserve topography and trees therefore must be balanced and considered on a case-by-case basis. The preliminary site assessment should guide the basic form of the building. The location of trees and root systems on and near the site will determine whether it is most appropriate to use a compact building footprint and excavated living spaces or a broader footprint with minimal excavation. Overall, the ideal design will be one that accomplishes all of the City's design objectives, to respect natural contours, to reduce building mass and to protect trees.

Topography and slopes

3.1 Minimize construction on steep slopes.

- Construction on large contiguous areas of slopes that exceed 30% should be avoided when alternatives exist.
- Minimize the footprint of a building on steep slopes.



Preferred: This structure works with the natural contours of the site and avoids tree roots.

3.2 Minimize the extent of excavation and fill on a site.

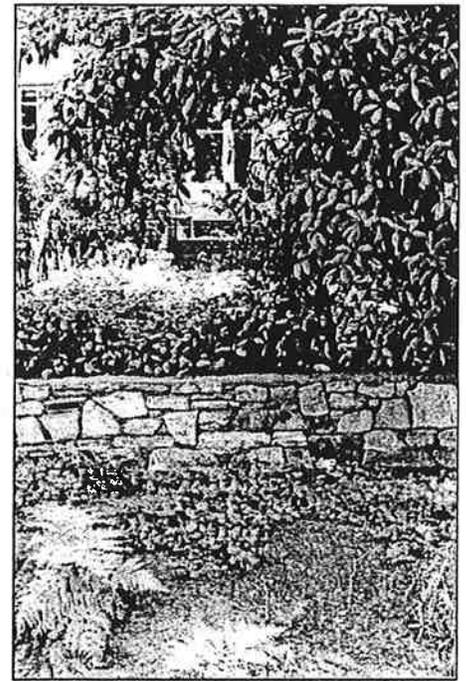
- The site design should follow the natural contours of the site. Where construction is necessary on a steep slope, step the foundation and building forms to follow the contours or locate the long axis of a building to lie parallel with natural contours.

3.3 Minimize the visual impacts of retaining walls, garden walls and other foundation structures as seen from the public way or neighboring sites.

- Use a stepped building foundation that follows site contours.
- Avoid extensive areas of "cantilevered" floors especially above a cut area.
- Avoid the creation of tall, unused underfloor areas that add to building mass. The level of the finished floor above unused, underfloor spaces should not be higher than five feet above the ground at any point around the full perimeter of the building.

3.4 Avoid abrupt changes in grade on the site and between adjoining properties.

- A design that incorporates sloped, planted areas to create a smooth grade transition is preferred.
- Avoid a design that requires a tall retaining wall, terracing or revetments that will be visible from the public way when feasible. When such transitions are unavoidable, multiple landscaped terraces are preferred.



Minimize the visual impacts of retaining walls and other foundation structures as seen from the public way.

Site Drainage**3.5 Engineer the drainage pattern to retain water on site when feasible.**

- Avoid directing new runoff onto adjacent properties, per Carmel Municipal Code Section 15.08.230.
- Maintain existing patterns of drainage between properties.
- Note that the City's engineering standards prohibit directing new drainage onto an adjacent property.
- Preserve natural open water courses.
- Design drainage systems to avoid erosion of hillsides.
- Consult early with Public Works Director and Building Official for sites with unusual drainage conditions.

The preliminary site assessment can be used to identify important open space features of the site and neighborhood that should be retained or enhanced.

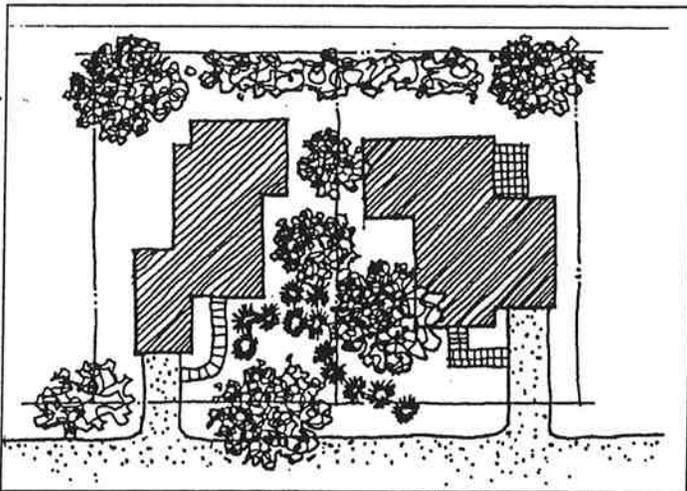
4.0 Open Space, Site Coverage and Setbacks

Open space should be coordinated with the design of structures on site and also with adjacent sites to enhance the parklike environment of the city. Open space should be distributed around a building to provide a visual separation from adjacent structures on abutting sites and avoid the appearance of crowding.

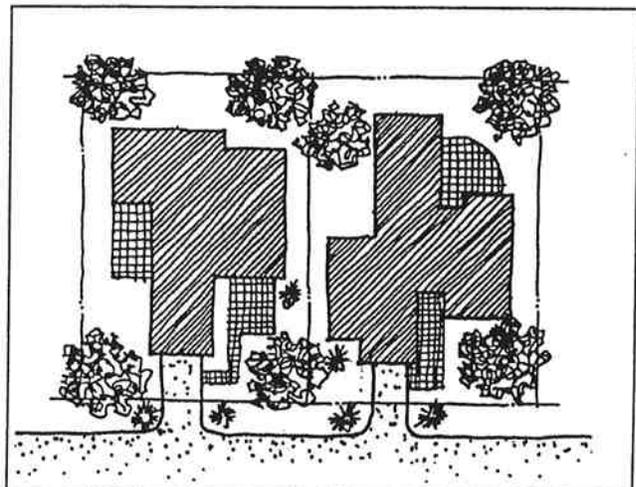
Landscaped open space can help enhance the urban forest, especially when coordinated with neighboring yards and roadside landscaping. Open space is a community resource and some front yard open space on each site should remain visible from the street to enhance the open character of the neighborhood at large.

Objectives:

- To promote preservation of open space as an amenity on individual properties
- To establish an open space setting for each building that is consistent with the neighborhood context
- To encourage coordinating open space with adjoining properties
- To encourage a visual flow of open space from each site into the right of way
- To maintain the "forest foreground" image along the front of a property
- To maintain a sense of discovery along the street by maintaining an informal roadway edge and diversity in front setbacks



Preferred: Open space is organized to have a positive effect.



