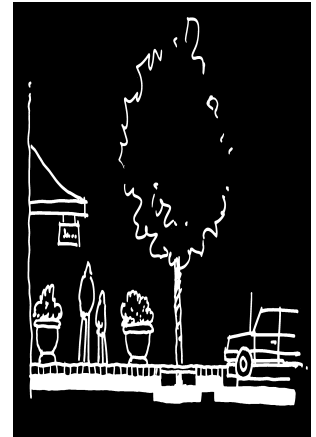
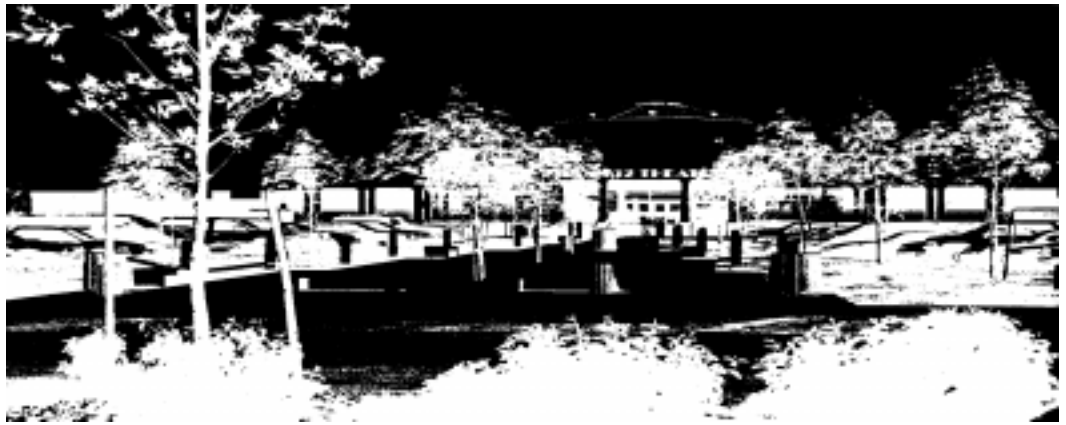
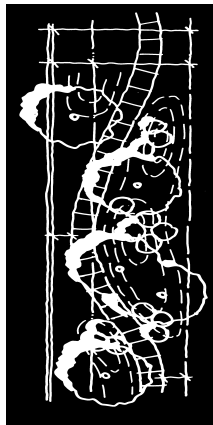


City of Louisville

COMMERCIAL DEVELOPMENT DESIGN STANDARDS AND GUIDELINES



COMMERCIAL DEVELOPMENT DESIGN STANDARDS AND GUIDELINES

Adopted 17 JUNE 1997 by Ordinance 1242, Series 1996
Amended by Ordinance 1287, Series 1998,
Ordinance 1341, Series 2000, and Ordinance 1915, Series 2026

**PREPARED FOR:
CITY OF LOUISVILLE, COLORADO**

PREPARED BY:
DOWNING, THORPE & JAMES INC.
1881 9th Street Suite #103
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ARCHITECTURE
PLANNING
LANDSCAPE ARCHITECTURE
ENGINEERING



**DOWNING
THORPE
JAMES**

COMMERCIAL DEVELOPMENT DESIGN STANDARDS AND GUIDELINES

June 17, 1997

Acknowledgments and Credits

Honorable Mayor and Members of the City of Louisville City Council

Chairman and Members of the City of Louisville Planning Commission

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City of Louisville Departments of Administration, Public Works and Planning

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INTRODUCTION

A. Purpose

The Commercial Development Design Standards and Guidelines (“CDDSG”) establish design criteria and minimum standards for commercial developments within the City of Louisville. The purpose of the CDDSG is to:

- 1) Enhance and protect Louisville’s quality of life and community image through clearly articulated commercial development design goals and policies, design guidelines and minimum design standards; and
- 2) Protect and promote Louisville’s long-term economic vitality through commercial design standards which encourage and reward high quality development, while discouraging less attractive and less enduring alternatives; and
- 3) Minimize adverse impacts of vehicular circulation to existing neighborhoods and to the surrounding physical environment; and
- 4) Enhance and protect the security and health, safety and welfare of all residents of the City of Louisville.

B. Applicability

The provisions of the Guidelines shall apply to all commercial development within the City, except commercial development for which there exists a vested property right to develop under other approved design guidelines and/or development standards.

The CDDSG provide general design guidelines, as well as mandatory minimum development standards. The CDDSG will be utilized by staff, planning commission, and city council to review commercial development applications submitted under the City’s PUD Development Plan review process.

The goals and policies set forth in this document are expected to be met through compliance with all mandatory design standards and consideration of design guidelines. Modifications to or waivers of mandatory design standards may be recommended by the Planning Commission and authorized by City Council as part of the PUD Development Plan Review process.

C. Who Uses the CDDSG

The CDDSG are to be used by property owners/ applicants and their design consultants in the planning of commercial development projects within the City of Louisville. The CDDSG will also be utilized by staff, planning commission, and city council as part of the PUD Development Plan process in their reviews of commercial projects to which the CDDSG apply.

D. Desirable Elements of Commercial Project Design

The city considers the following design features to be desirable elements of commercial development, and the standards and guidelines set forth in the following chapters are intended to facilitate the incorporation of these features into a commercial project:

1. Prominent access driveways with clear visibility of entrances and retail signage
2. Multi-modal transportation
3. Landscaped and screened parking
4. Quality of exterior building materials, surfaces, and textures
5. Significant landscape and hardscape elements
6. Building locations which provide pedestrian courtyards and common gathering areas with coordinated site furniture and lighting
7. Visual compatibility with development on adjacent sites
8. Visual connections between entrances and associated pedestrian areas of individual buildings to encourage visual and physical integration into a strengthened “sense of place”
9. Step-down of building scale adjacent to pedestrian routes and building entrances
10. Pedestrian-oriented ornamentation and detail at ground level
11. Multi-planed, pitched roofs with meaningful overhangs and arcades
12. Regular or traditional window rhythm
13. Articulated building forms and massing with significant wall articulation (e.g. insets, canopies, wing-walls, trellises)
14. Preservation of natural site features
15. Enhancement of view corridors to open areas and mountain vistas

E. Undesirable Elements of Commercial Project Design

The city considers the following design features to be undesirable elements of commercial development:

1. Poorly defined site access points
2. Disjointed parking areas, or confusing or unsafe circulation pattern
3. Square, “box-like” structures with large, blank, unarticulated wall surfaces
4. Highly reflective surfaces or heavily-tinted glass storefronts
5. Metal siding on primary facades
6. Mix of unrelated styles (such as rustic wood shingles or siding and polished chrome)
7. Strongly thematic architectural styles including some forms of “franchise” architectural styles associated with some chain commercial developments
8. Visible outdoor storage, loading, and equipment areas
9. Signage which is redundant or out of scale with building architecture

F. Relation of the CDDSG to Other City Regulations, Ordinances and Private Development Covenants

The CDDSG are a supplement to the City of Louisville's Zoning and Subdivision Regulations, PUD Ordinance, City of Louisville Department of Public Works Engineering Division Design and Construction Standards, and City of Louisville Storm Drainage Design and Technical Criteria.

Where a mandatory standard in this document is in conflict with any provision of the City of Louisville municipal code, the most restrictive requirement shall take precedence and shall apply. Building and life safety codes and the City of Louisville Department of Public Works Engineering Division Design and Construction Standards, and the City of Louisville Storm Drainage Design and Technical Criteria take precedence over the standards in this document in cases where the standards in this document require action that is in conflict with those codes.

All commercial development within the City of Louisville shall meet the guidelines of the Americans with Disabilities Act (ADA).

G. How to Use the CDDSG

The CDDSG are generally organized in a descending order of scale, from overall site planning concerns, to circulation issues, to buildings, site details, and then signs. When first developing overall planning concepts for a parcel, the earlier sections will be most relevant. At advanced stages of design, when architectural details and specific landscaping ideas are being developed, sections appearing later in the document will be most relevant.

This document has nine chapters and one appendix. Each chapter has four basic components:

1. A goal statement, which sets forth the city's overall design goal to be achieved in the PUD Commercial Planned Unit Development Plan review process with regard to the subject matter of the chapter.
2. A policy statement, which establishes a more specific design goal with regard to a more specific subject matter.
3. The statements of **standards**, indicated with an (S), and **guidelines**, indicated with a (G), which establish the specific design standards with which compliance is mandatory, and the design guidelines with which compliance is strongly encouraged. A failure to meet a mandatory standard may be used as a basis for denial of an application. A failure to meet a guideline shall not be a basis for denial of an application.
4. Graphic Illustrations showing one or more suggested design solutions that would be appropriate or inappropriate with respect to the standards and guidelines. These may be photographs or sketches. In the event of conflict between a graphic illustration and the text of the CDDSG, the text shall control.

H. Definitions

For purposes of this document, the following terms shall have the following meanings:

“Commercial Development”: Any land development activity in the city, including but not limited to retail and office development, but not including development activity intended solely for residential, industrial or light industrial use. Commercial development also includes any addition, remodeling, relocation or construction requiring an amendment to an approved, Final Commercial Planned Unit Development Plan.

“Open Space”: Land that is undeveloped or developed that can support plant materials; or has decorative landscape treatment; or that may be used by customers for recreation, circulation, or may be viewed by them. Walkways, plant beds, lawns, and terraces within an open space area may be included as part of such open space area. Paved parking lot areas used for auto circulation or parking do not qualify as Open Space.

“Parcel”: A parcel is the minimum amount that a single user may occupy. In many cases, more than one parcel will be combined for development of a single building or cluster of buildings to be used by a single user.

“Pedestrian Scale/Human Scale”: The relationship between the dimensions of a building, street, outdoor space, or streetscape element to the average dimensions of the human body.



1. SITE PLANNING

Goal:

Locate buildings to be visible from major roadways and entries, to provide clear orientation and access for both vehicles and pedestrians and to facilitate internal pedestrian circulation. Place structures in consideration of the existing built context, the location of adjoining uses, and the location of major roads. Include an analysis of the site's physical and natural characteristics and other influences. Create pedestrian courtyards and common gathering areas through creative design solutions. Create walkable, well-landscaped environments that encourage pedestrian movement between uses and gathering places.

