

**L I V A B I L I T Y   P L A N**

**Section Nine**

**Comprehensive Plan 2009**

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## INTRODUCTION

Urban design principles strive to improve the quality of life, or "livability", within a community by enhancing the man-made environment and by creating new opportunities for social interaction among residents. Good urban design practices also help to create a legible development pattern that makes the community understandable to residents and visitors alike. They often deal with the sensory response of people to the community's physical environment: its visual appearance, its aesthetic quality, and its spatial character.

Urban design can be used to bolster people's sense of well being and civic pride, their awareness of different places within the community, and even their behavior toward one another. The creative application of specific urban design improvements, no matter how large or small they may be, should result in a more aesthetically and functionally stable community which is a happier and healthier place to live, not only in the physical sense, but in the psychological and emotional sense, as well.

Promoting livability also has long lasting financial benefits. Creating places where people want to be encourages reinvestment into the community. This reinvestment in turn helps to keep taxes low because property values tend to increase which lessens the need to raise tax rates. Quality, sustainable development attracts businesses and residents, expanding the tax base. Financial investments promote a sense of ownership of the community.

## THE "LIVABLE" COMMUNITY

This *Livability* element of the Comprehensive Plan integrates urban design considerations into the City's growth and development processes to create an attractive and recognizable physical environment that complements the functional organization of Bee Cave, and to reinforce a sense of "community" among the people who live here (see **Illustration 9-1**). The intent of this *Livability* element is to provide recommendations for maintaining and strengthening both the City's image as a community of excellence and leisure, as well as its identity as a small town in spite of its proximity to the expanding City of Austin.

### **Illustration 9-1**

EXAMPLE OF A "LIVABLE" SPACE



In the simplest terms, creating “livability” means creating places where people want to be, that contribute to interaction and discourse with others, and that are personally fulfilling. It means creating environments which are “people-centric” rather than “auto-centric”. Many factors contribute to the “livability” of a community. This section has three primary focuses, which will be discussed in further detail throughout this section:

- (1) Create a sense of place,
- (2) Promote desirable neighborhoods, and
- (3) Encourage green concepts

## **SENSE OF PLACE**

Often thought of as mere beautification of a community, “community image” elements contribute to a much more complex process of utilizing a community's natural and man-made features to establish a distinct visual image and identity -- a “sense of place” -- for the community.

Communities often lack visual individuality, especially in the wake of major metropolitan areas, like the City of Austin. Smaller communities generally have more of a challenge than larger communities due to the fact that smaller communities generally do not have the advantage of distinctive skylines as identifying elements. They must endeavor to create their own identity, or signature, in other ways that are both conducive and responsive to their own individual size, scale and character. A recognizable image/identity is not only important to the inhabitants of a particular community, it is also important to those who live within surrounding areas and to visitors. It helps to provide orientation -- a point of reference for people moving into, around within, and out of a community.

## **DISTINCTIVE NEIGHBORHOODS**

Distinctive neighborhood characteristics create an individual “personality” within each community, or a sense of place. Additionally, contributing to the character of the community provides the residents with a sense of ownership of the neighborhood, which encourages residents to be more proactive in property maintenance and addressing security concerns.

The location and mix of housing where each property has different yet complementary characteristics — view, proximity to open space, access to retail services, house size and type — create neighborhoods that attract reinvestment because of each property’s individuality. This is often not the case in large homogenous subdivisions.

Identifying and preserving existing neighborhood landmarks (such as distinctive buildings and prominent natural features) are another method to foster neighborhood pride and a sense of

ownership, and to emphasize a neighborhood's individuality. The preservation of open space, its location within the neighborhood and its use (as a common green, recreation area, preservation of floodplain or other use) also creates unique and distinctive neighborhoods.

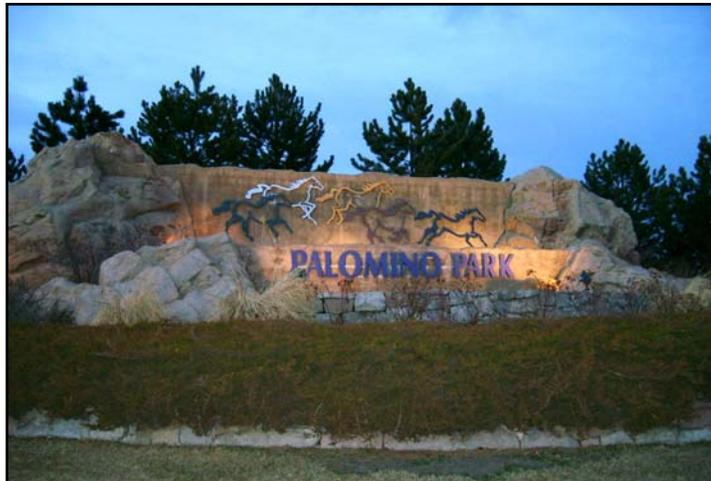
## GATEWAY ENTRANCES

The "sameness" that is often inherent to communities within a particular geographic area makes it appear that each one is just like its neighbors. For example, the visual appearance of the City to a traveler along State Highway 71, R.M. 620, or F.M. 2244 may be the same, or very similar, to the appearance of any other community. Due to the fact that developers and their architects often adhere to popular design trends of a particular time period, rapid development tends to result in homogeneity of style – it all looks similar. This lack of design variety, especially along major travel corridors, tends to create anonymity within a region – one community looks just like its neighbor, and it is difficult for people to know when they have left one community and entered another. Of course, many communities have taken steps to beautify and individualize their physical appearance, thereby creating their own image/identity to set them apart from their neighboring cities. Therein lays the challenge for the City of Bee Cave.

Gateways are significant elements that can help residents and visitors to determine the geographical boundaries of a community (see **Illustrations 9-2** and **9-3**). Also known as entryways or portals, gateways can provide a strong sense of arrival to, as well as a sense of departure from, the community. They are the first thing visitors see when they come into a community, and the last impression visitors have when leaving, and they can provide a strong indication of a community's image if they are prominent enough. One of the major urban

### **Illustrations 9-2 and 9-3**

EXAMPLES OF GATEWAY ENTRANCES



design issues facing the City of Bee Cave is the visual continuity, or sameness, along its major thoroughfares and highways.

Bee Cave has taken steps to create gateways along the major access corridors into the community. The City should continue this practice, specifically along State Highway 71, R.M. 620 and F.M. 2244 (Bee Cave Road). Properly developed, distinctive gateways into the community add greatly to the City's sense of identity, and could contribute the sense of "arrival."

The design of gateways into the City of Bee Cave should be guided by several factors. One of the most obvious factors is the number of people using a particular entry point. The most heavily traveled the roadway entering the community is State Highway 71, although both of the other primary access points also carry a large amount of traffic. Two entry features for the City placed directly along State Highway 71, both leading into and out of the community (i.e., at the eastern and western corporate limits) would be a positive step in creating a visual identity. These gateways could be as simple as carefully designed landscape features, which may include a special type of signage or other identifier that signifies arrival into the City. Other logical places for such entry features would be along both R.M. 620 and F.M. 2244.

Another important factor in the design of gateways is to develop an entryway that provides a sense of identity for the community, while projecting a desirable image for the city. This can be accomplished through careful use of signage, landscaping, and other design elements such as lighting, fencing, paving patterns, art/sculptural elements, and a variety of earth forms. Consideration should be given to establishing a uniform design concept for all gateway treatment areas, and hierarchical distinction between major and minor gateways can be achieved through design modification for each type of entry feature.

Design of entry features should take into consideration the setting in which each feature will be placed. Although any entry feature might ideally be placed at the corner of a roadway intersection which is at, or near, the true City limits, the design of the feature might conflict either visually or aesthetically with an adjacent retail use at the intersection. In such a situation, it may be prudent to move the entry feature further into the community to provide a better setting and better visibility, such as placing it upon the thoroughfare median, if there is one. The traffic speed at which an entry feature is viewed must also be taken into account, and the size, boldness and scale of the feature should be designed accordingly.

Many communities throughout Texas have successfully utilized this technique. However, the degree of success or effectiveness has greatly depended upon the design quality of the entry feature, as well as upon how strategically it is located and how visible it is from the road. It is important for the City of Bee Cave to assert its differing qualities, and to distinguish itself from other Hill Country communities. Gateway features are a simple first step in this direction. Priority for funding entry features, both in terms of total dollars spent per entry and in terms of the timing of expenditures, should be directly

related to the number of people using a particular entry point. Often, donations can be solicited from civic groups to assist in the funding of specific gateways and/or their maintenance (e.g., an "adopt a gateway" program).

## NEW URBANISM & TRADITIONAL NEIGHBORHOOD DESIGN (TND): TOWN CENTER

New Urbanism and Traditional Neighborhood Design (TND) are different terms used to describe the same end result – a community that fosters social interaction and mixed use pedestrian-friendly areas (see **Illustration 9-4**). The core idea behind the New Urbanism movement is the intent to revive a sense of community in today's increasingly urbanized culture. The main characteristics of a traditional neighborhood design are grid layouts, tree-lined streets, alleys, public squares, mixed use neighborhood centers, and varying residential densities; the pedestrian, often ignored in the typical urban area, is a significant element in the overall design. In other words, the "new urbanism" and "traditional neighborhood design" concepts strive to resurrect the early twentieth century American towns.

The Town Center land use designation was established to further this objective. As is stated within the *Future Land Use Plan* element, a mixture of land uses is appropriate for the Town Center, as it is also intended to be a place for local residents to shop, conduct personal and government-related business, live in the same place as their business, meet neighbors to eat in a restaurant or café, enjoy arts/cultural facilities, gather for community events and festivals, and other similar activities. The Town Center is substantially complete now and incorporates many of these attributes. The City should continue to use the present Town Center standards for the remaining development of the area.