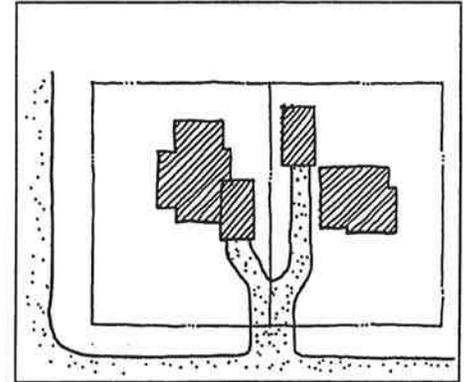
Discouraged: Open space is simply "left over" ground within required setbacks with limited positive effect.

4.1 A significant portion of each site should remain as landscaped open space.

- Minimize the amount of hard surfaces in order to maintain a sense of open space and provide space for planting.
- See the Land Use Code for a table which establishes maximum limits for site coverage.

Side Yards

More open space should be provided along side yards when buildings on adjacent properties are located close to the joint property line. This is particularly important when two-story structures are involved. A design should avoid creating a "tunnel" or narrow corridor between buildings on adjacent sites.



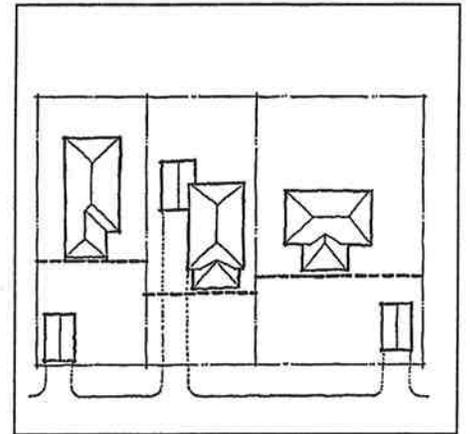
Preferred: Combining driveways may help reduce site coverage.

4.2 Consider locating open space such that it visually links with that of adjacent properties.

- This will increase the apparent size of open space resources.
- Use linked open spaces to preserve or enhance forest resources.
- Minimize barriers such as fences, walls and accessory structures that split adjacent open spaces into smaller units as seen from the street.

4.3 Stagger front setbacks to frame outdoor spaces and provide variety in the arrangement of buildings and open spaces along the street.

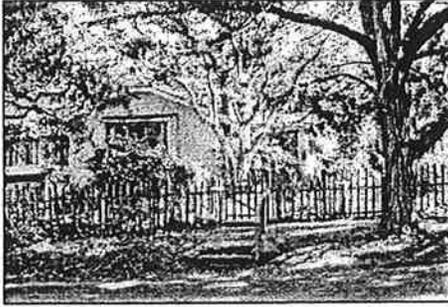
- Stagger setbacks to protect significant trees.
- Avoid aligning a building front with those of adjacent properties, unless doing so would result in a visual aggregation of open space and save significant trees.



Preferred: Stagger front setbacks to frame outdoor spaces and provide variety in the arrangement of open spaces along the street.

4.4 Variety in side yard setbacks is encouraged.

- Stagger setbacks with respect to adjacent properties to avoid a "canyon effect."
- Consider how the side yard space may relate to that of the adjoining property to maximize the perception of open space.
- See the Land Use Code for minimum setbacks and related provisions for flexibility.



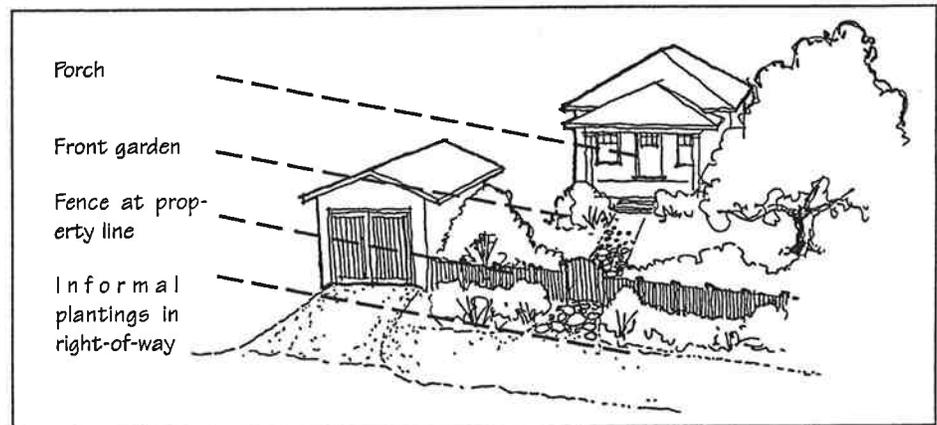
In some neighborhoods, the progression of spaces is layered and may include a right-of-way with informal plantings of native trees and undergrowth, a low fence or stone wall at the property line and a narrow walkway leading from the street through a front garden to a porch or stoop at a front or side entry.

Progression of Spaces

A progression of spaces exists from the street edge to the front of a building on many sites. This progression helps define the character of each neighborhood and should be reinforced in new projects. In some neighborhoods, this progression is quite simple, such as: street edge to open front yard to building entry. In other neighborhoods, the progression of spaces is layered and more complex and may include a right-of-way with informal plantings of native trees and undergrowth, a low fence or stone wall at the property line and a narrow walkway leading from the street through a front garden to a porch or stoop at a front or side entry.

4.5 Use a progression of spaces from the street edge to a building in the design of open space to reinforce neighborhood patterns.

- Provide an informal, planted edge in the right-of-way to help a site blend in with neighboring properties.
- Consider using a fence, wall or hedge to define the front property line when this is characteristic of the neighborhood.
- A walkway from the property line to the house should be informal in appearance and if feasible, should be separate from any driveway paving.
- Preserve existing open space features (access, vegetation, etc.) if they provide an attractive character consistent with neighborhood patterns.



Preferred: Provide a progression of spaces, from informal right-of-way plantings to a front garden, to the building entry.

5.0 Privacy, Views, Light and Air

Neighborhoods originally developed at relatively low densities and the amount of planted open space was extensive. Most blocks evolved with a reasonable degree of privacy for individual houses. Retaining this sense of privacy, in spite of higher densities, remains an objective.