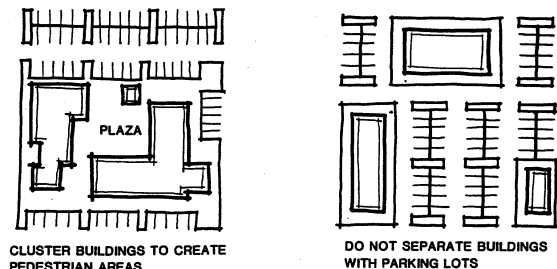
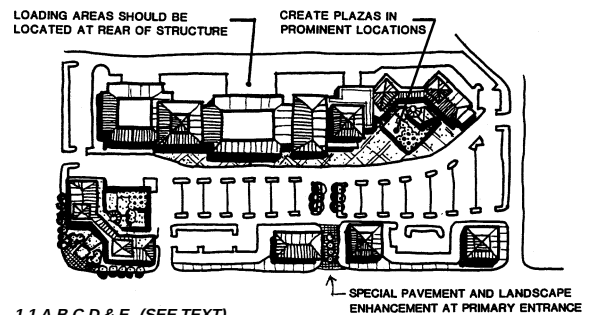
1.1 Building Siting and Orientation

Policy:

Buildings should be sited so that the character of existing land forms and site features is enhanced; the relationships between buildings are strengthened; and pedestrian and vehicular circulation is facilitated.

Standards and Guidelines:

- A. Provide pedestrian connections from buildings to public walkways and between buildings to buffer pedestrians from vehicle circulation areas. (S)
- B. Locate retail buildings to create plazas and pedestrian gathering places which are of a sufficient size and scale to buffer the pedestrian areas from traffic and circulation areas. (G)
- C. Orient buildings to promote views through and into each commercial development. (G)
- D. Orient single free-standing buildings and their primary facades and primary pedestrian entrances toward streets. (G)
- E. Position entries to buildings so they are easily identifiable from the interior drives and parking lots. (G)



1.2 Building and Parking Setbacks

Policy:

Provide a well-landscaped and pedestrian-friendly character along major streets which promotes a comfortable walkable environment. To attain this objective, all buildings and parking should be set back from perimeter and interior streets a sufficient distance to create a distinct landscape zone between buildings, parking, and adjacent roadways. Varying building setbacks to enhance visual interest along the streetscape is strongly encouraged.

Parking setbacks from all streets should allow for adequate visual buffering or screening.

Surrounding buildings or wrapping the project perimeter with parking lots, especially along the street front is strongly discouraged; orienting some buildings closer to the street to screen parking in the interior of the site and provide strong pedestrian connections to buildings is encouraged.

Standards and Guidelines:

A. Minimum Building Setbacks *EXCEPT WITHIN THE OLD TOWN CC-DISTRICT (for building footprints less than or equal to 30,000 gross square feet): (S)*

• Street R.O.W. Line:	
• Arterial Street	30 ft.
• Collector Street	20 ft.
• Local Street	15 ft.
• Internal/Common Property Boundary	10 ft.
• Internal/Private Driveway (to back of curb)	10 ft.

B. Minimum Building Setbacks *EXCEPT IN OLD TOWN CC-ZONE DISTRICT (for building footprints greater than 30,000 gross square feet): (S)*

• Street R.O.W. Line:	
• Arterial Street	50 ft.
• Collector Street	40 ft.
• Local Street	35 ft.
• Internal/Common Property Boundary	25 ft.
• Internal/Private Driveway (to back of curb)	10 ft.

C. Minimum Parking Setbacks *EXCEPT IN OLD TOWN CC-ZONE DISTRICT (from all perimeter property lines or rights-of-way): (S)*

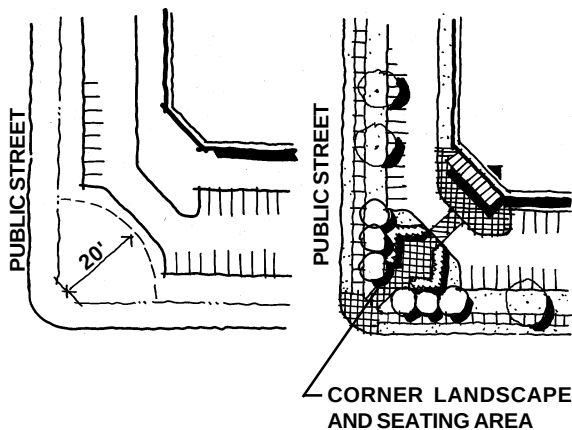
• Property Lines Adjacent to U.S. 36	40 ft.
• Arterial Street R.O.W.	25 ft.
• Collector & Local Street R.O.W.	15 ft.
• Internal/Common Property Boundary	10 ft.

D. No portion of any building, including canopies, overhangs, or other projections shall encroach into the above setbacks. (S)

E. Building and Parking Setbacks at Street Corners - If an intervening parking or a drive aisle is located between a building and the street corner, a corner landscape area must be provided. (S) In addition, no parking may be located within a radius of 15 feet measured from the point of intersection of the required parking setback lines. (S)

F. The clustering of buildings within larger master planned and multiple building projects is strongly encouraged, and the minimum building setbacks may be waived or modified for such purpose. (G) However, all fire and emergency access and building code requirements must be met. (S)

G. Consider orienting buildings, including some of the buildings in multiple building projects, to perimeter streets, rather than orienting all buildings to internal parking lots. (G)



1.2 E TREATMENT OF STREET CORNERS WITH PARKING

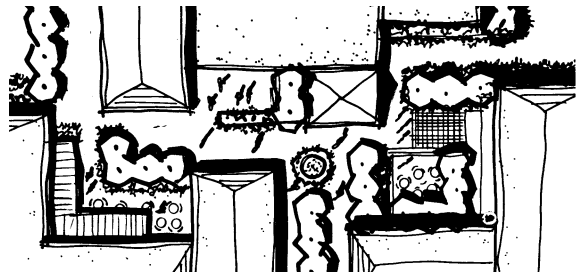
1.3 Pedestrian Amenities

Policy:

Plazas, courtyards or similar pedestrian amenities should be incorporated into both overall and individual site development plans. These areas should be easily accessible and comfortable for a substantial part of the year.

Standards and Guidelines:

- A. Furnish spaces with pedestrian amenities such as benches, landscaping, fountains and play areas. These outdoor spaces should be “functional” and should not appear as “left-over” spaces. (S)
- B. Aggregate open space areas for pedestrian use. (G) Do not distribute them in low impact areas, such as building peripheries, areas behind structures, or where barely visible. (S)
- C. Delineate areas of pedestrian activity with accent paving, landscaping, lighting and furnishings. (S)
- D. Provide seating that is useable year-round. Position seating which is buffered from exposed areas and takes advantage of sunny locations. (S)
- E. All common amenities within commercial developments shall be owned and maintained by the developer or by an organization established for such purpose. (S)
- F. Where feasible, create a sense of enclosure for outdoor seating areas. (G)
- G. Orient open spaces to views of activities, architectural landmarks or distinctive natural land forms. (G)



1.3 A FURNISH OUTDOOR SPACES WITH PEDESTRIAN AMENITIES.



1.3 C DELINEATE AREAS OF INTENSE PEDESTRIAN ACTIVITY.

1.4 Site Coverage Requirements

Policy:

Open space is a valued amenity. Building, parking, and driveway site coverage within each parcel should be limited.

Standards and Guidelines:

- A. The maximum building, parking, and driveway coverage within each parcel and for the entire development is 70%. (S)
- B. The minimum amount of open space provided within a commercial development parcel or cluster of parcels is 30%. (S) Open space can include “pedestrian-oriented” areas such as sidewalks and hardscape plazas within open space areas and pedestrian gathering places. (G) This open space area is in addition to any required public land dedication. (S)

1.5 Utilities, Mechanical, and Telecommunications Equipment

Policy:

The visual and noise impacts of utilities, mechanical equipment, data transmission dishes, towers, and similar antennas and equipment should be mitigated.



1.3 D PROVIDE SEATING THAT IS USABLE YEAR ROUND.

Standards and Guidelines:

- A. Install all permanent utility lines underground. (S)
- B. Temporary overhead power and telephone facilities are permitted during construction only. (S)
- C. Locate transformers away from major pedestrian routes and outdoor seating areas. (S)
- D. Buffer all transformers, telecommunications devices, equipment switching boxes and other utility cabinets from street and pedestrian areas with landscaping or architectural screens. (S) Do not leave meters exposed where visible to the public. (S) (See also Section 6. Screen Walls and Fencing). (S)

1.6 Service, Delivery and Storage Areas

Policy:

Service, delivery and storage areas can be visually obtrusive. The visual impact of service and delivery areas should be minimized, especially views of such areas from public ways and along designated view corridors.

Standard and Guidelines:

- A. Locate loading docks and service areas a minimum of 20 feet from any public street in areas of low visibility such as the rear of buildings. (S)
- B. Combine loading docks and service areas between multiple sites. (G) Screen from public view with fencing, walls and/or landscaping. (S) (See also Section 6. Screen Walls and Fencing).
- C. Clearly identify service entrances with signs to discourage the use of main entrances for deliveries. (G)

1.7 Water Quality Control and Drainage

Policy:

Storm water and snow-melt from rooftops, paved areas, and lawns carry plant debris, soil particles, and dissolved chemicals into the City's storm drainage system. Site development plans should employ management and engineering practices to protect stormwater from these undesirable elements, before releasing water into the City's storm drainage system.