### **Illustration 9-4**

PEDESTRIAN-FRIENDLY ELEMENTS WITHIN A TOWN CENTER



The availability of outside spaces such as courtyards, outdoor seating areas, small squares, pocket parks, and greenbelts, helps to promote a higher level of pedestrian activity and serves to enhance a

pedestrian-oriented environment (see **Illustrations 9-5** and **9-6**). Where possible, both residential and nonresidential land uses should be oriented to these outside spaces.

**Illustrations 9-5 and 9-6**

OUTSIDE SPACES WITHIN A TOWN CENTER



Traditional Neighborhood Design (TND) is oriented towards reducing urban sprawl while facilitating efficient use of existing and future services. It is important to note that the City of Bee Cave, with its numerous environmentally sensitive areas, should allow this type of design to be utilized generally in conjunction with the clustering concept, primarily due to the fact that neighborhoods developed on the basis of TND tend to have higher densities and less permeable service area than what is generally desired within the City of Bee Cave. It is therefore envisioned that the only area in which this type of development should be allowed is within the proposed Town Center area. The Town Center has been proposed within the *Future Land Use Plan* (refer to **Plate 8-1** for graphic support) with the intent that it be designed in keeping with the guidelines of TND, and therefore, to incorporate many of the characteristics of a TND area. The City of Bee Cave should limit the availability of residential TND design in other areas of the City in order to prevent it from becoming the predominant type of development within the City.

While this type of design is more likely to promote the desired small town environment within the City of Bee Cave, it is important to stress that the intent of this neighborhood design within Bee Cave is to create a rural, small town environment. The “new urbanism” and TND concepts should not be exploited in order to create higher density areas and small-lot subdivisions without the benefits and design concepts embraced by New Urbanism. A way in which to ensure that the purpose and intent of these concepts is upheld within the City is through careful and thorough enforcement of zoning and subdivision regulations, as well as any other applicable City ordinances.

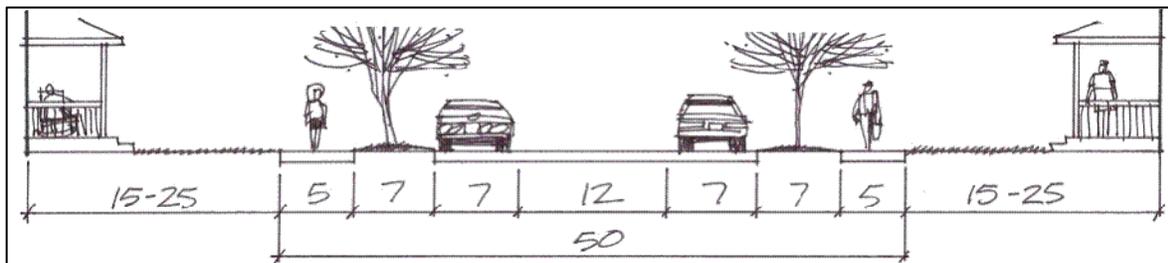
## DESIGN CRITERIA FOR NONRESIDENTIAL DEVELOPMENT

One of the factors that will determine the ultimate efficiency of Bee Cave's thoroughfare system is the manner in which properties adjacent to major thoroughfares are developed and used; the integrity of State Highway 71 is especially critical, as is that of R.M. 620 and F.M. 2244 (Bee Cave Road). The term "streetscape" has been developed in recent years to describe the visual image that is projected by a community street and by various elements within and adjacent to the street right-of-way (see **Illustration 9-7**). Overhead power lines, traffic signals, signs, light fixtures, plant materials, and street paving are some of the most noticeable physical elements that are found within a typical streetscape. The visual appearance of adjacent developments and their physical form also influence one's perception of a streetscape and the overall community.

The current streetscape along within the City of Bee Cave is generally characteristic of the typical state highway, with regional traffic, especially at peak periods of the days, various gas stations, and several restaurants. Steps should be taken now, as new development occurs, to improve and upgrade the image of the community as seen from State Highway 71, while at the same time protecting its traffic-carrying capacity.

### **Illustration 9-7**

DIAGRAM OF A YIELD SECTION



As nonresidential growth continues to expand in the core of the City, it is important to retain the Hill Country atmosphere. The City has already adopted many design guidelines for these nonresidential land uses, which will become increasingly significant as growth continues. The following discussion of additional guidelines is intended to establish a framework of key elements that should be considered when addressing the criteria for nonresidential design practices. These guidelines should be included within the Subdivision Ordinance or the Zoning Ordinance of the City of Bee Cave.

There are many specific site design items that can be addressed by the private sector during site development. Often, much of what creates a better view from the street is simply better site design. Site design review can be incorporated into the City's normal project review of site plans. The following sections discuss site design elements that could enhance nonresidential developments, especially along State Highway 71, R.M. 620 and F.M. 2244.

## GRADUATED SETBACKS

### PURPOSE:

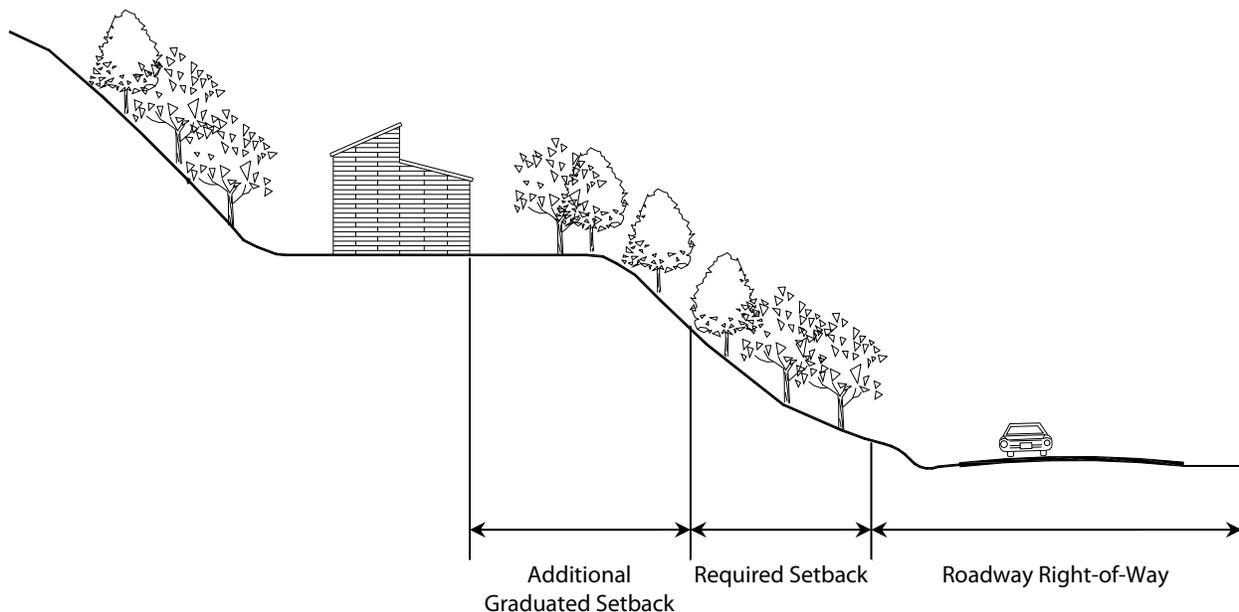
- Provide a positive visual image of the City of Bee Cave from all areas within the City, as well as from the major regional thoroughfares.

### SUGGESTIONS:

Implement a “graduated setback” ordinance, which would require nonresidential buildings to be increasingly setback from the road or from adjacent residential land uses as their height increases, or as the natural topography of the land increases (refer to **Illustration 9-8**). The City has implemented graduated setbacks according to Sec. 32.05.006(h) of the Zoning Ordinance; it is suggested, however, that the regulation be revised to require height measurement from the roadway rather than from the base of the structure.

### **Illustration 9-8**

#### GRADUATED SETBACK TO PROTECT VIEW FROM ROAD



## PLACEMENT OF PARKING AREAS

### PURPOSE:

- Provide a positive visual image of the City of Bee Cave along all major thoroughfares.

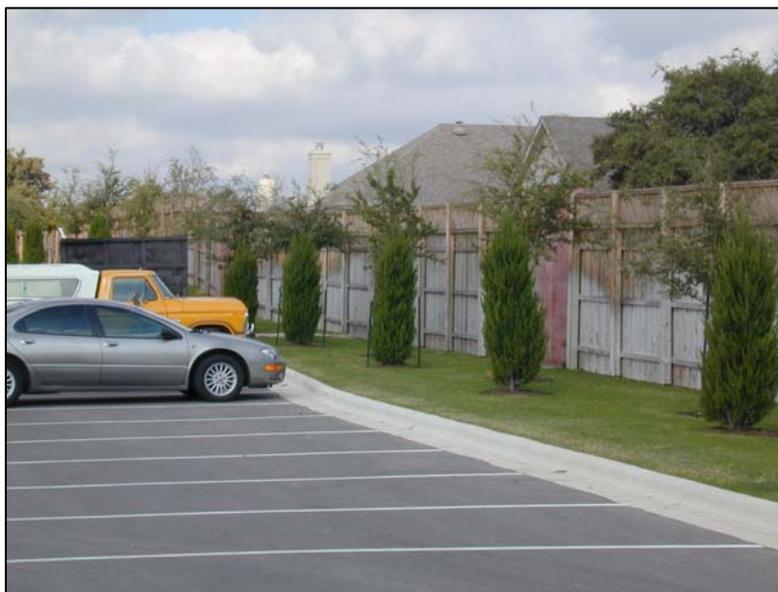
### SUGGESTIONS:

Related parking areas/facilities for all nonresidential uses located along any of the three major thoroughfares, State Highway 71, R.M. 620 and F.M. 2244, should be placed either at the side or at the rear of the primary structure and away from the major thoroughfares, thereby ensuring that they are not visible from the major thoroughfares whenever possible (see **Illustration 9-9**). An exception to this may occur when protection of natural vegetation or site constraints make such design impractical. The City may also require any additional landscaping and/or screening elements necessary to further shield parking areas from the view of those traveling on major roadways.