Objectives:

- To maintain privacy of indoor and outdoor spaces in a neighborhood
- To balance and share view opportunities to natural features and landmarks

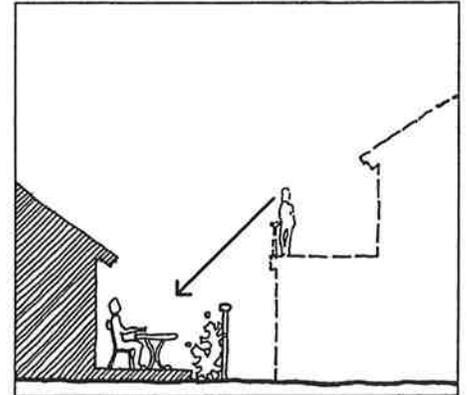
5.1 Organize functions on a site to preserve reasonable privacy for adjacent properties.

- Position a building to screen active areas of adjacent properties when feasible.
- Locate windows and balconies such that they avoid overlooking active indoor and outdoor use areas of adjacent properties.
- Preserve significant trees that will help to screen views into adjacent properties.
- Screen patios, terraces and service areas.

Views, Light and Air

Views to natural features and landmarks are key features of Carmel's design traditions. Important views occur to the ocean, canyons, and along streets. Protecting views is an important community concern. This includes views from public ways as well as those through properties. Also note that the desire to maximize view opportunities from one's own property must be balanced with consideration of respecting views of others. The preliminary site analysis may help identify view opportunities as well as existing views enjoyed by others.

Designs also should preserve reasonable solar access to neighboring parcels. Designs should protect and preserve the light, air and open space of surrounding properties, when considered cumulatively with other buildings in the neighborhood. Incorporating tall or bulky building elements near the property line of an adjoining site should be avoided.



Discouraged: Overlooking active outdoor areas on adjacent properties.

Policy P1-65

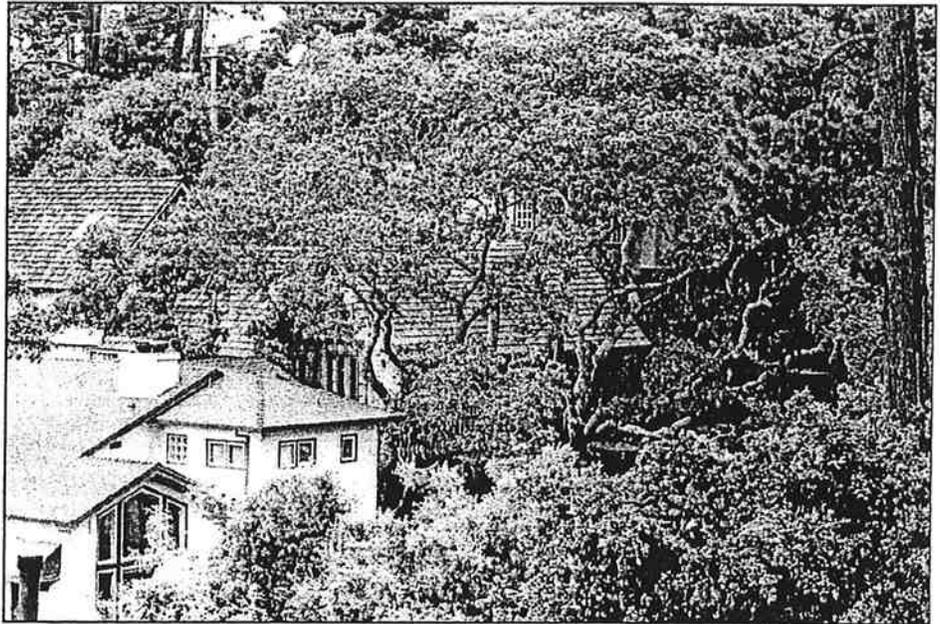
Consider the effect of proposed residential construction on the privacy, solar access and private views of neighbors when evaluating the design review applications. Avoid designs that are insensitive to the designs of neighboring buildings. Attempt to achieve an equitable balance of these design amenities among all properties affected by design review decisions.

All applicants are strongly encouraged to consult with neighbors early in the design process to learn their concerns and explain proposed projects.

Remember that trees are part of the view and that views are often filtered or transitory because of the urban forest. City policy prohibits trimming trees for views.

5.2 Maintain view opportunities to natural features that lie outside the property.

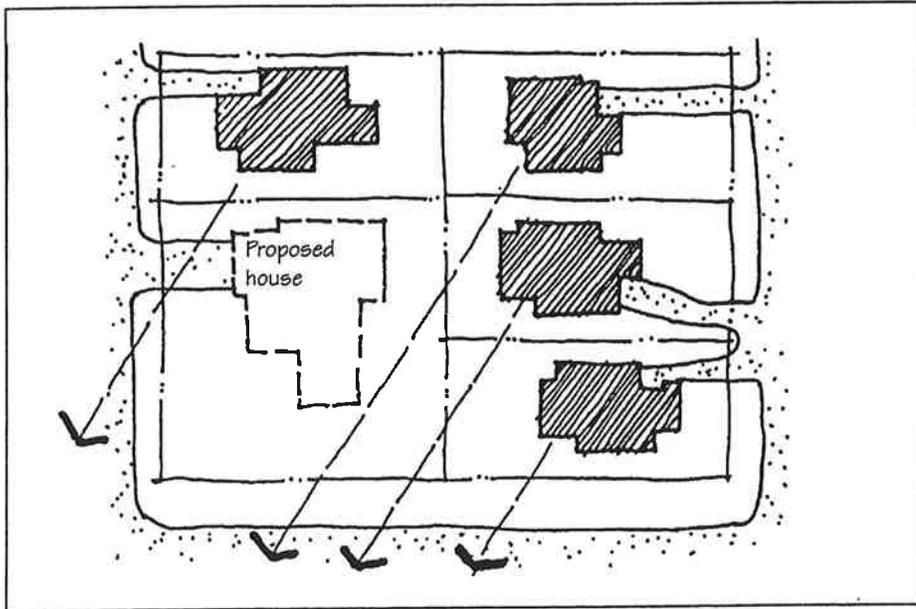
- Consider locating key building functions to make use of views.
- Also locate buildings so they will not substantially block views enjoyed by others.