Site drainage should be designed to minimize water collection near building foundations, entrances and service ramps. In addition to the City of Louisville's Storm Drainage and Technical Criteria, the following standards and guidelines apply:

Standards and Guidelines:

- A. Storm water should not drain directly into the public storm drainage system without first going through a detention pond and a grassy swale. (G)
- B. Design and maintain all grassed swales and other drainage channels in accordance with City of Louisville Storm Drainage Design and Technical Criteria. (S)

- C. Avoid hard concrete-lined channel designs. If a hard channel design is required use a more natural approach that incorporates river rock or natural rock channel lining when possible. (G)
- D. Utilize accepted design criteria and recommendations of the Urban Drainage and Flood Control District (UD & FCD) and the City of Louisville for detention pond design to enhance water quality. (S)
- E. The use of consolidated detention pond facilities is encouraged. (G)
- F. Design on-site drainage and detention facilities with attractive, landscape features and amenities. (S)

1.8 Site Grading, Excavation and Erosion Control

Policy:

The design of site improvements should minimize cut-and-fill in order to preserve each site's natural terrain to the maximum extent possible. Site grading designs should be executed in such a manner to avoid drainage impacts (such as erosion and road damage), both on-site and downstream.

Standards and Guidelines:

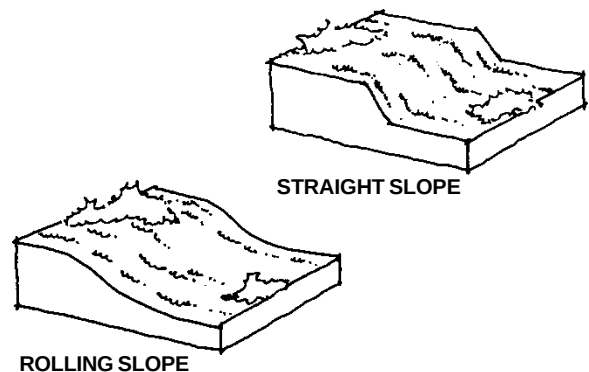
- A. Preserve the natural setting with grading designs that are sensitive to existing land forms and topography. (G)
- B. In developing sites, limit slopes to 4:1 or less. (G) Slopes in excess of 4:1 may be allowed when engineering or site constraints dictate a steeper slope. (G)
- C. In general, transition grades between old and new elevations should be rolling rather than one continuous straight slope. (G)
- D. Avoid grade changes within the drip-line of existing trees that are to be maintained. (G)
- E. Stockpile and protect topsoil during construction. (S)
- F. Preserve existing site vegetation, to the extent possible, during over-lot grading activities. (G) Replant all disturbed soil and slopes with an approved grass mixture or ground cover. (S) Prepare the soil prior to seeding. (S)



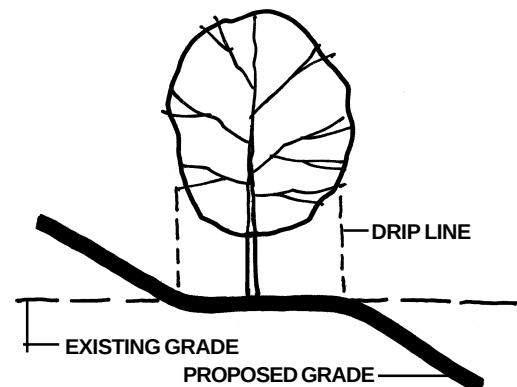
1.7 C AVOID HARD CHANNEL DESIGNS...



... USE GRASSY SWALES WHEN POSSIBLE AND DESIGN ALL ON-SITE DRAINAGE AND DETENTION FACILITIES WITH ATTRACTIVE, YEAR-ROUND SITE FEATURES AND AMENITIES.



1.8 C TRANSITION GRADES SHOULD BE ROLLING RATHER THAN ONE CONTINUOUS STRAIGHT SLOPE.



1.8 D AVOID GRADING WITHIN THE DRIPLINE OF EXISTING TREES.



2. VEHICULAR CIRCULATION AND PARKING

Goal:

The on-site vehicular circulation and parking system is a critical factor in the safety and success of a commercial development. The parking/access/circulation system should provide for the safe, efficient, convenient, and functional movement of multiple modes of transportation both on and off the site where pedestrian/bicycle/vehicle conflicts are minimized. Alternate modes of transportation, including public transit, bicycles and pedestrians should be given priority in the site design.

2.1 Site Access and Vehicular Circulation

2.1.1 Vehicular Access

Policy:

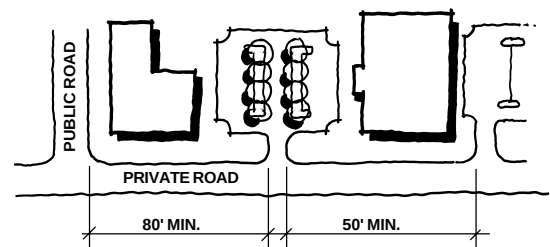
Promote the safety and mobility of through traffic by minimizing the number of access points to private property from public streets. Design vehicle entrances as Gateways.

Standards and Guidelines:

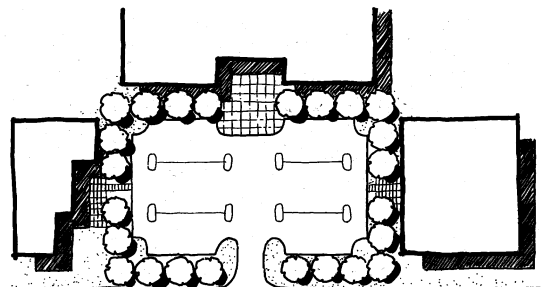
- A. Enhance the intersections of entrance drives with arterial and collector streets by incorporating signs, accent paving, special landscaping and lighting. (S)
- B. Materials used in entry features shall be consistent with other materials used in the development. (S)
- C. Utilize street intersections for access into commercial developments. (G)
- D. Locate site access points as far as possible from street intersections to provide adequate vehicle stacking room. (G) More than one access to a site may be permitted when it will not be hazardous to the safety and operation of the street or to pedestrians. (G)
- E. Maintain a minimum 50.0' separation between adjacent curb cuts along private roadways. (S)
- F. Maintain a minimum 80.0' separation between a public or private road intersection and a parcel curb cut. (S)
- G. When the opportunity exists, provide common or shared entries. (G) (See Section 5.2.C for landscaping details)
- H. Locate site entries to minimize pedestrian/vehicular conflicts. (G)
- I. Design entrances to align with focal points within the development such as landmark towers or landscape features. (G)
- J. Entrances that lead directly into head-in parking are not allowed. (G)
- K. Design internal roadways to incorporate design elements of gateway entries. (G)
- L. Accent pavement materials located within the public right-of-way must meet City of Louisville Public Works Department criteria. (S).



2.1.1 DESIGN VEHICLE ENTRANCES AS ENHANCED "GATEWAYS".



2.1.1 D, E & F MINIMUM SEPARATION BETWEEN INTERSECTIONS AND CURB CUTS



2.1.1 G PROVIDE COMMON OR SHARED ENTRIES WHEN POSSIBLE.



2.1.1 I DESIGN ENTRANCES TO ALIGN WITH FOCAL POINTS SUCH AS LANDMARK TOWERS.

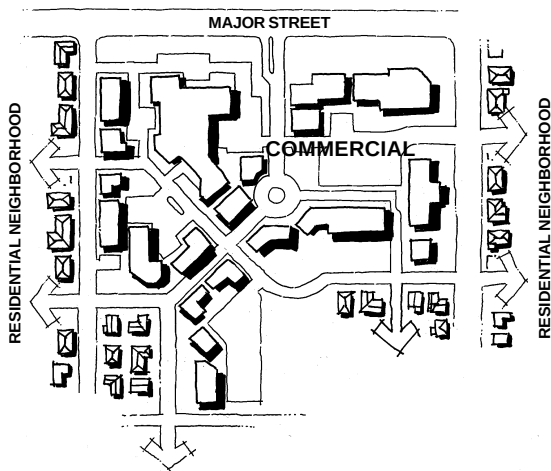
2.1.2 Vehicular Circulation

Policy:

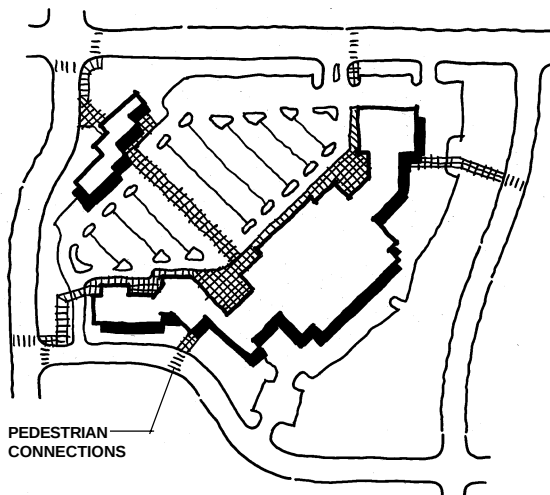
Projects with multiple building sites or parcels should include a hierarchy of internal roadways such as: 1) Internal Collector 2) Internal Drives and Parking Aisles; and 3) Service Drives. This hierarchy should be implemented by engineering and landscape treatments. The street, access and parking network shall provide for the smooth, safe, convenient and functional movement of all modes of transportation, including vehicles, public transit, bikes and pedestrians, with priority to the pedestrians.

Standards and Guidelines:

- A. Link developments with surrounding areas and uses by extending streets, drives and sidewalks directly into and across the development, and across property lines, thereby providing convenient, direct pedestrian, bicycle, and vehicular access to adjoining development. (G)
- B. Provide separate vehicular and pedestrian circulation systems with a strong emphasis on pedestrian linkages between uses. (S)
- C. Separate parking aisles from vehicle circulation routes and entry drives. (G)
- D. Avoid conflicts between adjacent parking lots by maintaining similar directions of travel and parking designs. (G)
- E. Design drive-thru lanes to allow for a vehicle stacking distance that accommodates anticipated demand without impairing traffic circulation. (S) For drive-thru restaurants, the vehicle staking distance must anticipate and accommodate periods of peak demand. (S)
- F. Drive-thru facilities and lanes shall be separated from parcel access points. (G)
- G. Drive-thru facilities and stacking lanes shall not be located within the front yard setbacks, and when located adjacent to public right-of-ways, residential zone districts, or pedestrian gathering areas shall be adequately screened from view. (S)
- H. One-way access ways require a minimum 12 foot wide (FL to FL) driveways, a minimum 15 foot radius intersection, and a maximum 100 foot length. (S)



2.1.2 A LINK DEVELOPMENTS WITH SURROUNDING AREAS.



2.1.2 B PROVIDE SEPARATE VEHICULAR AND PEDESTRIAN CIRCULATION SYSTEMS WITH A STRONG EMPHASIS ON PEDESTRIAN LINKAGES.

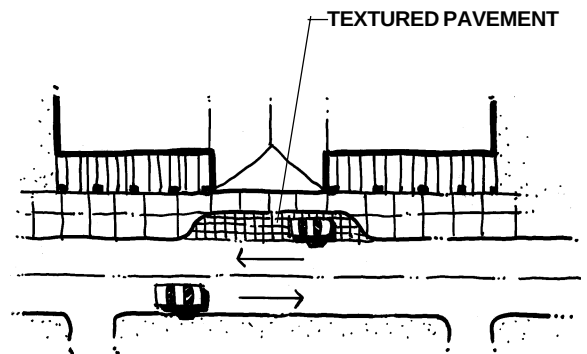
2.1.3 Passenger Drop-Off Areas

Policy:

Passenger drop-off areas should provide for safe and convenient access to building entries.