The City currently requires effective buffering or parking areas from street view and from the adjacent properties according to Sec. 32.05.002(f)(13) of the Zoning Ordinance; however, it is recommended that the City consider encouraging or requiring parking areas be located to the side or rear of buildings located along these thoroughfares.

### **Illustration 9-9**

PARKING BEHIND OFFICES NOT VISIBLE FROM THE ROAD AND  
SCREENED FROM ADJACENT RESIDENTIAL LAND USES



## EDGE TREATMENTS

### PURPOSE:

- Provide a positive visual image of the City of Bee Cave along all major thoroughfares.
- Provide a buffering element between residential and nonresidential land uses.

### SUGGESTIONS:

The City currently requires all nonresidential uses located along any of the three major thoroughfares (State Highway 71, R.M. 620 and F.M. 2244) to implement landscaping elements along the length of any major thoroughfare frontage within the setback area (see **Illustrations 9-10** and **9-11**) according to Sec. 32.05.002(f)(2) of the Zoning Ordinance. It is suggested this requirement remain in place.

The City also requires a screening wall between nonresidential and residential land uses. (It would be the responsibility of the nonresidential land use to construct and maintain the screening wall). It is recommended the City modify the existing requirement in Sec. 32.05.002(f)(3) of the Zoning Ordinance to include only masonry materials and remove the option of wood fencing. The following three alternatives should be considered to provide to the developer:

- MASONRY WALL WITH LANDSCAPING – 6’ in height, constructed of rock, stone or other material similar in appearance and quality;
- WROUGHT-IRON WALL WITH LANDSCAPING – 6’ in height with City-approved “Hill Country” landscaping materials;
- NATURAL SCREEN – 6’ in height with City-approved “Hill Country” landscaping materials.

It should be noted that each of the three alternatives must provide a continuous, opaque screen within two years of initial planting, and that earth berms may be used to further shield the view from the road.

### **Illustrations 9-10 and 9-11**

#### LANDSCAPING AND MASONRY ELEMENTS USED TO SCREEN BETWEEN INCOMPATIBLE LAND USES



## CIRCULATION

### PURPOSE:

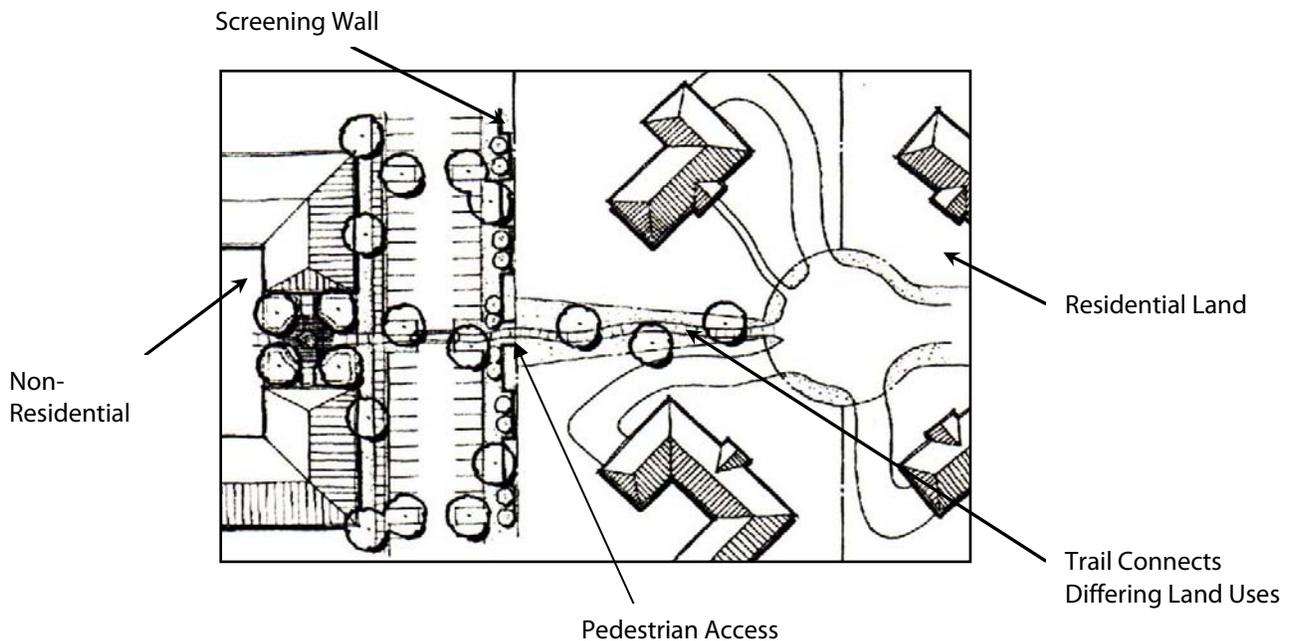
- Provide continuous pedestrian access throughout the City of Bee Cave, to all residential and nonresidential areas, through the construction of a trail system.

### SUGGESTIONS:

The City should continue to encourage pedestrian connectivity between varying land uses. Require all nonresidential developers to consider pedestrian access to and from adjacent land uses. The City may require the developer to construct a trail through the developing property that connects to existing trails or rights-of-way for trails on adjacent properties (refer to **Illustration 9-12**).

### **Illustration 9-12**

ALLOWS PEDESTRIAN ACCESS BETWEEN RESIDENTIAL AND NON-RESIDENTIAL LAND USES



## LAYOUT OF STRUCTURES

### PURPOSE:

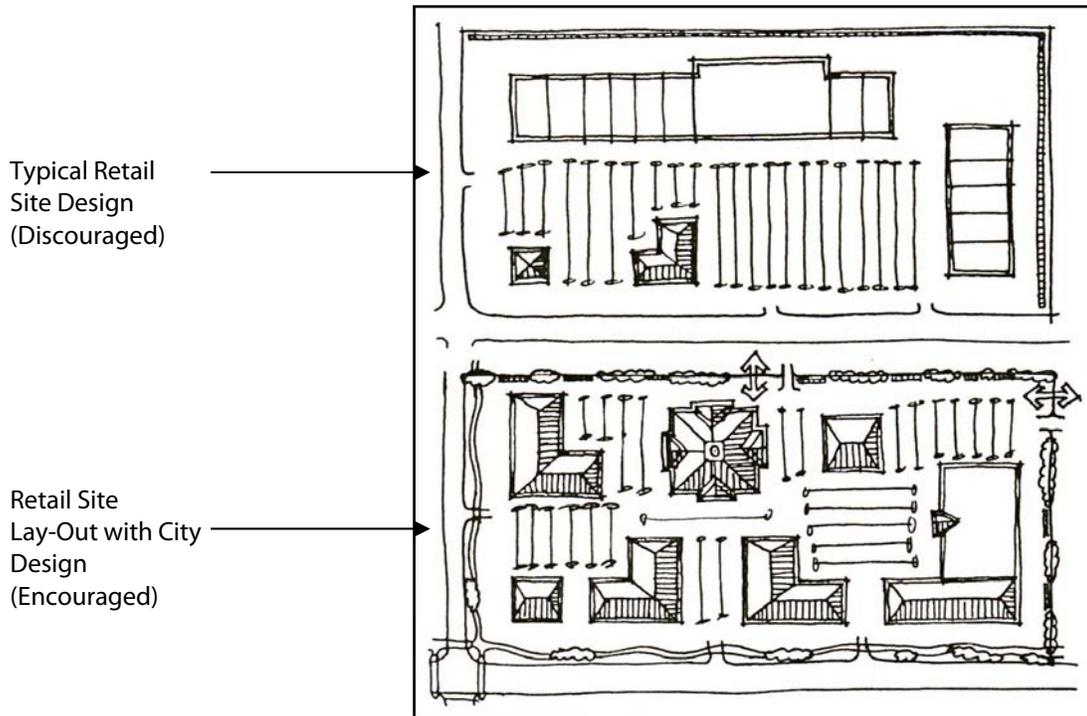
- Ensure the maintenance of the existing small-town atmosphere of the City of Bee Cave.
- Maintain the existing integrity of water quality and stormwater runoff in the City of Bee Cave area by reducing the percentage of impervious cover.

### SUGGESTIONS:

Encourage nonresidential developers to construct small-scale, pedestrian-friendly areas with small building "footprints", parking areas, and pedestrian walkways integrated into the City trail system. The City should create incentives for increasing the amount of landscaping, thereby increasing the amount of pervious cover by allowing the reduction in the number of parking lot spaces on a sliding scale (refer to **Illustration 9-13**). Although the Zoning Ordinance encourages small-scale developments and landscaping elements, it is recommended the City consider allowing a reduction in the number of parking lot spaces as an incentive to developers.

### **Illustration 9-13**

"CITY" SITE DESIGN HELPS TO CREATE A SMALL-TOWN ATMOSPHERE



## HEIGHT OF STRUCTURES

### PURPOSE:

- Protect the integrity of the scenic views in and around the City.
- Further the objective of a pedestrian-friendly environment by ensuring that nonresidential structures within the City are constructed at a human scale.

### SUGGESTIONS:

It is recommended the City continue to limit the height of nonresidential structures throughout the City of Bee Cave to a maximum of 50 feet. Allow increases in height in relation to topography only on a case-by-case basis.

## SLOPE RESTRICTIONS

### PURPOSE:

- Protect the integrity of the highest points of elevation in the City by prohibiting nonresidential land use construction directly at these points.
- Preserve the highest points of elevation in the City for current and future residents of, as well as visitors to, the City of Bee Cave.
- Protect the integrity of the ridgelines that are characteristic of the Hill Country.
- Minimize the negative visual impacts of water towers and other structures.