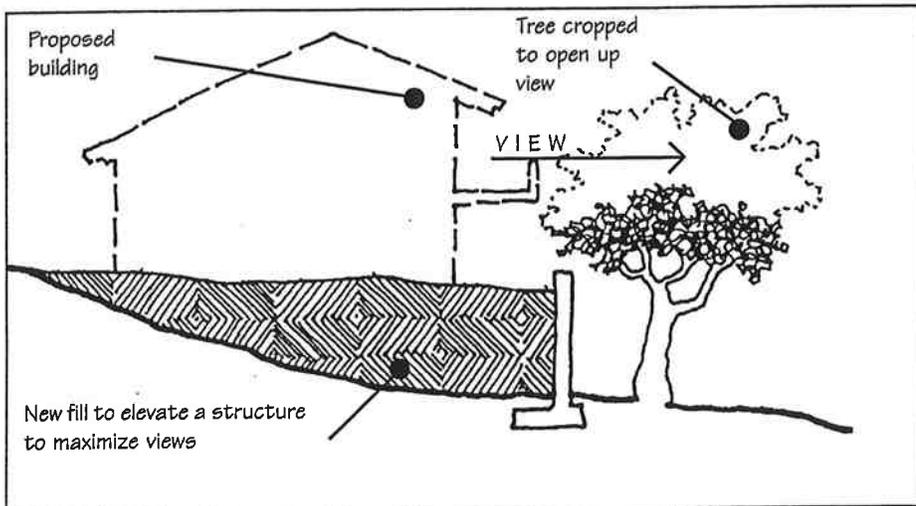
Maintain view opportunities from a site to natural features outside the property.

5.3 Maintain views through a property to natural features when feasible.

- Locate major building masses to maintain some views through the site from other properties.
- Consider keeping the mass of a building low in order to maintain views over the structure.
- Also consider using a compact building footprint to maintain views along the sides of a structure.



Preferred: A new building is sited to maintain views from existing houses.



Discouraged: Elevating a site to maximize views.



Facilities for parking should not dominate the design of the house or site as shown here.

6.0 Parking and Access

Traditionally, parking was a subordinate element in Carmel's residential neighborhoods, both on an individual parcel and along the street in general. Today, providing access for an automobile on a site is often a necessity, and doing so is encouraged, as a means of reducing on-street parking pressures. Nonetheless, it should remain subordinate to the overall character of the site.

Usually a garage was a subordinate element in a site plan and often was detached from the house. The wide variety of garage positions contributed to the diversity of the street scene: Many were located at the front property line, while others were sited in the rear. In later years, the garage was often attached, but remained subordinate to the main mass of the house. These traditions of diversity and subordinate character should be continued.

In some cases, it appears that owners positioned their garages away from prominent views. In particular, they located them uphill, away from downhill views to the ocean. When locating a garage, consider view impacts, the relationship to open space on the lot, and the relationship to that of neighboring properties.

Objectives for this section:

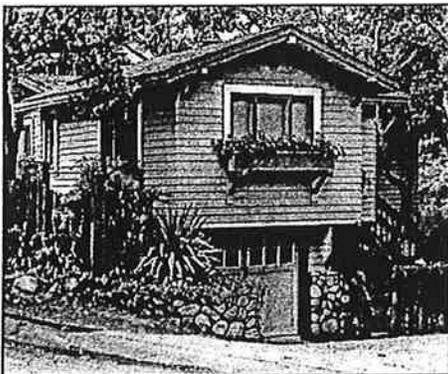
- To minimize the visual impacts of cars on a site
- To minimize the extent of hard, impervious surfaces
- To avoid garage structures that dominate the site and building design

6.1 Facilities for parking should not dominate the design of the house or site.

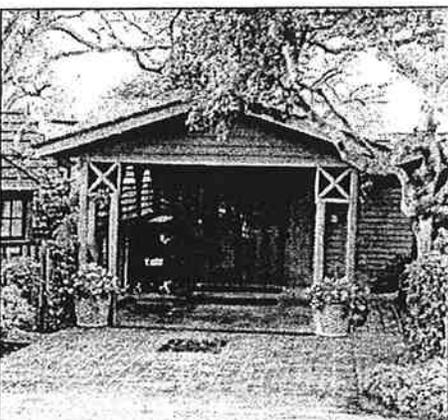
- Garages that are subordinate design elements are encouraged.
- Garages that are not visible from the street are encouraged.
- Garages integrated into the building design are encouraged.
- Keep the mass of a garage subordinate to that of the house.
- On smaller lots, with a garage visible from the street, provide a single, one-car garage door.
- Avoid moving established driveways if trees or significant vegetation would be harmed.

6.2 Parking facilities that maintain or enhance variety along the street edge are encouraged.

- Consider using a detached garage or carport.
- In some cases, parking facilities may be located in setbacks if this helps to achieve other design objectives.



In limited circumstances a garage may be located under a structure when the visual impacts will be minimized. This garage is clearly subordinate to the main building mass.



Consider using a carport for variety.

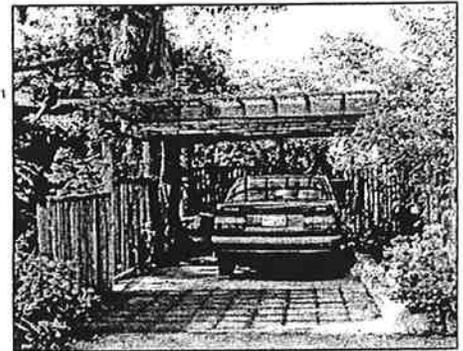
Driveway paving

6.3 Minimize the amount of paved surface area of a driveway.

- In general, the width of a driveway should not exceed 9 feet.
- Also consider using paving strips, or "tire tracks," for a driveway. This is especially appropriate for a long drive that runs to the rear of a property.
- Except for corner sites with a "through driveway," only one curb cut and one driveway should be provided for a site. Sharing a driveway with an adjacent property is an alternative that also should be considered.
- Avoid large expanses of paving for vehicles visible from the street.



Consider using a shared driveway to minimize the amount of paving area.



Position a garage (or carport) to maximize opportunities for open space, views and privacy.

6.4 Separate a driveway from a front walkway to reduce the visual impacts of paved surfaces.

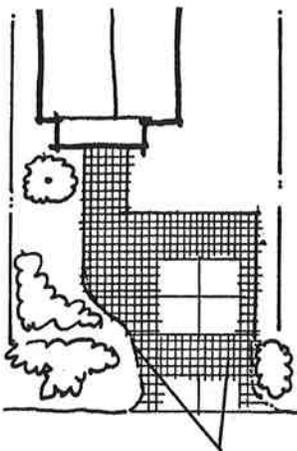
- Install plant materials to separate a walk from a driveway.