Standards and Guidelines:

- A. Passenger drop-off areas should be incorporated into all projects. (G)
- B. All schools and child care facilities having a capacity greater than 25 students shall incorporate drop-off areas. (S)
- C. Provide a clear separation of vehicular traffic between drop-off zones and accesses to either parking lots or parking structures. (S)
- D. Design drop-off lanes so as not to obstruct traffic flow when motorists are stopped to discharge passengers. (S)
- E. Use a textured paving material that is distinguishable from the travel lane at the drop-off. (G)
- F. Use signs to indicate "drop-off zone" or "passenger loading only". (S)



2.1.3 D & E DESIGN DROP-OFF LANES SO AS TO NOT OBSTRUCT TRAFFIC FLOW AND USE TEXTURED PAVEMENT TO DELINEATE THIS ZONE.

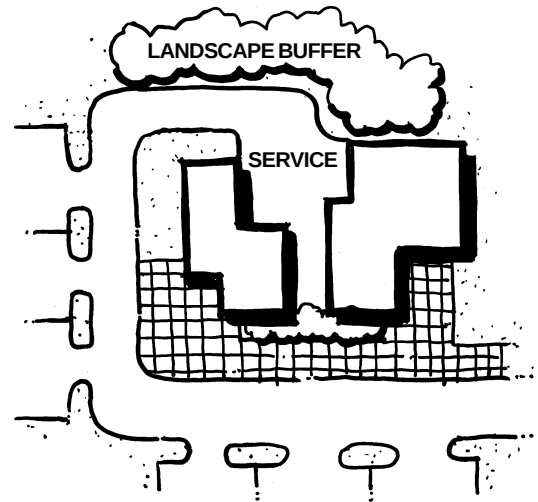
2.1.4 Service/Delivery, Emergency and Utility Access

Policy:

Routes for service, emergency and utility access should be clearly marked. Service circulation within a development should be designed to provide safe movements for all anticipated vehicles. The design of individual parcels to accommodate truck access shall meet all regulatory requirements for turning radii without sacrificing other important goals and policies of the CDDSG.

Standards and Guidelines:

- A. Meet all Louisville Fire Protection District regulations in the design and provision of emergency access to buildings for fire suppression, police, ambulance and other emergency vehicles. (S)
- B. Avoid the creation of "blind areas" that cannot be patrolled by police or security staff. (G)
- C. Provide shared service and delivery access ways between adjacent parcels and/or buildings. (G)

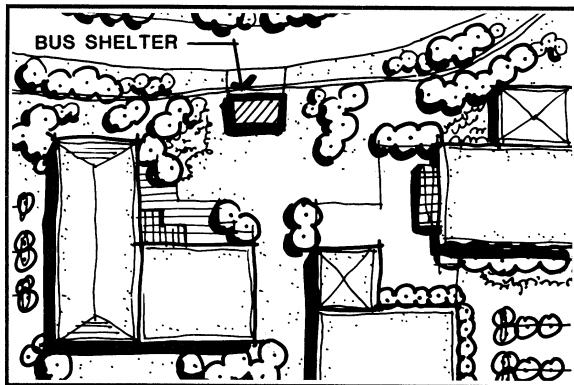


2.1.4 C PROVIDE SHARED SERVICE AREAS BETWEEN BUILDINGS OR PARCELS.

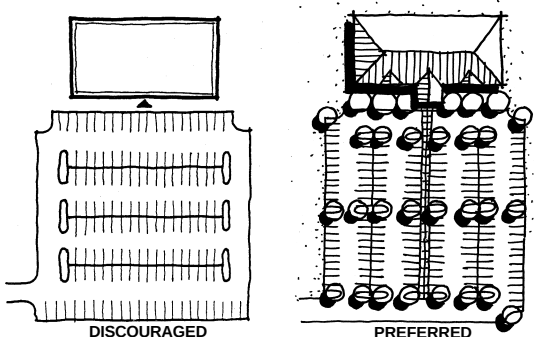
2.1.5 Mass Transit Facilities

Policy:

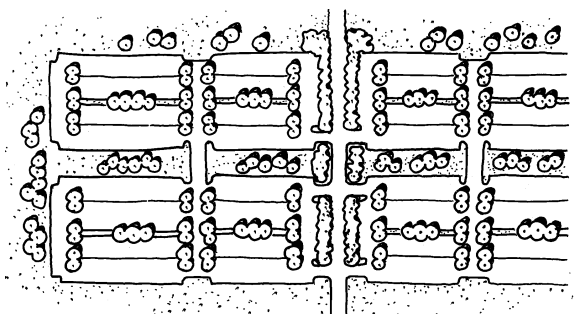
Mass transit facilities should be accommodated within all major commercial developments that could generate high volumes of transit use. Transit routes, access points and shelter locations should be addressed along major roadways within and on the perimeter of such projects. Transit facilities shall be provided in a manner to make transit an attractive mode of travel for both employees and patrons.



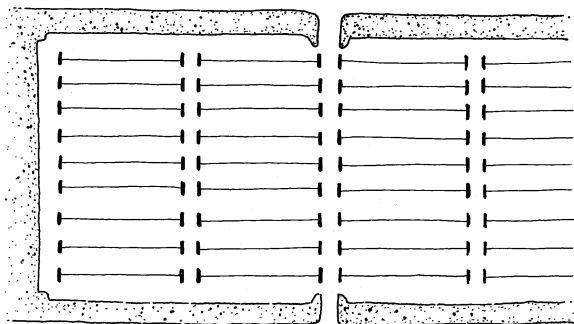
2.1.5 A LOCATE BUS SHELTERS CLOSE TO SIGNIFICANT CLUSTERS OF BUILDINGS.



2.2.1 E ORIENT PARKING AISLES PERPENDICULAR TO BUILDING ENTRANCES SO PEDESTRIANS WALK PARALLEL TO MOVING CARS.



DO THIS...



..NOT THIS

2.2.1 G DIVIDE LARGE PARKING AREAS INTO A SERIES OF SMALLER, CONNECTED LOTS.

Standards and Guidelines:

- A. Locate bus shelters close to significant clusters of buildings. Provide a concrete pad in front of bus shelters. Provide protection for bus shelters from the prevailing winds. Consider incorporating passive solar heating features. (G)
- B. Coordinate any shelter design and locations with RTD. (S)

2.2 Parking Lots and Structures

This section provides standards and guidelines for the siting and layout of parking lots and structures. Specific landscape standards for parking areas are included in Section 5.3, Parking Lot Landscaping.

2.2.1 Surface Parking Lots

Policy:

Vehicle parking should be provided to meet the location and quantity requirements of specific uses without undermining the function of other modes of transportation or detracting from the creation of attractive pedestrian environments.

Standards and Guidelines:

- A. Design parking lots to avoid dead-end aisles. (G)
- B. Where a dead-end aisle is authorized, adequate space for unimpeded turn-around must be provided. (S)
- C. Separate parking areas from buildings by either a raised concrete walkway, pedestrian plaza or landscaped strip. (S)
- D. Avoid head in parking, except handicap parking, which causes hazardous backing movements into major drive aisles. (G)
- E. Orient parking aisles perpendicular to buildings so pedestrians walk parallel to moving cars. Minimize the need for pedestrians to cross multiple parking aisles and landscape areas. (G)
- F. Design parking areas that incorporate pedestrian walkways in a manner that links buildings to the street sidewalk system. (S)
- G. Divide parking areas which accommodate more than 125 vehicles into a series of smaller, connected lots. (S)
- H. Landscape and offset portions of the lot to reduce the visual impact of large parking areas. (G)
- I. Avoid aligning all travel lanes in parking lots in long straight configurations. (G)
- J. Provide cross-access easements between adjacent lots to facilitate the flow of traffic between complementary users. (G)

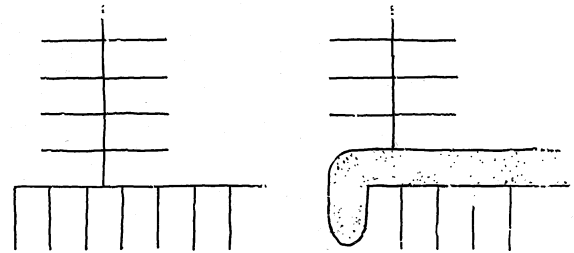
K. Minimum Parking Ratios:

Except for uses in the area designated as *Downtown Louisville*, the minimum number of parking spaces required per parcel/ use is based on the following ratios (# Parking Spaces/Floor Area as defined in Section 17.08.165) (S):

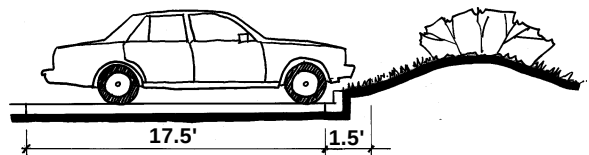
• Retail Uses	4.5 spaces/1000 SF
• Restaurants	15 spaces / 1000 SF
• Theaters	1 spaces / 3 seats
• Professional Offices	4 spaces/1000 SF
• Medical/Dental Offices	6 spaces/1000 SF
• Warehouse	1 / 1000 SF
• Showroom	4.5 / 1000 SF
• Hotel/Motel/Extended Stay Lodging/ Bed & Breakfast plus	1space/guest room 1 space/2 employees

The minimum number of parking spaces required for any construction, expansion or modification in Downtown Louisville that creates additional floor area is one space per 400 square feet of new floor area, rounded to the nearest 400 square feet. See Section 17.20.025 of the Louisville Municipal Code for additional requirements regarding parking in Downtown Louisville.