### SUGGESTIONS:

Prohibit the construction of any nonresidential buildings directly upon the highest point of any nonresidential tract of land, and prohibit all development on topography with slopes greater than 20%. Currently Sec. 32.05.004(c) requires delineation of steep slopes on all plans, however development is not prohibited.

## BUILDING MATERIALS

### PURPOSE:

- Ensure the aesthetic value of nonresidential land uses.
- Create cohesiveness throughout the City by establishing which building façade materials contribute to the desired “Hill Country” look and feel in the City of Bee Cave (see **Illustration 9-14**).

### SUGGESTIONS:

Continue to include within the Zoning Ordinance a list of acceptable materials and materials that require further examination by requiring a Conditional Use Permit, as well as permitted and prohibited colors to reflect the Hill Country atmosphere. The following is a recommended list with these categories:

Permitted Materials	Requires Conditional Use Permit
Limestone Rustic wood Stucco Granite marble Other stone Glass (30% or less of exterior wall) Brick Adobe (brick)	Painted wood Concrete Glass (over 30% of exterior wall) Synthetic materials
Permitted Colors	Prohibited Colors
Muted, rustic earth tones	Bright colors Primary colors Pinks, purples

### **Illustration 9-14**

“HILL COUNTRY” BUILDING MATERIALS



## ARTICULATION OF BUILDING FACADES

### PURPOSE:

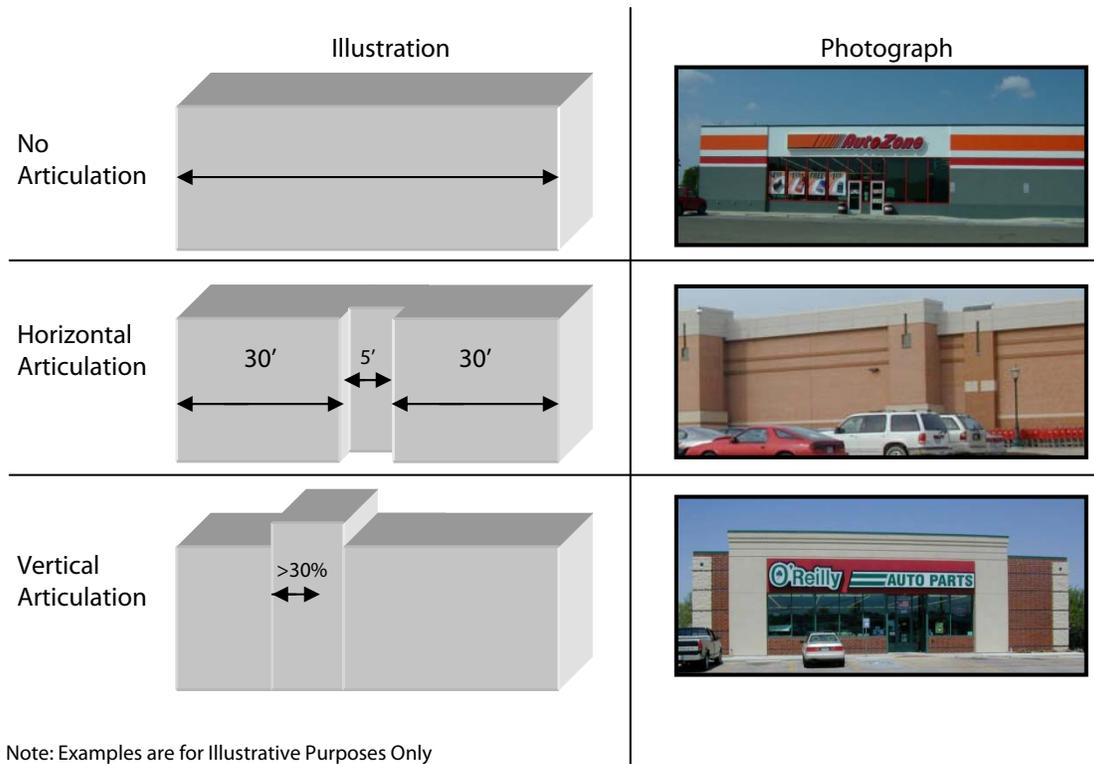
- Ensure the aesthetic value of nonresidential land uses, especially those that are larger in scale.

### SUGGESTIONS:

The Zoning Ordinance (Sec. 32.05.005(c)(5) currently requires horizontal articulation for wall planes longer than 50 feet, and vertical articulation for at least 30% the distance of the roofline. Refer to **Illustration 9-15** for a basic diagram of horizontal and vertical articulation.

### **Illustration 9-15**

#### FAÇADE OFFSET DIAGRAM



## SIGNAGE

### PURPOSE:

- Ensure a sense of cohesiveness throughout the City of Bee Cave, especially along the major thoroughfares, including State Highway 71, R.M. 620 and F.M. 2244, thereby maintaining and enhancing the aesthetic appeal of the City.

### ILLUSTRATIONS 9-16 AND 9-17

#### MONUMENT-STYLE SIGNS



### SUGGESTIONS:

Require all nonresidential signs to be monument-style signs proportional to the size and scale of the primary building structure. Encourage shared signage; especially along the major thoroughfares (refer to **Illustrations 9-16** and **9-17**). Require the use of masonry materials as the primary building materials of all nonresidential signs. Wood materials should be allowed as a conditional use. Maximum allowable height should be approximately eight feet.

The Sign Ordinance (Sec. 28.04.005 and Sec. 28.04.008) currently requires colors and materials as described in the nonresidential building materials section and compatible and complementary to the primary structure, and also prohibits lighting as an element of the sign itself (i.e., neon lighting). It is recommended this requirement continue.

Prohibit the construction and use of billboards.

Ensure that the existing Sign Ordinance is enforced.

## LANDSCAPING

### PURPOSE:

- Enhance the view and image of the City of Bee Cave, especially along the major thoroughfares, including State Highway 71, R.M. 620 and F.M. 2244.
- Contribute to the overall quality and visual appearance of individual nonresidential developments (see **Illustration 9-18**).
- Contribute to the percentage of pervious cover within individual nonresidential developments.

### SUGGESTIONS:

The Zoning Ordinance has increased to a minimum 75' landscaped edge for all nonresidential land uses along the three major thoroughfares, State Highway 71, R.M. 620 and F.M. 2244 (Sec. 32.05.006(f)(3)). The City should consider requiring a minimum 50' landscaped edge adjacent to any street right-of-way with the exception of these three major thoroughfares.

Provide incentives to existing nonresidential land uses to persuade them to comply with the landscaping and tree preservation sections within the Zoning Ordinance, and ensure that all new nonresidential land uses are compliant.

The Zoning Ordinance currently encourages xeriscape techniques in order to reduce the amount of watering and irrigation that are often necessary for common landscaping materials, and discourages the use of ground cover that would require a large amount of watering and irrigation (i.e. Saint Augustine grass). These policies, covered in further detail in Sec. 32.05.002(k), should continue.

### **Illustration 9-18**

#### NON-RESIDENTIAL LAND USE WITH LANDSCAPING



## SCREENING OF REFUSE CONTAINERS

### PURPOSE:

- Maintain and enhance the appearance of the City of Bee Cave from public streets and neighboring properties.
- Prevent public view of solid waste containers (e.g., dumpsters).

### SUGGESTIONS:

The Zoning Ordinances currently requires a screen around any commercial or industrial solid waste container that is visible from an existing or proposed public roadway (see **Illustrations 9-19** and **9-20**). Dumpsters located at the rear of a building would not require screening. This requirement can be found in Sec. 32.05.003(c)(7) of the Zoning Ordinance.

Solid waste containers should not be placed within required parking spaces, and they should allow proper access and vehicular circulation by service trucks.

### **Illustrations 9-19 and 9-20**

#### EXAMPLES OF REFUSE CONTAINER SCREENING



## SCREENING AND LOCATION OF OUTSIDE STORAGE, LOADING AREAS, AND UTILITY EQUIPMENT

### PURPOSE:

- Improve appearance of community from public streets and neighboring properties.
- Prevent public access to storage areas.

### SUGGESTIONS:

Loading, service, and outside storage areas should be screened and should not face onto or be visible from a major or minor thoroughfare, wherever possible. Loading docks and service areas should be located at the rear of the building. When loading docks and/or outside storage areas are located within a side yard, they could be screened from adjacent properties and public rights-of-way by using masonry walls in conjunction with landscaping materials (refer to **Illustration 9-21**). Sec. 32.05.001(d)(2) of the Zoning Ordinance currently restricts these elements.

Cell towers and other utility structures should be designed to blend into the surrounding area whenever possible (see **Illustration 9-22**). The Zoning Ordinance currently includes this provision in Sec. 32.05.002(f)(7).

### **Illustrations 9-21 and 9-22**

#### SCREENING OF OUTSIDE STORAGE AND UTILITY EQUIPMENT



## **SITE DESIGN CRITERIA FOR RESIDENTIAL DEVELOPMENT**

The design and character of residential neighborhoods is an important component of the community's overall urban design. As more property is developed into residential subdivisions, such design factors as the provision of open space, adjacency issues, screening, and landscaping, as well as the design layout of the subdivision itself, will be critical to the perception of the City's residential neighborhoods. While the community clearly must provide developers with options appropriate to the marketing of their subdivisions, the community must also strive to maintain some continuity between different residential subdivisions; this is also addressed within this *Comprehensive Plan 2009*.

Older residential neighborhoods will need continued maintenance in such areas as streets and utility service, while newer residential subdivisions offer the potential of embracing and including positive design elements that will add value, both aesthetic and monetary, to the homes constructed within them. The vast majority of the existing homes and residential areas in the City of Bee Cave are characterized by high-quality development. The enhancement and maintenance of these high-quality areas is of the utmost importance.