Garage location

6.5 Position a garage to maximize opportunities for open space, views and privacy.

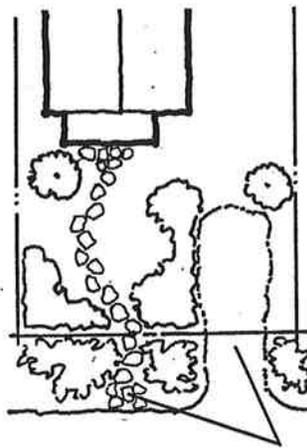
- Locate a garage to maintain larger contiguous areas of open space on a site.
- Locate a garage to screen activity areas on adjacent properties to enhance privacy.
- Locate a garage to maintain views through the property.

Discouraged



A walkway and drive are combined, increasing the apparent size of paved area.

Preferred



The walkway and drive are separated, reducing the apparent amount of paved area.



Preferred: Locating a detached garage at the rear of the lot



Preferred: Orienting the garage door away from the street.

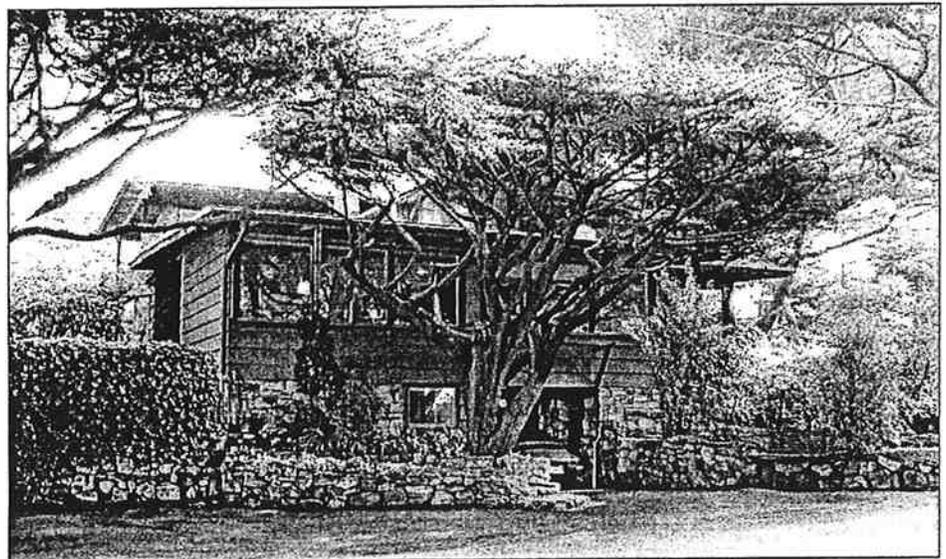
6.6 Locate a garage to minimize its visual impacts.

Three options should be considered:

1. Detached, at the rear of the lot.
2. Detached, in front, within the front setback is acceptable, when other design traditions objectives are met. This option should not be repeated to excess within a block.
3. Under the house, when other design tradition objectives are met. (See below.)

6.7 In limited circumstances a garage may be located under a structure when the visual impacts will be minimized.

- The garage door should not dominate the front of the house. A door perpendicular to the street is best in this condition, and...
- The driveway may not dominate the front garden and may not create a "ramp" effect or introduce tall or massive retaining walls. A sense of a front yard must be maintained.



When a garage is located under the house, the driveway should not create a ramp effect. The garage door also should not dominate the front.

Building Mass, Scale and Form

Most buildings in Carmel had simple forms and were relatively small in scale, particularly in relation to the size of their lots. A new building should appear similar in scale to those seen traditionally. Large complex structures and those with continuous, blank surfaces can appear massive and should be avoided.

7.0 Building Mass and Scale

A building should contribute to the character of the neighborhood and should not dominate the street or neighboring properties. Structures composed of a few smaller, simple elements, rather than a single large, continuous form, are encouraged. A large building mass can block views, interfere with the enjoyment of open space and restrict free passage of light and air. Therefore, a large, expansive building mass should be avoided.

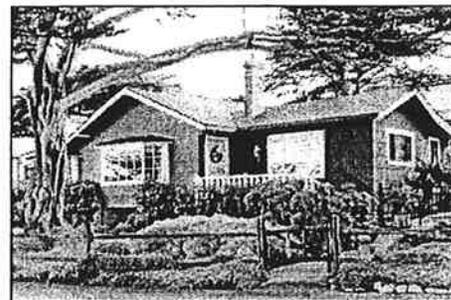
Keeping the actual building mass in scale with those seen traditionally is the best approach. This can be achieved by building less than the allowed floor area, constructing some floor area below grade, avoiding excessive roof volume and keeping above-ground floor levels close to grade. Where a large building mass does occur, some relief should be provided by introducing just a few varied roof lines, offsets or smaller building elements. However, the result should remain simple in character and the overall composition should appear to be a set of discreet rectangular building masses, rather than a complex assemblage of varying planes around a single building mass.

Objectives:

- To maintain the massing and scale of building characteristic of Carmel
- To keep building scale in proportion to the area of the site
- To encourage diversity in housing design reflecting the eclectic mix of styles that is characteristic of Carmel

Policy P1-63

Adopt design regulations that establish maximum limits on site coverage and floor area in order to preserve open space and avoid excessive mass and bulk. Establish provisions for less allowable coverage and floor area on sites constrained by environmental factors to preserve open space, vegetation, natural landforms and the character of surrounding neighborhoods.



Structures composed of a few smaller, simple elements, rather than a single large, continuous form, are encouraged.

Building Mass

7.1 A building's mass should relate to the context of other homes nearby.

- Larger building masses should be divided into forms that are similar in scale to houses seen in the immediate neighborhood.
- Using a detached secondary structure (garage, guest house, etc.) is encouraged to reduce the overall mass of the primary building on a site.

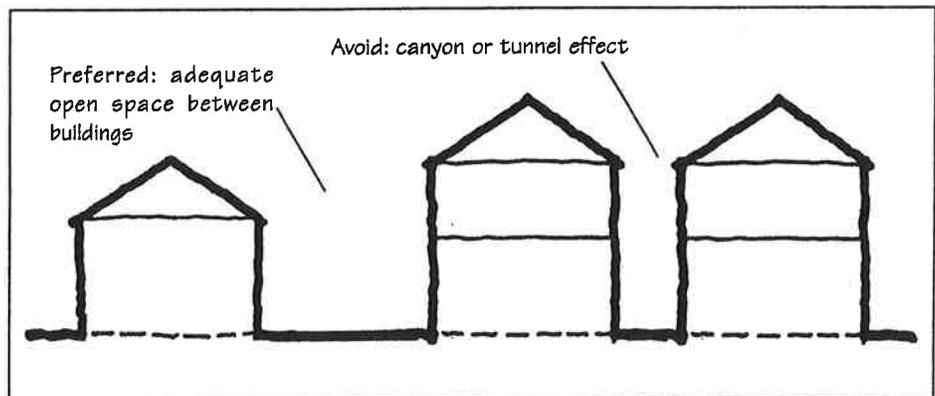
7.2 Minimize the mass of a building as seen from the public way or adjacent properties.