- L. Locate special parking spaces for van pool and car pool parking close to building entrances. (G)
- M. When opportunities exist for shared parking between different uses with staggered peak parking demand, make every effort to take advantage of this opportunity to reduce the total number of parking spaces within the development, especially in multi-tenant and mixed-use commercial centers. (G)
- N. Use curbed landscaped islands to designate a change in direction of parking stalls and aisles. (S)
- O. Provide landscaped islands at the ends of all rows of parking. (S) (See Section 5 for required sizes.)
- P. Parking bumpers in surface lots are prohibited. (S)
- Q. Where parking spaces abut landscaped islands, medians, or perimeter curbs or sidewalks, the length of spaces may be shortened by 1.5 feet to account for the car overhang, and the width of the sidewalk or landscape strip increased by that same amount. (G)



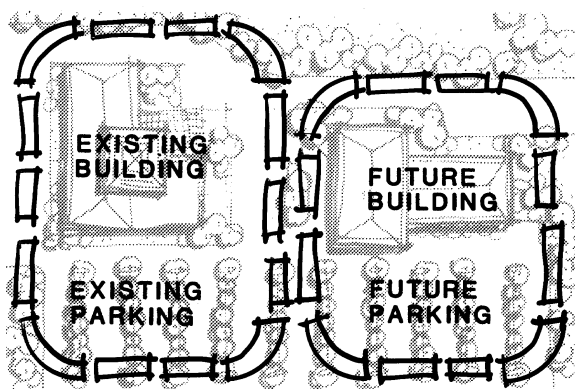
2.2.1 N USE CURBED LANDSCAPED ISLANDS TO DESIGNATE A CHANGE IN DIRECTION OF PARKING STALLS AND AISLES.



2.2.1 Q PARKING SPACES MAY BE SHORTENED BY 1.5' WHERE THEY ABUT LANDSCAPED ISLANDS.



2.2.2 D THE GROUND LEVEL OF PARKING STRUCTURES SHOULD BE INTERESTING TO THE PEDESTRIAN.



2.2.3 WHERE EXPANSION OF A BUILDING IS PLANNED, RESERVE APPROPRIATE AMOUNTS OF LAND FOR THAT PURPOSE.

2.2.2 Parking Structures and Parking Beneath Buildings

Policy:

The appearance of parking structures, whether free-standing or attached, should relate to the buildings they serve, and contribute to the character of the development. The incorporation of parking structures in a commercial development is encouraged in order to minimize site coverage.

Standards and Guidelines:

- A. The general architectural criteria shall apply to all parking structures. (S) (See Section 4 Architectural Design Criteria)
- B. Provide convenient pedestrian connections between parking structures and main buildings. (S)
- C. Separate vehicular access to parking structures from access to general surface parking lots, and clearly identify the access with signs. (G)
- D. Where the ground level of the parking structure fronts a public way, provide decorative screens, murals, or plant materials to create interest for pedestrians. (S)

2.2.3 Provisions for Future Parking Lots and Structures

Policy:

Many large projects which are expected to be developed in phases should anticipate and accommodate such phasing in the parking lot design. Provision should be made for increased parking demands related to anticipated expansions, and for possible changes in use of a building or complex of buildings.

Standards and Guidelines:

- A. Where expansion of a building is planned, appropriate amounts of unimproved land for additional parking should be reserved at the outset. (G)

2.2.4 Motorcycle Parking

Policy:

Motorcycle parking should be designed and sited in such a way that it is clearly distinguishable from automobile parking. Parking stalls should be identified to encourage orderly positioning of parked motorcycles. Adequate security for parked motorcycles and visibility of motorcyclists by automobile drivers is also a concern.

Standards and Guidelines:

- A. Locate motorcycle parking bays separately from automobiles. (G)
- B. Use concrete paving in these parking areas to support kickstand pressure. (S)
- C. Provide 1 motorcycle space/40 vehicle parking spaces up to a total of 10 spaces. (G)



3. PEDESTRIAN AND BICYCLE CIRCULATION

Goal:

Pedestrian and bicycle systems should be incorporated into all developments and designed to be safe and invite walking and bicycling throughout the project. Individual parcels and sites (within larger projects) should be integrated with adjacent properties design to form a comprehensive system and to provide convenient access to the adjacent neighborhoods as well as the regional systems.

3.1 Overall Pedestrian and Bicycle Circulation

Policy:

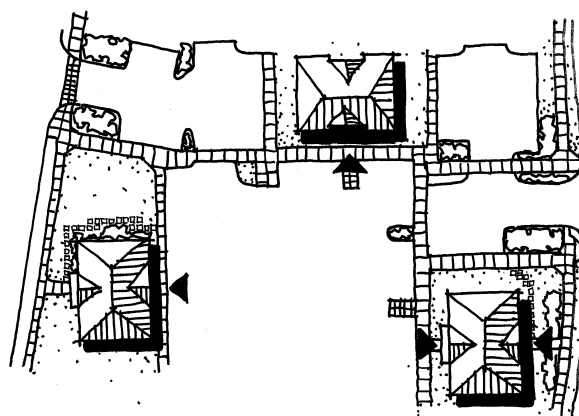
Pedestrian spaces and routes should be designed to invite walking throughout and around each commercial development. Routes should be integrated to form a comprehensive circulation system providing convenient, safe and visually attractive access to all destinations on the site. Ease of maintenance should be considered.

Standards and Guidelines:

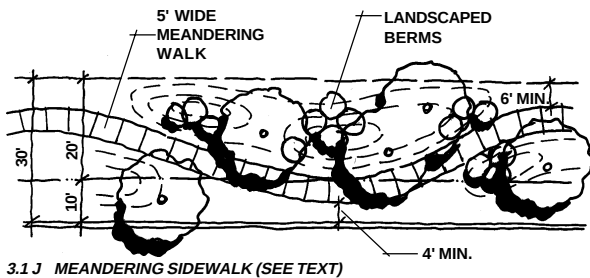
- A. Locate buildings and design on-site circulation to minimize pedestrian/vehicle conflicts. (S)
- B. Separate pedestrian and vehicle movements with the use of landscaping, barriers or other appropriate design solutions. (G) (See also Section 3.4)
- C. Differentiate areas of pedestrian and bicycle/vehicle interface with accent pavement and signage to alert drivers to potential conflicts. (S)
- D. Where a driveway crosses a walkway, make the walkway continuous in grade without a ramp down to the road bed. (G)
- E. Provide well-identified connections from the primary pedestrian and bicycle paths within the development to the perimeter sidewalks and bikepaths. (S)
- F. Align walkways directly and continuously to connect pedestrian destinations. (S) Avoid following the outline of parking lots that do not provide direct pedestrian access. (G)
- G. Locate pedestrian access and walkways away from the north sides of buildings. (G)
- H. Sidewalks shall be at least 5 feet wide and detached from all arterial, collector and local public streets by a minimum 6 foot wide landscaped parkway, except at intersections where acceleration & deceleration lanes are provided. (S)
- I. Sidewalks should be aligned parallel to the adjacent street. (G)



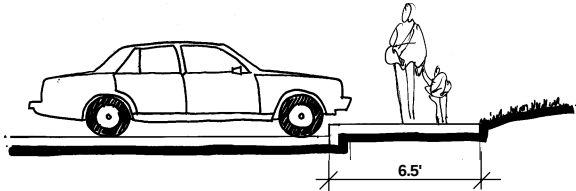
3.1 B SEPARATE PEDESTRIAN AND VEHICULAR MOVEMENTS WITH LANDSCAPING, BARRIERS, OR OTHER APPROPRIATE DESIGN SOLUTIONS.



3.1 F ALIGN WALKWAYS DIRECTLY AND CONTINUOUSLY TO PEDESTRIAN DESTINATIONS.



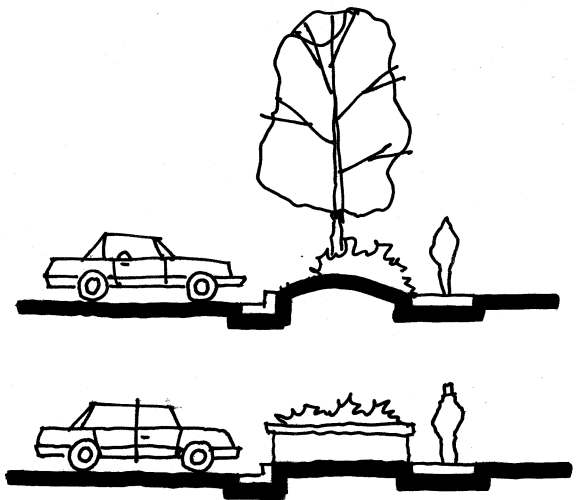
3.1 J MEANDERING SIDEWALK (SEE TEXT)



3.1 L WALKWAYS SHOULD BE 6.5' WIDE WHERE ATTACHED TO END OF HEAD-IN PARKING STALLS.



3.2 PROVIDE CLEARLY DEFINED PEDESTRIAN PATHWAYS THROUGH PARKING LOTS TO BUILDINGS.



3.3 USE ATTRACTIVE BARRIERS TO SEPARATE PEDESTRIAN AND VEHICULAR TRAFFIC.

- J. In cases where a meandering sidewalk is desired along an arterial street, provide adequate width within which to accommodate berming and landscaping that enhances the meander and defines the walkways. (G) If the appropriate width is not provided within the public right of way to meet this guideline, a sidewalk easement will be required. (G)
- K. Attached sidewalks are permitted only adjacent to acceleration and deceleration lanes, internal drives, the front of parking stalls and designated drop-off areas outside of the traffic flows. (S)
- L. Attached sidewalks shall be a minimum of 5 feet wide, except those sidewalks attached to head in parking stalls shall be 6.5 feet in width. (S)

3.2 Pedestrian Connections through Parking Lots

Policy:

Bikeways and pedestrian walkways should be separated and buffered from external and internal automobile circulation within parking lots. Walkways should lead pedestrians from parking areas to building entrances to facilitate convenient movement and to minimize conflicts with cars. Pedestrians should feel comfortable that they are in a clearly defined pathway to the building.