## **SINGLE FAMILY RESIDENTIAL LOT DENSITIES FOR NEW DEVELOPMENT**

### **Typical New Neighborhood/Subdivision Design (Base Density)**

Major thoroughfares typically attract large volumes of traffic; therefore, it is not desirable to front residential lots directly onto these streets. Fronting residences on major thoroughfares will reduce efficiency of the thoroughfares due to the number of driveways, curb cuts and cross-streets, as well as the possibility of on-street parking in front of the houses. Also, when a subdivision's layout produces lots fronting onto a major thoroughfare, there is ultimately pressure later on to convert these residences into retail or commercial land uses. The majority of frontage of along the major thoroughfares within the community should be used for retail and commercial purposes. As stated within the *Future Land Use Plan* element, the preponderance of retail uses should be along and adjacent to State Highway 71, R.M. 620 and F.M. 2244 (Bee Cave Road).

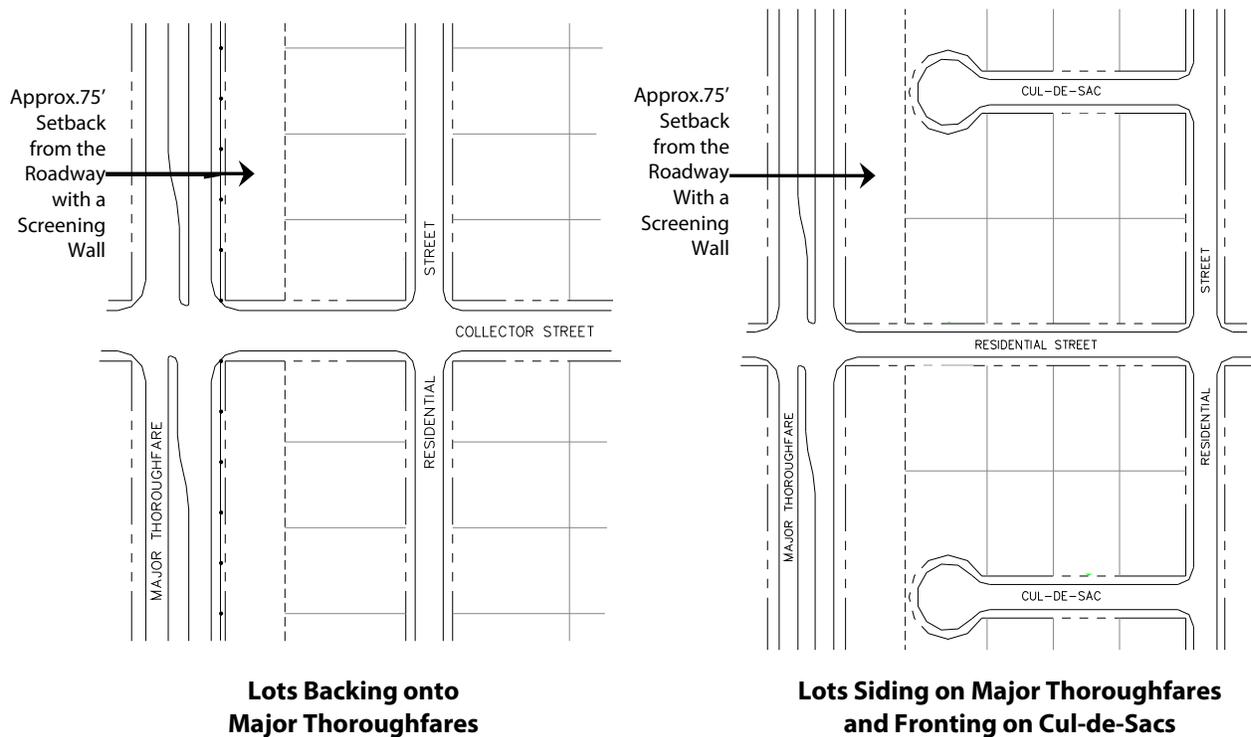
The general appearance and image of residential neighborhoods and the community as a whole are also greatly affected by the orientation of development along the major streets. Fronting lots onto major roadways tends to present aesthetic and noise problems for area residents due to large amounts of traffic passing in front of homes. Of equal importance is the safety factor when area residents must back their vehicles into the arterial to leave their homes. No space is typically provided along arterial streets for parking which would serve the needs of visitors, deliveries, etc.

A preferred approach is to side residential lots onto major streets since this allows more visibility into

the neighborhood with views of pleasing elements like home fronts and landscaped yards. This tactic also enhances neighborhood security and minimizes negative traffic impacts upon the surrounding major thoroughfares. The careful treatment of subdivision design adjacent to future major thoroughfares will contribute to the safety and capacity of the thoroughfares. Also it will help to protect adjacent residential properties from the negative influences of these roadways, and from pressures to convert residences into nonresidential land uses in the future.

**Illustration 9-23**

SINGLE FAMILY RESIDENTIAL LOT LAYOUTS ADJACENT TO MAJOR THOROUGHFARES



**Illustration 9-23** shows residential lot arrangements that are designed to protect not only the residences, but the capacity and function of the adjacent thoroughfares. One method of accomplishing a desirable thoroughfare/residential relationship is to design residential lots fronting onto a parallel residential street and backing onto the major thoroughfare. By restricting access and by providing screening and suitable landscaping with an adequate setback between the residential development and the major thoroughfare, it is possible to avoid problems that would be created if all abutting lots had direct access onto the major thoroughfare. A setback of 75 feet should be required for developments adjacent to State Highway 71; this 75-foot should also be required for those adjacent to either R.M. 620 or F.M. 2244. Intersections of collector streets or other subordinate roadways should be spaced as shown on the Thoroughfare Plan (see **Plate 4-1** in the *Thoroughfare*

Plan element). Street spacing such as this will result in an interior subdivision design permitting access to the neighborhood, but discouraging the movement of through traffic within a residential area.

**Illustration 9-23** also shows how short, "open" ended cul-de-sac streets may be used to create lots that do not have direct access onto a major thoroughfare. This technique offers a practical and economical way to protect the capacity of the major thoroughfare, and it also helps to preserve the integrity of the residential neighborhood. This method of "siding" residential lots generally does not require screening walls; therefore, it is one of the more desirable options utilized by developers in subdivision design. Cul-de-sac streets can be efficient methods in developing land, and they are very desirable for residents due to minimal traffic flows. The use of cul-de-sac streets alternated with through collector streets that intersect with a major thoroughfare tends to yield an efficient lot layout design, and this practice also maximizes thoroughfare capacity and efficiency. **Illustration 9-25** shows comparative examples of pavement (impervious cover) versus lot yield for several suggested residential street configurations adjacent to major thoroughfares. All lots should have at least 24 feet of frontage on a residential, public street.

A neighborhood should be predominantly residential in nature. It is usually bounded by thoroughfares or collector streets, or by some other natural or manmade features such as creeks, or topographic features. A neighborhood should contain some park or open space features, and should have some convenient retail areas and various other facilities, such as churches, are also

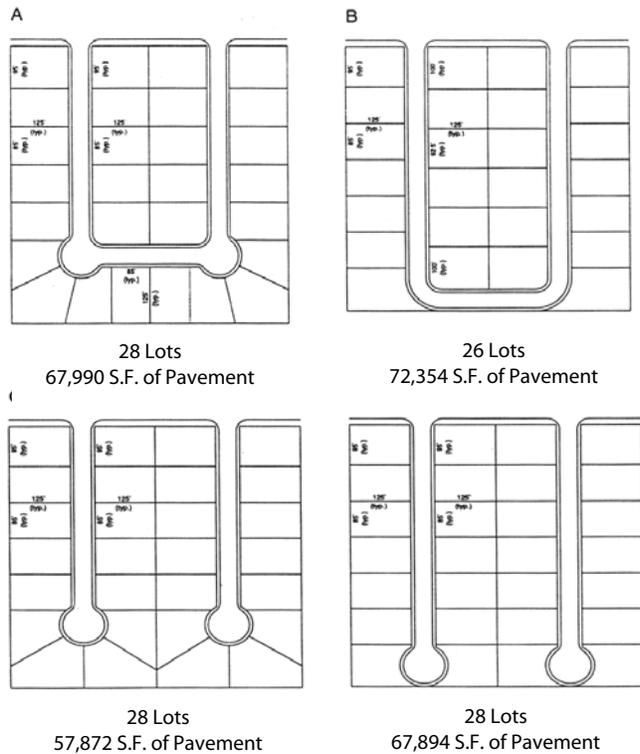


**Illustration 9-24**

A "HILL COUNTRY" RESIDENTIAL DEVELOPMENT

**Illustration 9-25**

COMPARISON OF "PAVEMENT" TO "LOT YIELD" FOR SUGGESTED RESIDENTIAL STREET CONFIGURATIONS ADJACENT TO MAJOR THOROUGHFARES



appropriate as part of a typical neighborhood. It is also defined in more abstract terms by the sense of "community" and the quality of life enjoyed by the people who live and play there. Well-designed neighborhoods provide a setting for residents to develop a strong sense of belonging, which is promoted by their interactions with one another. The quality and livability of the City's neighborhoods are integral components of the overall character. The key to a successful neighborhood is creating a sustainable environment where the ongoing investment in property is supported by public investment in parks and greenbelt areas; opportunities for social interaction; accessibility for pedestrians, bicyclists and vehicles; and distinctive characteristics which give an area a unique identity. In summary, neighborhood viability may be quantified in terms of the following characteristics:

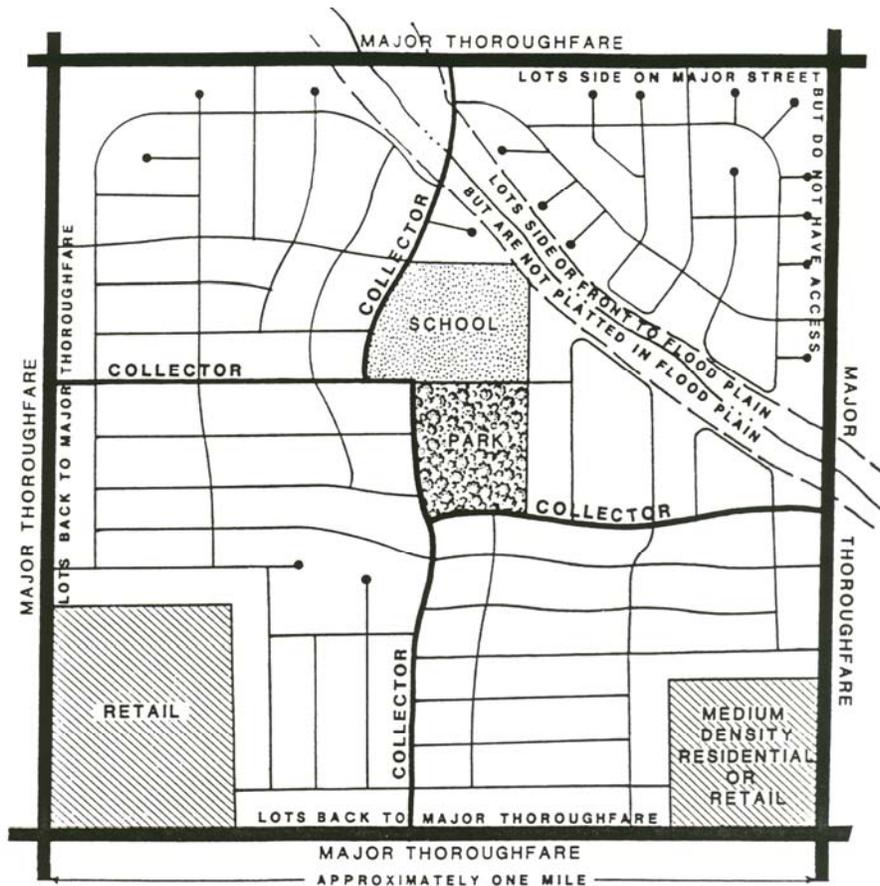
- Opportunities for social interaction;
- Careful and strategic placement of retail uses and other appropriate nonresidential uses within the neighborhood area;
- Continued investment in public and private property to stabilize property values;
- Condition of public facilities and infrastructure serving the area;
- A sense of "community" and "belonging" among residents; and,
- Access to amenities such as open space and trails.

The City of Bee Cave should strive to ensure that these elements are present in all neighborhoods within the City, in both existing and new developments. These characteristics should also be considered vital to the quality of life within the City of Bee Cave as a whole. **Illustration 9-26** shows a typical, generalized neighborhood layout and how the proposed subdivision treatments and thoroughfare standards may be used.

The most important aspects of **Illustration 9-26** are that major thoroughfares bound the residential neighborhood area and residential lots are not allowed to front directly onto these roadways. Lots should back to the major thoroughfares, and cul-de-sacs are used to open up the neighborhood and to provide access to residences from interior streets rather than directly from the major roadways. Collector streets are generally not continuous, but are instead offset within the interior of the neighborhood, which discourages cut-through traffic. In addition, the City should require a creek setback protection zone in order to protect sensitive drainage areas, particularly Little Barton Creek.

**Illustration 9-26**

TYPICAL RESIDENTIAL NEIGHBORHOOD LAYOUT



It is essential that Bee Cave develop additional design criteria for typical subdivision developments, such as:

- Continue enforcement of the Tree Preservation Ordinance, thereby limiting where and when trees may be removed;
- Require trees to be planted at a distance of 30 to 40 feet along both sides of residential subdivision streets in order to mitigate any tree removal;
- Require all units to have a two-car garage with off-street parking provisions in driveways;
- Develop a street cross section for use within neighborhoods for rural density (refer to the "Type 'F' Rural Street" section within the *Thoroughfare Plan* element);
- Require the construction of ribbon curbs instead of raised curbs for drainage purposes, whenever possible (refer to **Illustration 9-27**);
- Require sidewalks or connections to the City trail system; these could be further enhanced with streetscape elements such as decorative lamps, benches, and planters in all new developments;
- Require the construction of neighborhood entrance signs that are constructed primarily of masonry materials and that incorporate landscaping elements (refer to **Illustration 9-29**);
- Require that all lighting elements (i.e., street lighting, trail lighting) in these neighborhoods must be low-intensity, in order to ensure that no resident is adversely affected.
- Require formation of neighborhood associations, which would be responsible for maintenance of the neighborhood for all new residential developments.

**Illustration 9-27**

RESIDENTIAL DEVELOPMENT WITH RIBBON CURBS



**Illustration 9-28**

RESIDENTIAL DEVELOPMENT WITH ENTRANCE SIGN AND LANDSCAPING ELEMENTS



## Cluster Design

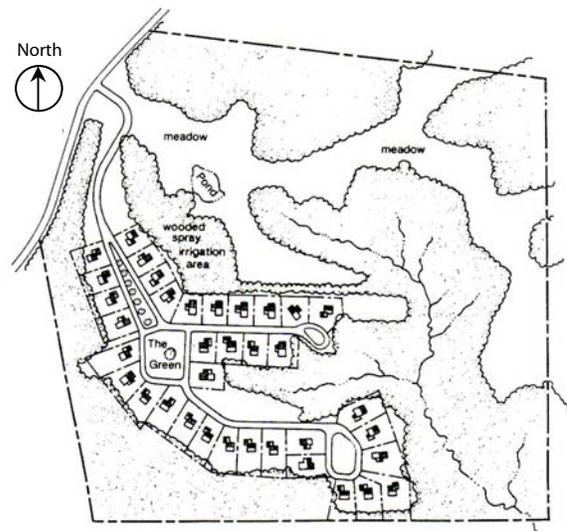
The most important aspect of cluster design in subdivisions is the conservation of open space, thereby helping to create rural character in communities and neighborhoods. A cluster design creates large pockets of planned open space by allowing clustering of development (see **Illustrations 9-29** and **9-30**). Incentives, such as allowing smaller lot sizes, can be developed in order to encourage developers to use this concept. This method of neighborhood development utilizes increased development densities in some areas of the subdivision by decreasing the density of development in other areas; permanent open space is set aside, while the overall density of the subdivision remains the same.

This type of development can be encouraged in areas where the base density is relatively low. This is the case in the City of Bee Cave, with a desired average density of one dwelling single family unit per acre. The City should provide developers with incentives to utilize this design technique. One way in which the City can do this is generally referred to as a “density bonus”, whereby a developer is allowed higher density levels in exchange for the provision of open space. Another incentive is to allow smaller street widths and cul-de-sac radii, as well as allowing the developer to reduce development costs. This would also help to create more pedestrian friendly streets, with street grading designs using varying materials (i.e., brick, cobbled stones) and creating interesting street patterns.



**Illustration 9-29**

TYPICAL LARGE-LOT SUBDIVISION WITHOUT PROVISION OF OPEN SPACE



**Illustration 9-30**

PRESERVATION OF OPEN SPACE THROUGH CLUSTER DESIGN

It is recommended that the City of Bee Cave maintain the one-acre-lot average for single family homes, however, the base density of one-half-acre could be reduced to the individual lot size to a minimum of 20,000 feet. The following is an example of the clustering concept as it is intended to be implemented in the City of Bee Cave:

A landowner with a 100-acre tract would be allowed to develop 100 lots, which is no different than what is allowed when developing a typical neighborhood design. However, the reduction of lot size to 20,000 square feet provides a monetary incentive to the developer (less initial cost for roadways and improvements), and allows the community to benefit from the perpetual open space that is the result of the clustering concept. The result could be 100 lots on less total acreage than the typical development with a one-acre lot minimum.

Several important criteria should be established for the use of the clustering technique within the City of Bee Cave. Clustering should not be permitted on development tracts of less than 20 acres. Tracts that are 20 acres or less do not provide the City of Bee Cave with enough open space to warrant the reduction in lot size. In addition, clustered developments of 20 acres or less would not result in a neighborhood with a rural, small-town character and design. When the clustering technique is used, it should be buffered from adjacent major roadways and existing or proposed large-lot development.

As previously mentioned, this type of residential neighborhood design could be especially valuable for the City of Bee Cave due to its various environmental concerns. It is important to note, however, that the calculation of open space should not include areas that are previously protected by City Ordinance or by other legal constraints, including elements such as creek setbacks and floodplain areas. However, the clustering technique does allow for the conservation of other environmentally sensitive areas that may not be otherwise protected, such as ridgelines and view areas with great variations in topography. Utilizing and encouraging this design technique within the City of Bee Cave would allow the area to develop residential areas, as it likely will due to high demand, but in a positive way that recognizes the significant environmental concerns while ensuring the maintenance of the existing rural character of the City.

## **DESIRABLE NEIGHBORHOODS**

This section discusses recommendations on how to create desirable neighborhoods. Desirable neighborhoods are places where people want to live – both existing and future residents. Although many of the recommendations apply to nonresidential development, it is primarily focused on residential neighborhoods.

## **AESTHETICALLY-PLEASING AND PEDESTRIAN-FRIENDLY STREETS**

An important aspect of a desirable neighborhood is the streetscape and the level to which it accommodates pedestrian activity. The streets should not diverge from the “urban fabric” of the neighborhood, but rather complement the surroundings. The following are recommendations to help promote aesthetically-pleasing and pedestrian-friendly streets:

- Maximize the visibility of architecturally distinctive cultural and civic facilities and open space area corridors.
- Maximize visibility of open space areas by locating parks in prominent locations, and by widening open space corridors such as flood plains and trails where they are crossed by roadways.
- Where streets terminate or “T” into another roadway, ensure that there is a prominent feature or building at that point. Good examples of prominent features include such things as parks, clock towers, public art, and architecturally distinctive civic, cultural or nonresidential structures.
- Design streets so that they gently curve, to provide oblique views of buildings and streetscape, but still maintain a general grid pattern to maintain a sense of orientation.
- Ensure that sidewalks are at least 5-feet wide (the minimum dimension that two people can comfortably pass each other) and that canopy trees are located between the sidewalk and curb to create shade and a feeling of safety for pedestrians.