Consider these options:

- Build to less than the maximum floor area.
- Locate some floor area either fully or partially below grade.
- Avoid using tall volume spaces (e.g. high ceilings or steep pitches across wide spans) that increase the visual bulk of a building above grade.
- Avoid long, uninterrupted wall planes.

7.3 Avoid placing a tall building wall near a property line when it will be adjacent to similar walls on neighboring sites.

- Preserve open spaces and access to light between properties.
- Avoid the appearance of a narrow corridor or tunnel between buildings as seen from the street.



Discouraged: Avoid the appearance of a narrow corridor between buildings as seen from the street.

7.4 Avoid the creation of large, unused underfloor areas that increase building mass.

- On sloping lots, floor levels should be stepped to follow site grade.
- If floor levels cannot be stepped, larger underfloor spaces should be counted and used as part of the allowed floor area.

7.5 When locating floor area in a below grade or partially below grade space, minimize the visual impacts as seen from the public right of way and site disturbances.

- Locate any walkout area or terrace to the side or rear to reduce the building height as it will be perceived from the street. When this is not feasible provide screening with other building elements or landscaping.
- The use of exposed retaining walls should be minimized when developing a below-grade space.
- Impacts on tree roots also should be minimized.
- The visual impacts of window wells should be minimized.

Building Scale

7.6 A building should relate to a human scale in its basic forms.

- Oversized elements make structures appear massive and should be avoided. Avoid a “grand entry” design, for example.
- Avoid design treatments that produce a top-heavy appearance such as large cantilevered building elements, roof forms that dominate the body of the building and wide chimney structures.
- Low, horizontal building forms that appear to hug the ground are encouraged.

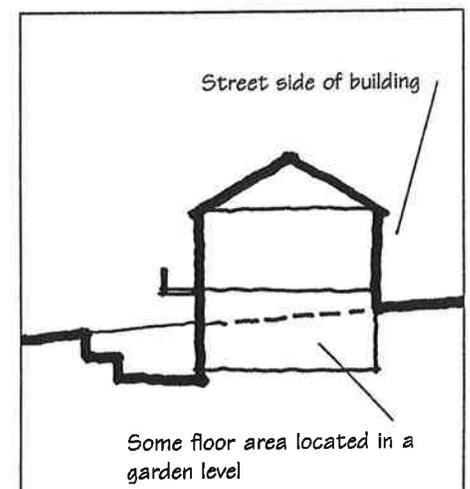


A building should relate to a human scale in its forms, elements and in the detailing of doors, windows and walkways.

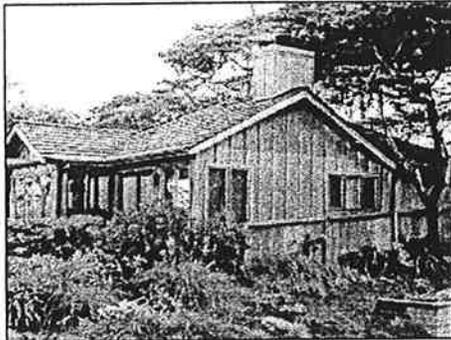
Building Height

7.7 A building should appear to be no more than two stories in height, as viewed from the public right-of-way.

- Presenting a one-story height to the street is encouraged.
- Locate two story elements downhill, except where this would appear dominant or out of scale when viewed from the public right-of-way or a neighboring home.
- Using a low building plate height also is encouraged. The maximum plate height for the first floor of a building is 12 feet. (See the Land Use Code for details.) However, this maximum is established to accommodate sloping building sites. In cases where a building site is relatively flat, a lower plate height is appropriate. Interior wall heights should generally not exceed 8 feet.
- Locating some floor area below grade or reducing roof pitch are appropriate ways to reduce building height and mass.



Locating some floor area in a garden level is also encouraged as a means of reducing building height.



Traditional building forms were simple. This should be continued.

8.0 Building Form

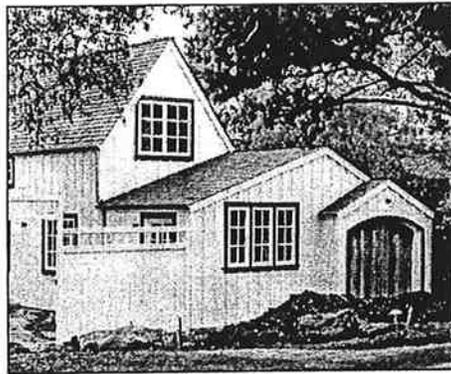
Traditional building forms were simple. Although variety exists in the composition of forms, they read as collections of simple solids. This should be continued.

Objectives:

- To maintain the range of traditional building forms
- To promote simple building forms that fit with neighborhood context

Detail of Building Form

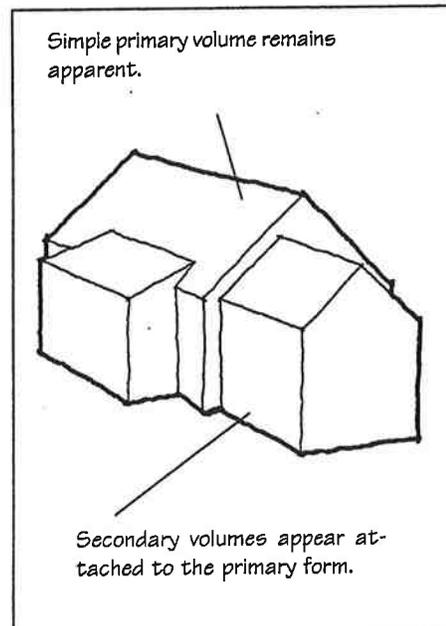
One may tend to think that providing extensive variety in building planes, roof planes and in architectural details will reduce the perceived scale of a building or help it to blend with the neighborhood. In fact, this can result in a facade that is overly “busy” and can attract attention, making the mass of the building more noticeable. This treatment is out of character and should be avoided.