Standards and Guidelines:

- A. Internal pedestrian walkways should be designed to avoid the crossing of drive through lanes, and service drives. (S)

3.3 Site Barriers

Policy:

Barriers are intended to separate vehicular and pedestrian traffic for safety purposes, or to restrict access for security reasons. Barriers should be designed as visual assets to the development, and where barriers are used, the following standards and guidelines apply:

Standards and Guidelines:

- A. Barriers may include fences, walls, gates, curbs, bollards, low shrubbery, and berms. (G)
- B. Barrier materials shall be consistent with site furniture and building materials. (S)
- C. Steel post, chain, cable and wire barriers are prohibited. (S)
- D. These alternatives to conventional barriers may also be considered (G) :
 - 1) Change the level between a walkway and the surrounding area as an effective means to keep pedestrians on walks.

- 2) Install benches, seating walls, bike racks, or raised planters along the edge of a designated route to discourage cross-cutting.
- E. The use of movable vehicle barriers such as gates, barricades, and mechanical devices that fold down or recess into the pavement is discouraged.

3.4 Bicycle Parking

Policy:

Functional and attractive bike parking shall be provided in convenient locations and in adequate numbers for both customers and employees.

Standards and Guidelines:

- A. Locate bicycle parking spaces near both customer and employee building entrances. (S)
- B. Provide sufficient lighting levels to facilitate evening bicycle use. (S)
- C. Do not position racks where they will obstruct building entrances or the flow of pedestrian traffic. (S)
- D. Provide bicycle parking spaces at bus shelter locations. (S)
- E. Provide bicycle parking spaces in the following minimum ratio:
One (1) bicycle space for every ten (10) required off-street automobile parking spaces up to a total of 20 bicycle parking spaces. (S)
- F. Providing protection from the elements for bicycle parking is encouraged. (G) Consider the use of shelters. (G) Coordinate the design of the bicycle shelter with adjacent buildings or other street furniture designs. (G)
- G. Use bicycle racks that accommodate a range of bicycle types and a variety of security devices. (G)



3.4 A LOCATE BICYCLE PARKING CLOSE TO BUILDING ENTRANCES.



3.4 G PROVIDE RACKS THAT ACCOMMODATE A VARIETY OF BICYCLE TYPES.



4. ARCHITECTURAL DESIGN

Goal:

Architectural design should seek to blend in rather than stand out from adjacent structures. All elements including the scale and mass of buildings, materials, colors, roof styles, door and window openings, and details should be responsive to existing architectural design. New buildings should add to community character without rigid uniformity of design.

All buildings should be energy efficient to conserve natural resources.

Building masses should respond to “human scale” with materials and details that are proportionate to human height and provide visual interest at the street and sidewalk level. Buildings should be reduced in apparent mass or articulated to avoid large monolithic, box-like shapes.

Strongly thematic architectural styles associated with some chain restaurants and service stores are strongly discouraged and if utilized must be modified to be compatible with nearby structures and uses.

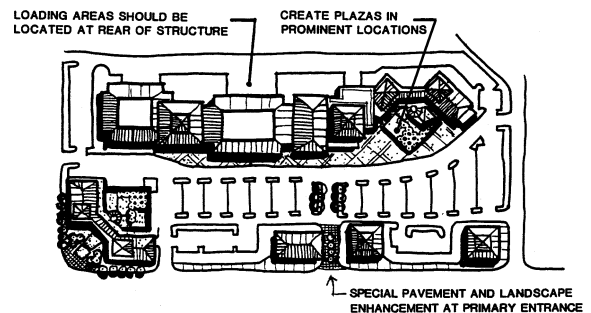
4.1 Building Relationships and Compatibility

Policy:

All buildings within a proposed development should be visually and physically compatible with one another, and with existing buildings on adjacent sites.

Standards and Guidelines:

- A. Locate buildings so they will not obscure desired views from existing or proposed buildings nearby. (G)
- B. Locate the building(s) to create pedestrian plazas and gathering places. (G) (See Sec 1.1.A)

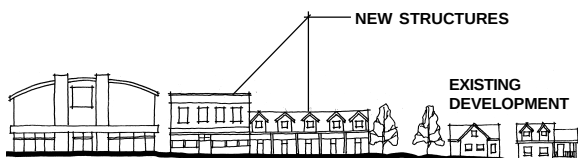


4.1 B LOCATE AND ORIENT BUILDINGS TO CREATE COMFORTABLE PEDESTRIAN PLAZAS AND GATHERING PLACES.

4.2 Building Heights

Policy:

Building heights should be minimized and should not be out of scale with existing or planned development. Buildings should appear “anchored” closely to the ground, although building heights are expected to vary, especially along the perimeter edges, adjacent to the major roadways.



4.2 B TRANSITION THE HEIGHT OF NEW BUILDINGS TO BE COMPATIBLE WITH ADJACENT DEVELOPMENT.

Standards and Guidelines:

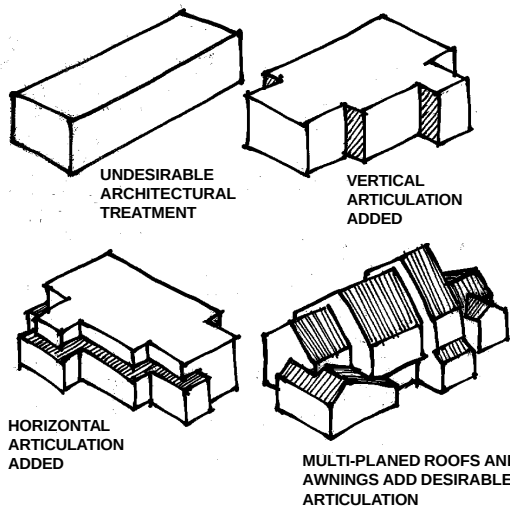
- A. Relate building heights to adjacent open spaces to allow maximum sun and ventilation and to provide protection from prevailing winds. (G)
- B. The height of new development should be compatible with and transition from the height of adjacent development. (G)
- C. The maximum height of all commercial buildings (as measured pursuant to the Louisville Municipal Code) is 35.0', and 42.0' to the top of the rooftop mechanical screen. (S)
- D. Architectural elements such as domes, spires, towers, etc. may exceed the 42.0' height limit up to 50.0', when authorized through the PUD process. (S)

4.3 Building Massing, Forms, and Pedestrian Scale

Policy:

Buildings should relate to the terrain and each other in their massing and forms. Square "box-like" structures with large, blank, unarticulated wall surfaces are not an acceptable form.

Facades with a high level of visual interest from auto and pedestrian views are encouraged. The exterior character of buildings should respond to pedestrian scale in the immediate vicinities. Buildings should have features and patterns that provide visual interest at the scale of the pedestrian, that reduce apparent mass, and that relate to local architectural character.



4.3 B & C BREAK LARGE BUILDINGS INTO MODULES OR SUB-PARTS TO REDUCE PERCEIVED SCALE.



4.3 B & C USE A VARIATION IN FACADE ELEMENTS TO REDUCE PERCEIVED SCALE.

Standards and Guidelines:

- A. In cases of facades more than 50 feet in length, incorporate significant architectural features and treatments to diminish the building mass. (S)
- B. Additional techniques shall be used to reduce scale and apparent massing of buildings. (S) Utilization of the techniques set forth in the following guidelines C thru I, as well as other techniques proposed by the applicant, will be used in determining compliance with this standard.
- C. Variations in facade elements can reduce perceived scale and mass. For example:
 - 1) Variations in color and/or texture should be used. (G)
 - 2) Step downs and step backs should follow the terrain and be tiered and reinforced by landscape elements. (G)
 - 3) Variation in roof forms and height of roof elements should be used. (G)
- D. Compositions that emphasize floor lines or that express rhythms and patterns of windows, columns, and other architectural features are encouraged. (G)
- E. Express the position of each floor in the external skin design:
 - 1) Consider terracing, articulated structural elements, or a change in materials as methods of defining floors. (G)

- 2) Consider using belt courses or other horizontal trimbands of contrasting color and materials to define floor lines. (G)
- F. Avoid blank walls at ground-floor levels. Use windows, trellises, wall articulation, arcades, material changes, awnings or other features. (G)
- G. Use materials manufactured in units and measurable in human proportions such as brick, tile, and modular stone. Other appropriate materials include: stucco, glass, and decorative tiles. (G)
- H. Architectural features such as columns, pilasters, canopies, porticos, awnings, brackets or arches should be included. (G)
- I. Windows that can reveal indoor amenities and activities and displays are encouraged. (G)



4.3 G USE BUILDING MATERIAL THAT CAN VISUALLY BE MEASURED TO GAIN A SENSE OF HUMAN SCALE.

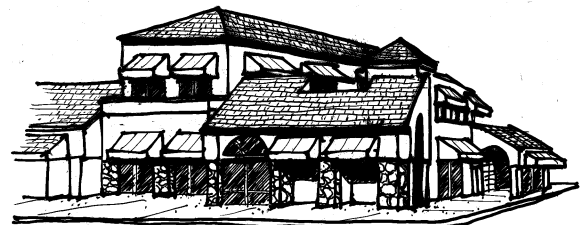
4.4 Roof Forms and Materials

Policy:

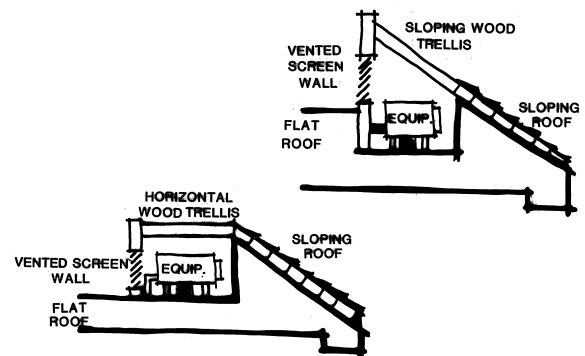
Rooftops should contribute to the unified appearance of each development and should be considered as seen from: higher areas, ground level, other buildings, and roadways.