## **EXISTING NEIGHBORHOOD IMPROVEMENTS**

Bee Cave has over 1,000 acres of existing residential land use, nearly a third of the acreage within the City limits; therefore, efforts should be made to continually improve the existing neighborhoods. There are many approaches to neighborhood revitalization or restoration.

One possibility for the City is to work with neighborhood associations and property owners to retrofit neighborhoods with canopy trees to slow traffic and to shade sidewalks and street paving, when physically and financially feasible. On streets that are excessively wide, strategically locate tree planters in the parking lane of the street, while being careful not to interrupt drainage. The installation of street trees can be achieved by developing a City program for planting trees in neighborhoods as residents request it and on a cost-share basis. Other coordinated efforts could include installation of landscaped roundabouts to break-up long straight streets, where physically possible, or screen rear alleys and garages when they abut public streets and open space.

Another opportunity for the City would be to facilitate volunteer-based programs to upgrade housing and improve neighborhood areas. Funds for such programs could be garnered from grants or from charitable donations (e.g., from local businesses, churches, service organizations). Many cities across Texas host home improvement projects in which neighborhood residents volunteer to help with basic exterior household repairs. Many cities receive supply donations from local hardware stores.

The City may find it useful to document the conditions of neighborhoods as they age to identify deteriorating areas and to prioritize such areas for improvements. Facts that should be documented include but are not limited to, code violations, public safety reports (e.g., police and fire), and ownership/rental percentages. There are several methods that can be used to determine these facts, including conducting door-to-door housing condition surveys and reviewing code violation reports.

## REDEVELOPMENT OF EXISTING RETAIL CENTERS

The City should proactively plan for the redevelopment of some existing retail centers (see **Illustration 9-31**). Since retail centers often fail because of a surplus of retail-zoned land, competition from other centers, and a weakening market that is moving to other areas, such centers should generally be redeveloped. Redevelopment should largely consist of non-retail uses such as new residential (including townhomes and patio homes) and neighborhood-oriented parks, with limited retail uses (such as a coffee shop, bakery or restaurant). In addition, new homes in a neighborhood area often reinvigorate investment in the adjacent neighborhoods.

All redevelopment of retail centers should be geared to creating attractive pedestrian areas which are well connected to surrounding development. Developments with big-box retail buildings and shopping malls could be retrofitted into pedestrian-oriented developments by looking at the underground utility runs, “out-parcels”, parking pads, vehicular circulation and the basic building structure to determine how to extract a street and block pattern for infill. Another key issue is to determine how any redevelopment would connect to surrounding streets and paths. Therefore, it is important to review new big box and retail development for future redevelopment options prior to approval.

### **Illustration 9-31**

#### FORMER RETAIL AREA REDEVELOPED AS PATIO HOMES

(Conceptual Plan from *Joint Retail Study*, 2002, Townscape, Inc.)



## HOUSING OPTIONS

It is important for cities to provide a variety of housing for the full life cycle of citizens and to meet the needs of different segments of the population – people of different ages, socio-economic levels, and employment levels. The “full-life cycle” is intended to describe all stages of life – young singles, professional couples, families with children, empty-nesters, retirees and seniors, including those requiring living assistance. This should include high income homes of various types (large lot, small lot, townhome, loft and condominium) and more affordable housing types (small lot/small home, townhome, loft, condominium, mother-in-law suite, carriage house and others).

## SPECIAL HOUSING TYPES

**Casita/Cottage.** Single family, but house size is a maximum of 1,500 square feet.

**Multi-Unit Large Home.** A building which is designed and constructed to look like a large single family home, but may contain 4-6 units. Parking is located behind the main structure and may be accessed by a drive-thru from the front street, or by an alley.

**Loft.** These are units which are located in association with retail (either above or in close proximity to) and generally include a mezzanine space. They are often located above the first floor which may be office of retail use.

**Live-Work Unit.** A live-work unit is a residential unit which includes the capability for the ground floor space adjacent to the front sidewalk to become an allowed business use.

**Mother-in-law Suite.** This is an accessory residential unit located on a single family lot which does not have a presence on the front street. It will also include a separate entry from the main house. It is often constructed above the primary unit’s garage or attached to the rear of the primary home.

**Carriage House.** A carriage house is similar to a mother-in-law suite except that it is generally larger, located on a larger lot and located above a large parking garage or stables.

The City should consider ensuring the creation and integration of residential units suitable for young people and empty-nesters by encouraging developments of 20 acres or more to include:

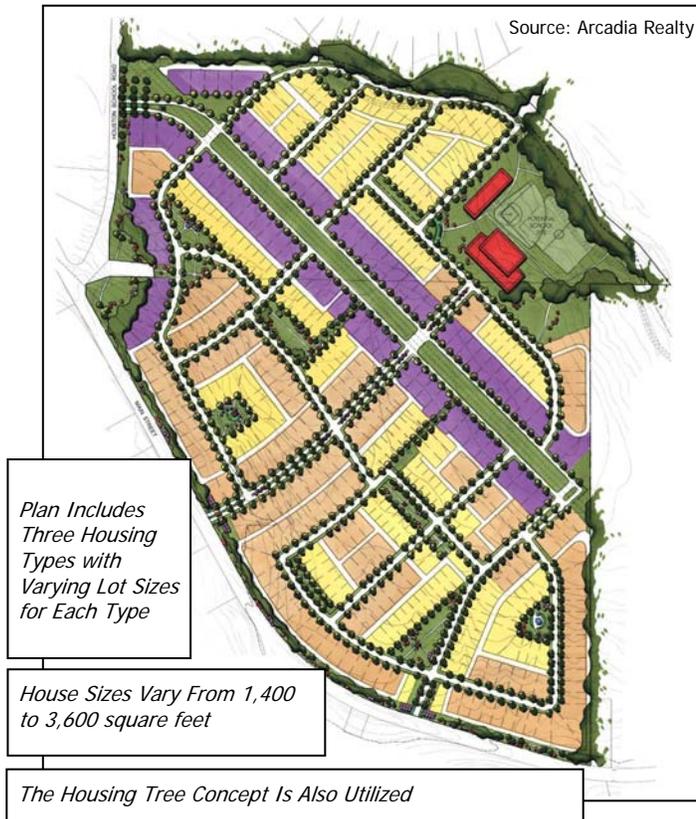
- At least five percent of the total number of units to be suitable for young persons, empty nesters and the single elderly. Units that would qualify include townhouses, cottages, lofts, etc. (with adjacent mixed use retail), and mother-in-law suites and carriage houses (in association with single family homes).
- To ensure quality, such units/lots should meet the following criteria.
- Homes on lots that are narrower than 55 feet should have rear-entry garages;
- Townhouses should have a minimum required square footage of livable space (e.g., 1,200 square feet), with no maximum size. Townhouses must also have rear-entry garages.

- Any lots/units directly adjacent to or across a street from a park/open space should face onto the open space.
- Notwithstanding the above, the 5% requirement may also include homes designed and built to appear like a traditional large home, but which may include up to four living units.

The inclusion of a range of quality, well-constructed and appropriately situated residential unit types should be part of all new developments (see **Illustration 9-32**). This can provide affordable accommodation alternatives for a variety of housing needs of various age groups, employment, and economic status. Such residential unit types include small homes/small-lot development, townhouses, multi-unit homes, carriage houses, mother-in-law suites, live-work units (adjacent to retail and commercial areas), and loft apartments (in mixed use areas). It is important however, that these varied housing types not be consolidated in one large area which could become blighted (or stigmatized), but rather dispersed in appropriate areas with proximity to open space, recreation and services such as retail.

### **Illustration 9-32**

#### PLAN FOR THE HOMESTEAD AT MILLS BRANCH IN LANCASTER,



As shown in **Illustration 9-33**, the primary beneficiaries of these types of accommodation include large sectors of the population, including, but is not limited to:

- Young singles desiring small, affordable accommodation,
- Young, single professionals desiring proximity to retail and entertainment,
- Couples seeking to start families,
- Baby boomers,
- Seniors on fixed incomes, and
- Retirees desiring a smaller, low-maintenance unit in a walkable, mixed use neighborhood.