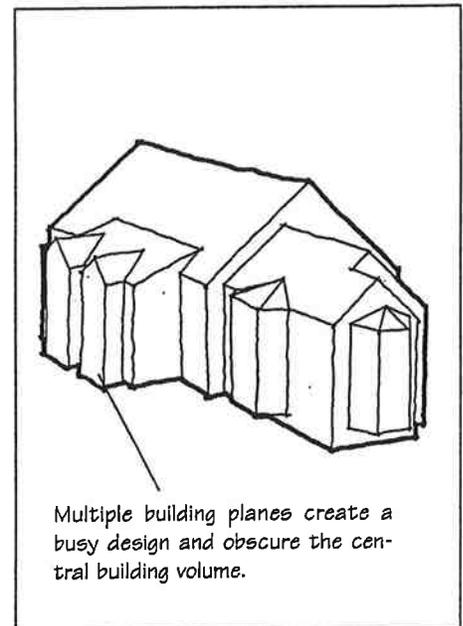
Preferred: A composition of simple building forms

8.1 A building form should appear similar to those seen traditionally.

- Building forms should be simple. Basic rectangles, L or U-shapes are typical. Avoid “busy” building forms.
- A form with a horizontal emphasis is preferred.
- Roof forms should be composed of just a few simple planes.



Preferred: Simple building form and a simple roof



Discouraged: Complex building form and multiple planes

8.2 Use restraint when introducing variation in building planes.

- Keep building walls simple in the extent of variation in wall and roof planes.
- Use building offsets to achieve specific purposes such as avoiding tree limbs or breaking the mass of a large building element.
- Avoid building forms that are complex, monumental, formal or out of scale with the neighborhood context.



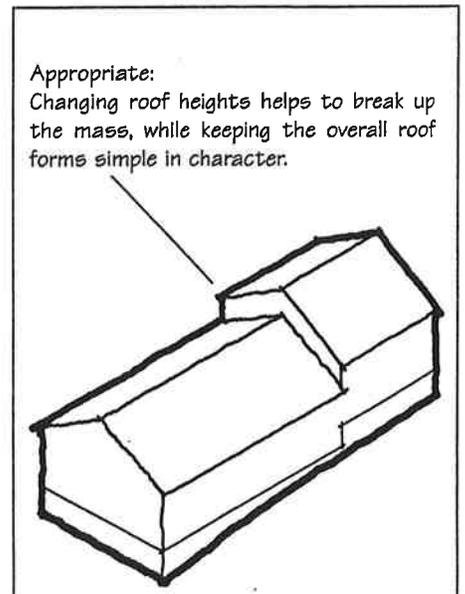
Simple primary roofs with subordinate attachments, such as dormers, are appropriate.

Roof Form

Varied roof forms are typical in a block and this tradition should be continued.

8.3 Use simple roof forms. Limit the number of subordinate attachments, such as dormers, to avoid a cluttered design.

- For example, basic gable and hip roofs are traditional and their use is encouraged.
- Flat roofs may be used to a limited extent on smaller, one-story structures. They should not be used on large buildings or two-story elements.
- Avoid complex roof forms that call attention to the design or add unnecessary detail.
- Mansard roofs typically add more mass than other forms and are discouraged. A sloping roof "skirt" that conceals a flat roof is particularly out of character. Similarly, a gable roof that is "clipped" at the top adds unnecessary complexity to a design and should be avoided.



Appropriate: Changing roof heights helps to break up the mass, while keeping the overall roof forms simple in character.

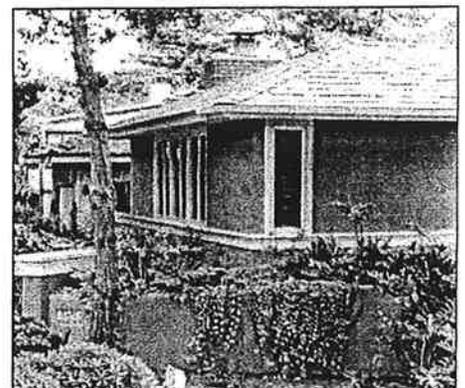
8.4 A roof form should be in proportion to the scale of the building.

- In general, moderately pitched roofs (4:12 to 6:12) are preferred.
- Shallow to moderately pitched roofs are appropriate on one story buildings. More steeply pitched roofs with low plate lines can be used on two story buildings.
- The wider the area a roof must span, the shallower the pitch should be to avoid excess height or flat roofed elements.

Preferred: A simple roof form is appropriate.

8.5 Roof eave lines should appear low in scale.

- Low plate heights that reduce the height of exposed walls are encouraged.
- Consider tucking second story rooms under the sloping sides of a roof form and keeping low eave heights. Light can be brought to such rooms using dormers or clerestories.



Roof eave lines should appear low in scale.

Special Thanks

City of Carmel-by-the-Sea:

Community Planning Division

P.O. Drawer G
Carmel, CA 93921
(831) 624-6835

Brian Roseth, Principal Planner
Gary Kelly, City Forester
Rick Tooker, Planner
Ben Berto, Senior Planner
Chip Rerig, Associate Planner
Mary Bilse, Associate Planner
Karen Crouch, Adm. Assistant

Design Traditions

Steering Committee:

E. Pope Coleman, Chair
Gary Girard
Earl Power
Robert Kohn
Francyne Laney
Anne Bell
Bart Bartron
Olof Dahlstrand
Dianne Billingsley
Melanie Billig
Brian Congleton
Paul Eid
Judy Lyle
Marshall Hydorn
Barbara Brooks

Planning Commission:

Janice Fisher, Chair
E. Pope Coleman
J. Allan Paterson
Bill Strid
Frank Wasko
Robin Wilson
Bart Bartron

*A very special thanks to
all of those who partici-
pated in the series of pub-
lic workshops which the
city sponsored!*

Consultants:

Winter & Company

775 Poplar Avenue
Boulder, CO 80304
(303) 440-8445

Noré V. Winter
Brian W. Koenig
Julie Husband

RACESTUDIO

1128 The Alameda
Berkeley, CA 94707
(510) 528-4316

Bruce Race, FAIA, AICP

Scott Lewis,

Landscape Architect

530 Jackson Street, Fourth Floor
San Francisco, CA 94133
(415) 982-7924

Scott Lewis

Real Estate Services Group

1785 Massachusetts Avenue NW
Washington, DC 20036
(202) 588-6258

Donovan Rypkema

Resources

Definitions of Key Terms

Average grade is a horizontal line approximating the ground elevation through each building on a site, used solely for calculating the *exterior volume* of buildings. Average grade is calculated in four steps: (1) Plot the ground level perimeter of the building on a topographic map of the site using 1-foot contour intervals. Assign an elevation of zero for the lowest contour line that passes through the building. (2) Find each point where a contour line intersects an exterior building wall. Using a straight line through the building, connect each point to where the same contour line emerges from the building footprint, (3) for each line drawn in step #2 multiply its length by its elevation and then sum all results, (4) divide the sum from step #3 by the sum of all line lengths. The resulting elevation is extended as a horizontal line through the building. Average grade is calculated separately for each building.