Standards and Guidelines:

- A. Avoid roof lines running in continuous planes of more than fifty (50) feet. (G)
- B. Flat roofs are not encouraged. (G)
- C. Roof materials should be high quality, durable and consistent with local architectural themes. (S) Concrete tile, asphalt shingles, and standing-seam metal are examples of appropriate roof materials. (G)
- D. Screen roof top mechanical units from view with architecturally integrated screening units, roof parapets, or sloped roof forms. (S)
- E. Design roof forms to correspond to and denote building elements and functions such as entrances, arcades, and porches. (S)
- F. Roof forms should relate to adjacent buildings or developments. (G)



4.4 MIX ROOF FORMS TO CREATE VARIETY IN THE "ROOFSCAPE".



4.4 D SCREEN ALL ROOF EQUIPMENT WITH MATERIAL CONSISTENT WITH THE MAIN STRUCTURE.

4.5 Building Materials and Colors

Policy:

Exterior materials and colors should be aesthetically pleasing, of a high quality and compatible with materials and colors of nearby structures. Compatibility of building materials is desired throughout a development project consisting of multiple buildings.



4.5.1 F USE HEAVIER MATERIALS AT LOWER PORTIONS OF BUILDINGS.

4.5.1 Building Materials

Standards and Guidelines:

- A. Exterior wall materials must be muted. (S) As such:
 - 1) Matte textures are encouraged. (G)
 - 2) Masonry, brick, stone and stucco, are strongly preferred. (G)
 - 3) Textured concrete may also be considered. (G)
 - 4) Wood is also appropriate in the context of similar adjacent development. (G)
- B. Utilize materials in their natural texture and color. (G)
- C. Use the same materials and colors on all elevations of a building. (S)
- D. Highly reflective materials such as bright aluminum and glass are not permitted as the primary building material, especially at the pedestrian level. (S)
- E. Combine building materials in patterns that create a sense of human scale. (G)
 - 1) Cast or scored concrete that gives a sense of proportion may be appropriate as well as conventional modular materials such as brick or stone. (G)
 - 2) Avoid large blank featureless or uniform surfaces. (G)
- F. Use heavier materials such as natural stone and masonry materials on the lower 3 to 4 feet of buildings to help visually anchor them to the ground. (G)
- G. High quality, low-maintenance materials are encouraged. Select durable building materials that will age well. (G)
- H. Painted metal, painted concrete, plain unfinished concrete block or large expanses of unarticulate stucco are not acceptable materials. (S)
- I. Do not use plexiglass, glossy metal and backlit vinyl awnings. (S)

4.5.2 Building Colors

- A. Do not use paints or other covering materials with unproven durability. (S) Do not use bright colors, (including bright white) that may streak, fade or generate glare. (S) While subdued or muted colors generally work best as a dominant, overall color, a bright or primary color can also be appropriate for accent elements, such as door and window frames, and architectural details. (G)
- B. Choose color palettes for new buildings that are compatible with the colors of adjacent structures. (S)
- C. Minimize the number of colors appearing on a structure's exterior. (G)
- D. Paint architectural detailing to complement the facade and coordinate with adjacent buildings. (S)
- E. Roof colors shall be muted and compatible with the dominant building color. (S)

4.6 Building Entrances

Policy:

Primary building entrances should be easily identifiable and relate to human scale.

Standards and Guidelines:

- A. Locate main entrances to be clearly identifiable from primary driveways and drop-offs. (S)
For example:
 - 1) Design building entrances to contrast with the surrounding wall plane. (G)
 - 2) Consider tinted glass, painted doors, or recessed features that will create a shaded effect. (G)
 - 3) Create a frame around doorways, by changing materials from the primary facade material. (G)
 - 4) Design primary entrances to be accessible to handicapped users without complex ramp systems. (G)
- B. All building entrances shall be well-lit. (S) (See Chapter 8)
- C. Consider using building entrance ways as a transition from the building to the ground. Incorporate walls, terraces, grading and plant materials to accomplish this transition. (G)
- D. Consider using terraces or porticos to define entrances. (G)



4.6 A LOCATE AND DESIGN MAIN ENTRANCES TO BE CLEARLY IDENTIFIABLE.

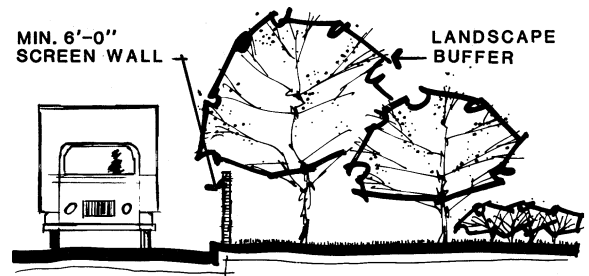
4.7 Service Entrances and Loading Areas

Policy:

Service areas should be visually unobtrusive and integrated with the project site design and architecture.

Standards and Guidelines:

- A. Orient service entrances, loading docks, waste disposal areas and other similar uses toward service roads and away from arterial and collector streets and residential areas, unless adequately screened. (S)
- B. Screen service entrances and trash dumpsters from public streets, pedestrian gathering areas and primary entrances with fencing, walls and/or landscaping. (S) Use the same materials as employed elsewhere on the building or site. (S)
- C. Coordinate the location of service areas with adjacent developments, so that shared service drives may be feasible. (G)
- D. Do not place service areas where they will be readily visible from adjacent buildings or where they will negatively impact important/identified view corridors. (S)



4.7 B SCREEN SERVICE ENTRANCES AND TRASH DUMPSTERS WITH FENCING, WALLS, AND/OR LANDSCAPING.

4.8 Energy Conservation Measures

Policy:

Local climate conditions afford the opportunity to take significant advantage of passive and active solar energy applications. Buildings should be designed and sited to maximize the use of solar gain for energy savings, and respect the solar access requirements of adjacent (existing and proposed) buildings.

Standards and Guidelines:

- A. Applicants are encouraged to consider energy conserving design concepts, including but are not limited to the following: (G)
 - 1) Proper orientation and clustering of buildings to take advantage of the prevailing summer winds and to buffer against adverse winter wind conditions.
 - 2) Types of material and their insulation characteristics.
 - 3) The arrangement and design of windows and doors.
 - 4) Direct solar or photovoltaic energy.
 - 5) Daylighting concepts.
 - 6) Earth sheltering with creative land forming.
 - 7) Natural ventilation of outdoor, indoor and attic spaces.



5. LANDSCAPE DESIGN ¹

Goals:

Landscaping for commercial areas is provided within each building site to: 1) enhance the aesthetics of commercial developments, 2) create a pedestrian friendly environment, 3) break up the mass of buildings, 4) soften architectural materials, 5) provide screening of service structures, 6) enhance the streetscape/parkway environment, 7) define building and parking area entrances, 8) provide shade and climate control, 9) control airborne particulates and 10) provide buffers between incompatible land uses or site areas. Drought tolerant plant species that are native to the region or suitable to this climate should be used.

This chapter addresses 4 distinct zones corresponding to the 4 major design influences on each commercial site:

- 1) Perimeter Landscaping Adjacent to Public and Private Roads
- 2) Perimeter Landscaping Adjacent to Abutting Property
- 3) Parking Lot Landscaping
- 4) Individual Building Landscaping

On smaller sites, there may be overlap between the four (4) planting zones that could result in over planting. Please consult with Planning Division staff to determine whether the requirements of one zone may take precedence over those of another zone.

The City shall strive to:

- Inspect all plant material prior to planting
- Inspect all irrigation designs and implementations
- Inspect installation at one and five year intervals

5.1 Perimeter Landscaping Adjacent to Public and Private Roads

Policy:

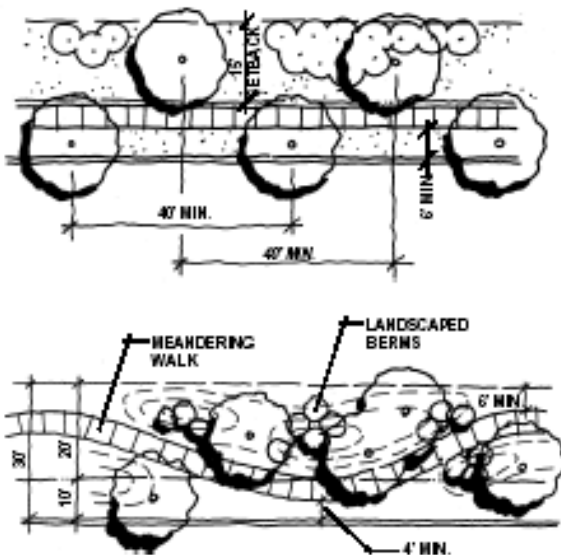
The corridors along perimeter arterial streets and internal collectors should provide a visually cohesive open space system. Similar landscape treatments should be used at all entrances and intersections. Plant materials, massing, spacing, and height characteristics should reinforce the hierarchy of roadways. Planting and grading should work together to create a variety of experiences along these roadways and to call attention to open space amenities. Perimeter edge treatments should establish identity for the project and convey a high-quality image.



5.1.A INCLUDE A COMBINATION OF MANICURED AND ENHANCED NATURAL LANDSCAPE AREAS.



5.1.D CREATE LANDSCAPE POCKETS IN LONG EXPANSES OF FENCES AND WALLS.