**Illustration 9-33**

HOUSING TYPES AND COMMON OCCUPANTS

Cohort Life-Cycle	Single family	Cottages (<1,500 s.f.)	SFA/ Townhouse	Multiple family	Loft	Hi Rise Condo	Mother-in-Law Suite	Carriage House	Urban Retail Accessible
Young Persons (Birds leaving the nest)				*	*		*		*
Young Professionals			*	*	*	*	*	*	*
Shared Clerical				*	*			*	*
Service Industry				*	*		*		
Young Couples	*	*	*	*	*	*		*	*
Families with Children	*		*						
Empty Nesters	*	*	*			*		*	*
Retirees		*	*			*			*
Single Elderly			*			*	*	*	*
Senior Assisted Care				*					*
Senior Nursing Care				*					

## MULTIPLE FAMILY RESIDENTIAL DESIGN GUIDELINES FOR NEW DEVELOPMENT

Certain areas within the City of Bee Cave are suitable for multiple family developments, as designated by the *Future Land Use Plan*. Multiple family land uses can be designed in such a way that they are assets to the community, and are integrated within the residential fabric of the community. The following outlines regulations currently included in the City's Zoning Ordinance, intended to ensure the development of high-quality multiple family land uses, within the areas designated as multiple-family residential:

- Attached residential district including primarily low- and mid-rise multiple family dwellings and garden apartments;
- Located near a major thoroughfare and serve as a buffer between retail or commercial development or heavy automobile traffic and medium or low density residential development;
- Permitted and conditional uses listed in Sec. 32.04.001.
- No more than three stories limited to a maximum of 40 feet in height (accessory buildings no more than one story and 20 feet in height); Additional regulations in Sec. 32.05.006);
- Limit of 11 dwelling units per acre;
- Maximum building footprint: 20,000 square feet;
- Minimum lot depth: 150 feet;
- Yard size:
  - Minimum front yard setback: 40 feet;
  - Minimum side yard setback: 25 feet, or 80 feet for buildings over one story adjacent to a single family residential district;
  - Minimum rear yard setback: 40 feet, and 40 feet per story for buildings over one story adjacent to a single family residential district;
  - See Sec. 32.03.007(d)(2)(D) for building separation regulations.
- Minimum 800 square feet per dwelling unit;
- All buildings shall contain an odd number of dwelling units;



**Illustration 9-34**  
MULTIPLE FAMILY LAND USE

- Parking regulations:
  - One covered parking space for each one bedroom unit;
  - Two cover parking spaces for each two bedroom unit;
  - Two and a half spaces for each three bedroom unit, and two spaces must be covered;
  - Three spaces for each four or more bedroom unit, and two spaces must be covered; and,
  - One space for every five units regardless of the number of bedrooms to provide guest spaces.
- Refuse facilities:
  - Every multiple-family dwelling shall be within 250 feet of a refuse facility;
  - Refuse facility may not be within 30 feet of an adjacent single-family property;
  - Screening required on three sides by a wall not less than six feet in height.
- Screening wall required when abutting a street or residential use;
- Special requirements:
  - Roofs shall be pitched of at least 4:12 for all buildings, and shall only be constructed of masonry tile, terra cotta rile, concrete tile, slate or metal material; Accessory buildings shall mirror the architectural style and use of the same construction material as the principal buildings; Single-family units constructed in this district shall conform to SFA District standards;
  - A paved walkway shall connect the front door of each ground floor unit to a parking area;
  - Buildings shall not exceed 200 feet in length, and no wall plane shall exceed 50 feet in length; Buildings shall be constructed in accordance with architectural standards described in Sec. 32.005.005;



**Illustration 9-35**

LANDSCAPING ENHANCES MULTIPLE FAMILY  
LAND USE



**Illustration 9-36**

GARAGES DIRECTLY ATTACHED TO MULTIPLE FAMILY  
UNITS

- All buildings containing residential units shall provide signage which clearly identifies the numbers (addresses) of the units within each building visible from entrances into the complex or drive aisles;
- All parking areas shall have appropriate lighting and shall be positioned such that no light adversely impacts adjacent residential areas (see Sec. 32.05.008); and,
- Roofing materials used to construct covered parking shall be constructed out of the same building materials that are used for the construction of the residential units.
- Open space:
  - Except as provided below, any multiple-family development shall provide open space which equals or exceeds 30% of the gross platted area, or 300 square feet of open space per dwelling unit, whichever is greater, excluding rights-of-way for collector and larger sized streets. Within the required open space, a minimum of 200 square feet per dwelling unit of useable open space shall be provided.
  - Open space shall meet the following criteria:
    - All multiple-family units must be located within 600 feet of an open space area (up to 1,200 feet for special circumstances, see 32.03.007(h)(2)(A));
    - Open space areas shall be at least 40,000 square feet in size, a minimum of 50 feet wide, and must have no slope greater than 10%;
    - Pools, tennis courts, walkways, patios and similar outdoor amenities may be located within areas designated as open space. Areas occupied by enclosed buildings, except for gazebos and pavilions, driveways, parking lots, overhead electrical transmission lines, drainage channels and antennas, may not be included in calculating useable open space;
    - Within open space areas, there shall be at least one tree for every 1,000 square feet of space. New trees planted to meet this requirement shall be a minimum six-inch caliper.

The regulations can be found in detail within the Zoning Ordinance (Sec. 32.03.007). It is recommended the City continue to enforce the existing regulations and conduct periodic reviews to ensure adequacy.

## **GREEN DEVELOPMENT CONCEPTS**

The following sections discuss opportunities for additional green development within Bee Cave to promote a more sustainable city. Two ways the City can encourage a more “green” community is by ensuring hike/bike trail connectivity and considering energy costs and environmental quality particularly when reviewing site plans.

### **HIKE/BIKE TRAIL CONNECTIVITY**

To a large extent, land development is centered on the automobile. This is due to the fact that the primary mode of transportation is the automobile, and development is designed to accommodate automobiles, often to the exclusion of any other travel option. However, alternative forms of transportation are becoming increasingly important, with society becoming more aware of healthy lifestyles that involve walking, running and biking, and the rising cost of gasoline is helping to fuel this trend.

Connectivity and the ability to travel from one area to another without the use of a vehicle is an important community feature. Examples of connectivity would be a person being able to walk to a store, park, trail, school, or through an adjoining neighborhood. Neighborhood design should encourage people to be physically active in their community. In addition, an alternative form of transportation would benefit a large portion of the population who cannot drive because of age or disability.

Trails should be an integral part of the City’s park and open space system – trails are recreation facilities that all age groups can use and, in addition can provide an alternative means of transportation. Each new development should provide trail access to larger City-wide and regional trails. The City should also investigate the addition of bicycle lanes to existing roadways.



**Illustration 9-37**  
EXAMPLES OF PARKS AND OPEN SPACE LINKAGES

Interconnectedness needs to be created by requiring convenient pedestrian, bicycle and automobile access as development occurs — both within the project itself and to adjacent developed areas. Further, pedestrian and bicycle connectivity to schools, retail areas, parks, and places of employment should be required (see **Illustrations 9-37, 9-38, and 9-39**). If adjacent areas are not yet developed, provisions for pedestrian, bicycle and automobile access should be established with consideration for future connections/access.



**Illustration 9-38 and 9-39**  
EXAMPLES OF BICYCLE LANES

## ENERGY COSTS AND ENVIRONMENTAL QUALITY

There are many opportunities in which the City can encourage green practices in the development process. The City should consider encouraging development that is environmentally sensitive in terms of the following:

**Site Planning.** Utilize environmentally sound site layout and density that will minimize the need for continuously high levels of energy consumption. This may include such things as:

- Clustered development (i.e., conservation subdivision design) that preserves open space and minimizes construction and maintenance of roads and utilities, and
- Higher density developments in mixed use centers that reduces utility distribution, roads and trips.

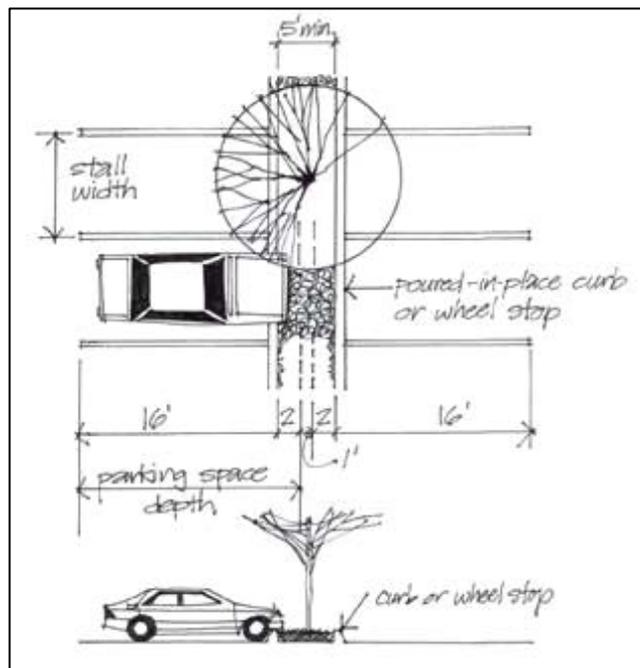
**Water Quality.** Preserve open space throughout developments to allow ground absorption of water and the natural filtering and cleaning effect of soil and plant material to improve ground and stream water quality. In addition, utilize native and/or drought-tolerant species with organic mulch for landscaping to minimize fertilizers and excessive water use.

**Air Quality.** Improving air quality can be improved by the following:

- Encouraging mixed use,
- Providing interconnectedness of streets between neighborhoods and retail, recreation and services to minimize trip length and congestion,
- Providing alternative circulation systems such as hike/bike trails; and
- Use of low maintenance grass and ground covers to reduce the need for mowing.

**Heat Island Effect.** Shading paved areas reduces the temperature by 40 degrees on the surface and seven to 11 degrees in the ambient temperature (see **Illustration 9-40**). Preservation of open space through the maintenance of natural flood plains, creation of parks, clustering of development, conservation of environmentally sensitive areas, and shading of paving such as streets, parking lots and plazas will greatly reduce the ambient

**Illustration 9-40**  
HEAT ISLAND EFFECT



temperature in the city and further reduce energy costs for air conditioning.

**Ecology.** Preserve plant and animal habitat areas and corridors in a functional, native condition to maintain a level of bio-diversity.

**Light Pollution.** Consider implementing a “Dark Sky Ordinance”, which will help to minimize lighting into the night sky and to neighboring residential areas.

Other steps the City can take to promote green development is to plan for transit service which will connect with future regional rail, utilize green building and neighborhood development standards in the design and construction of all new City buildings, and consider adopting buffer requirements for major stream channels, tributaries and waterways to protect natural drainage corridors as a valuable resource for the community.

## **CONCLUSION**

It is the intent of these guidelines to improve the overall quality and image of the City of Bee Cave. As zoning changes are requested, the application of these concepts should be followed. Each concept/guideline should be applied constantly and consistently with each individual project, in keeping with these recommendations and with the stated goals and objectives pertaining to livability within this *Comprehensive Plan 2009*.