These definitions apply to the material presented throughout the City's Residential Design Ordinance and Design Guidelines.

A **basement** is an underground room or excavated space with at least 5-feet but not more than 9-feet of interior height, finished or unfinished, the exterior walls of which are exposed no more than 1 foot above *final exterior grade* and *existing grade* at any point. The finished floor of the story above a basement shall not be more than one foot above either grade. (Note: In calculating the floor area of a basement space it may be necessary to count part of a room or space as *basement* and part of a room or space as above-ground space. Room walls do not have to follow the lines formed by grades and these definitions.) Basement spaces may be used for any residential occupancy allowed by the Uniform Building Codes such as bathrooms, family rooms, hobby rooms, offices, mechanical equipment, storage, and, if equipped with window wells, for bedrooms.

Community Character is a sense of unity or belonging together that elements of the built environment exhibit because of similarities among them.

Context is the area surrounding a project site that helps define the community character which that site or building is a part of. In general, a building should visually relate to its surrounding context.

Design Guidelines are a community's policy about design. Design guidelines provide guidance to users contemplating a project in Carmel, by providing ideas and solutions to various design issues facing residential development.

Detached Garage is a completely freestanding structure, which is not attached to the house by any roof or wall element.

Design Review is the process of receiving comments on a project's design from an officially designated, and trained, review body. In Carmel, this review is conducted by the Design Review, the Planning Commission or the Planning Staff.

Existing Grade is the set of elevations representing the surface of the ground prior to commencing grading, filling or other site alterations for a project. On developed sites, as each topographic line passes beneath a building it shall be assumed to be a straight and level line for purposes of defining existing grade. *Existing grade* may also be referred to as *Natural Grade*. It is intended by this definition not to measure this grade from the floor of any excavated space within a building.

On developed sites previously excavated to create basements or other spaces partially below grade, an approximation of preexisting conditions may be substituted using grades on adjacent sites, retaining wall and prior survey maps for reference as long as the resulting project complies with all Design Guidelines and avoids the appearance of large exposed cuts and unnatural topography.

Exterior Volume is the total space occupied by all structures located above *average grade*. Exterior Volume is expressed in cubic feet and is measured from the exterior wall and roof surfaces of each building. Where the *average grade* line lies below a building the exterior walls of the building are projected down to average grade to calculate its volume. Portions of a building located below average grade are excluded from exterior volume. Exterior Volume includes all dwellings, guesthouses, subordinate units, garages, carports, gazebos, chimney structures, storage sheds, projecting windows and covered porches.

For that portion of any balcony or deck located more than 18" but less than five feet above existing or final grade, the space measured from the top of any rail or enclosing walls down to either grade shall count as exterior volume. For balconies and decks serving the second floor or located five feet or more above grade, the space measured from the floor or underside surface of the balcony or deck to the top of any rail or enclosing walls, counts as exterior volume.

Exterior Volume excludes the volumes in and under arbors, trellises and roof eaves. That portion of any deck or balcony located within 18" of grade is excluded from exterior volume. For building elements not addressed by this definition the Planning Commission shall determine whether an element counts as volume based on its perceived contribution to mass and bulk as seen from any neighboring site or from the street.

Final Exterior Grade is the elevations representing the surface of the ground at all parts of a site not occupied by a building upon project completion. This grade follows the actual soil surface around the buildings including all excavations and fills. Where final exterior grade intersects a building wall this term may also be called perimeter grade. Excluded from this definition are one or more window wells serving basement rooms, the combined area of which do not exceed 10% of the floor space in the total basement area.

Floor Area is the total gross square footage included within the surrounding exterior walls of all floors contained within all enclosed buildings on a building site. In above-ground spaces, floor area is measured at the exterior of the enclosing walls. In basement spaces, floor area is measured at the interior of the enclosing walls. Floor area shall include, but shall not be limited to, all floors of all enclosed spaces within all buildings, basements, mezzanines, guesthouses and studios. All required parking shall be counted as floor area whether supplied by garage, carport or other means.

1. **Base Floor Area** is the calculated floor area allowed on a site prior to consideration of *bonus floor area* and adjustments to floor area based on site constraints.
2. **Bonus Floor Area** is floor area located in a basement, in addition to the *base floor area*, granted to a site as an incentive to reduce above-ground mass and bulk.

Height is the vertical (plumb) distance from the appropriate grade to the design feature being measured. The appropriate grade to use depends on the design feature; some features are measured from *existing grade* while others are measured from *final exterior grade*.

Land Use Code is the official code of ordinances adopted by the Carmel City Council that regulates all matters relating to the design and construction of land improvements within city limits.

Mass, Building is the physical size and bulk of a structure—roughly the volume of space which a building occupies, above ground, on a site. Typically, the larger the building the greater its perceived mass is.

Open Space is any portion of a lot that is free of structures, paving or improvements other than landscaping.

Preservation is the act or process of applying measures to sustain the existing form, integrity and materials of a historic building or structure, and the existing form and vegetative cover of a site.

Scale, Building is the size and proportions of the structure and its design elements as they appear to the pedestrian.

Setbacks, Building are imaginary vertical planes applied to each building site beyond which building improvements may not encroach. These areas must remain as open space on a lot. The front yard setback in Carmel, for example, is fifteen feet on most lots.

Site Coverage is the total ground area of a site occupied by materials or improvements that cover the natural soil but which are outside the perimeter of structures that count as floor area. Site coverage includes:

1. Fully permeable materials including gravel, decomposed granite, spaced decking and exterior stairs. However, shredded bark, wood chips and similar materials used as mulch within fully landscaped areas shall not be counted as site coverage.
2. Semi-permeable materials including sand-set bricks or pavers, garden walkways of small paving stones, and arbors.
3. Impermeable materials including asphalt, concrete, mortared brick and stone, unspaced decking and balconies at any level, garden walls, solariums, bridges, sheds not counted as floor area, ponds, and swimming pools.