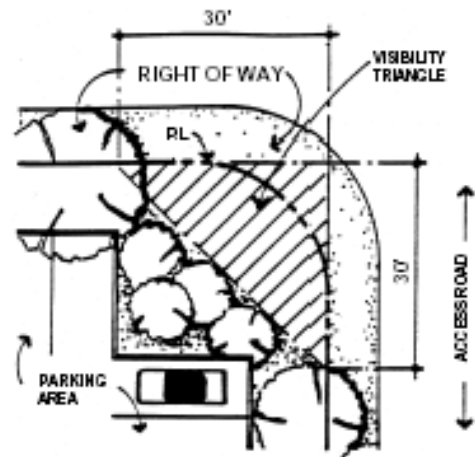


5.1.E2 & E4 LANDSCAPE REQUIREMENT DIAGRAMS

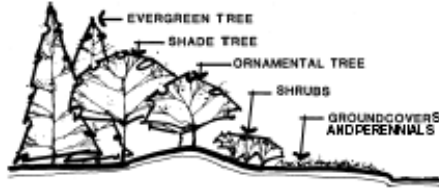
Standards and Guidelines:

- A. Include a combination of manicured and enhanced natural landscape areas. (G)
- B. Place annual and perennial gardens at entries. (S)
- C. Place project identification markers along the perimeter edge of all commercial developments. (G)
- D. Design long expanses of fence and wall surfaces to create landscape pockets. In cases of walls or fences over 50 feet in length, provide structural offsets, insets or landscape pockets to break monotony, provide visual interest and reduce heating effects. (S)
- E. Parkway and Median Plantings:
 - 1) Vary street tree planting species in medians and parkways. (S) However, maintain the desired rhythm of plantings by selecting street trees with similar characteristics (i.e., height and branching patterns). (S)
 - 2) Where detached walks parallel to the street are proposed:
 - a. Provide a minimum of 1 tree per 40 lineal feet of public and private street frontage between the sidewalk and curb in a minimum 8-foot width strip (S) Also in this area, provide durable, low growing shrubs at a minimum ratio of 1 shrub per 5 lineal feet, durable ground covers or a combination of the two. Irrigated grass that is native to Colorado or hybridized for arid conditions may also be placed in these areas. However, if the width of the area between sidewalk and curb is less than 10 feet, it would require subsurface irrigation. (S)
 - b. Provide an additional 1 tree per 40 lineal feet of street frontage within 10 feet outside the sidewalk, internal to the development. (S)
 - c. Provide a minimum of 1 shrub per 5 lineal feet plus ground cover or grass that is native to Colorado or hybridized for arid conditions outside the sidewalk, internal to the development. Native or hybridized grass should be limited in this area and when used should be planned in a manner that can be efficiently irrigated. Low water using species should be chosen, provided they will typically provide a green appearance. (S)
 - 3) Where attached sidewalks are proposed:
 - a. Provide a minimum of 1 tree per 20 lineal feet of public and private street frontage within 15 feet of the edge of the sidewalk. Tree spacing should be evaluated relative to the mature canopy size, as provided in the Recommended Plant Materials List maintained by the

- City and on file with the Planning Division. (S)
- b. Provide a minimum of 5 shrubs per 20 lineal feet plus perennial flowerbeds, ground cover or grass that is native to Colorado or hybridized for arid conditions within 20 feet of the edge of curb. Grass areas that are less than 10 feet wide in any one dimension and bordered by impervious (or paved) surfaces, may be irrigated with a subsurface (no pop up or spray heads) system. (S)
- 4) Where meandering sidewalks are proposed:
 - 1) Provide a minimum of 1 tree per 20 lineal feet of public and private street frontage. Tree spacing should be evaluated relative to the mature canopy size, as provided in the Recommended Plant Materials List maintained by the City and on file with the Planning Division. (S)
 - 2) Accompany the trees with a variety of shrubs and ground covers. Terracing of landscape area may also be appropriate in this area; however, berming should be avoided, as it tends to lead to inefficient irrigation and water waste. (G)
 - 3) Provide a minimum of 8 shrubs per 20 lineal feet plus perennial flowerbeds, ground cover or grass that is native to Colorado or hybridized for arid conditions. Grass areas that are less than 10 feet wide in any one dimension and bordered by impervious (or paved) surfaces, may be irrigated with a subsurface (no pop up or spray heads) system. (S)
 - 5) To prevent interference with motorist visibility, plant parkway trees a minimum of 3 feet from the back of curb and choose shrubs that do not exceed 24" mature height. (S)
- F. Visually buffer all parking lots adjacent to perimeter roadways with adequate screening within a planting strip between the public right of way and the edge of the parking lot pavement. (S) Provide adequate shrub plantings to create a dense visual buffer between parking lots and perimeter roadways. (S) When using Juniper shrubs to create said buffer, a variety of species should be used to avoid the appearance of a single mass. (S) A maximum ratio of 1 Juniper per 3 deciduous shrubs is suggested. (G) Raised planters and screen walls are also encouraged to provide parking lot screening. Bermed turf areas should be avoided due to their tendency to waste irrigation water. (G)
- G. Sight-lines at Intersections and within Medians
- 1) Provide adequate sight lines for an effective 30-foot sight triangle measured from the right



5.1.G TYPICAL SIGHT LINES AT INTERSECTIONS



5.1.H.1 PROVIDE A MINIMUM OF 3 LEVELS OF LANDSCAPE SCALE AT ENTRY DRIVES

of way. (S) Plants and signage are allowed within the sight triangle if:

- a. plants do not exceed 30" in height at full maturity; and
- b. signs do not exceed 30" in height (measured from top of curb height) unless they are more than 80 percent open. (S)

H. Provide a diversity of landscaping materials at entry drives to development parcels. (S) Therefore:

- 1) Provide a minimum of 3 levels of scale, including shade, evergreen, and/or ornamental trees, shrubs, annual and perennial flowers, and ground covers. (S)
- 2) Plant clusters that appear as a cohesive visual element, and that complement the overall landscape theme and palette. (G)
- 3) Integrate the plant design with the entry sign. Plantings should frame or provide a visual base for the signs. (S)

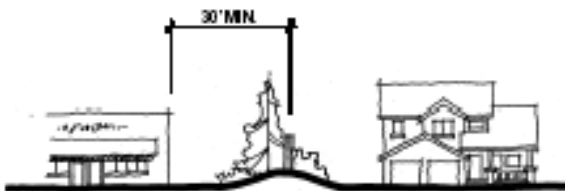
5.2 Perimeter Landscaping Adjacent to Abutting Property

Policy:

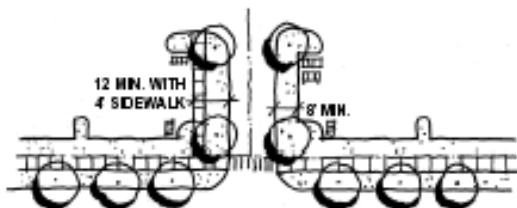
Visual buffers should be provided between similar land uses to accomplish transitions and to mitigate potential conflicts between dissimilar uses.

Standards and Guidelines:

- A. Between similar uses (i.e., where the adjoining uses are each permitted in the underlying zone district): Provide a minimum 10 foot wide buffer planting strip next to a perimeter or internal property line containing 1 tree for every 40 lineal feet of property line and appropriate shrubs, ground cover and/or native or hybridized grass areas. (S) This may not apply to internal property boundaries within a multiple-lot development to the extent the lots are developed under a single Planned Unit Development Plan and achieve other site design policies of these guidelines.
- B. Between dissimilar uses (i.e., where the adjoining uses are not both permitted as a use by right in the underlying zone district(s)): Provide a minimum 30-foot wide buffer planting strip containing a minimum of 1 tree for every 20 lineal feet of property line and a screen hedge incorporating both deciduous and evergreen shrubs a minimum of 3 feet in height (at maturity) along a minimum of 50% of this perimeter area. (S)
- C. Common/Shared Access Drives:
 - 1) Provide a minimum 8-foot wide buffer strip along both sides of a shared access drive when no sidewalk is included. (S)



5.2.B PROVIDE A 30' WIDE PLANTING STRIP BETWEEN DISSIMILAR USES.



5.2.C COMMON/SHARED ACCESS DRIVES.

- 2) Provide a minimum 12-foot wide buffer strip along both sides of a shared access drive where a sidewalk is included. (S)

5.3 Parking Lot Landscaping

Policy:

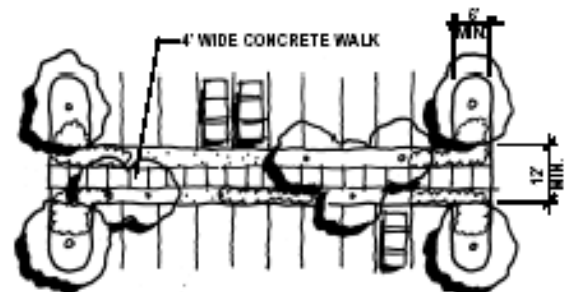
Parking lots are necessary features of building sites that can, if not designed properly, visually detract from the overall development character. Parking lots should be designed to blend with each building site's character using landscape plantings and grading.

Standards and Guidelines:

- A. Use low, opaque walls and/or flowering plants combined with raised planters to create a dense visual buffer of parking areas from peripheral streets or frontages. (S)
- B. Lower the grades of parking lots below existing street elevations to aid in obscuring views of automobiles, while promoting views of architectural elements of the structures beyond. (G)
- C. A minimum of 1 canopy shade tree per 8 parking spaces is required in all parking lots, to be planted in islands, medians, and perimeter areas adjacent to lots (excluding streetscape tree plantings). (S)
- D. Physical shade structures that incorporate live planting may also be an appropriate means of shading parking lot areas. (G)
- E. No Evergreen Tree with a mature width greater than 20 feet, as noted in the Recommended Plant Materials List, should be planted within 15 feet of a hardscaped area. (S)
- F. Utilize landscaped islands and medians to improve the definition of circulation patterns, provide shading for paved areas and break up continuous rows of parking. (G)
- G. No landscaped area within a parking lot shall be less than 100 square feet. (S)
- H. Landscaped Islands
 - 1) Provide a minimum 6-foot wide landscaped island at the end of every row of parking, equal in length to the length of the parking space(s). (S)
 - 2) Provide a minimum of 2 canopy shade trees in each island with a minimum mature canopy of 20 feet. (S)
 - 3) In addition to the trees, plant each island with either a minimum of 8 shrubs, not exceeding 3 feet in height at maturity or a durable and hardy ground cover. (S)
- I. Landscaped Medians
 - 1) Place landscape medians between every other parking bay in lots for more than 100 cars. (S)
 - 2) Landscape medians should be 12 feet wide, including a 4-foot concrete sidewalk. (S)



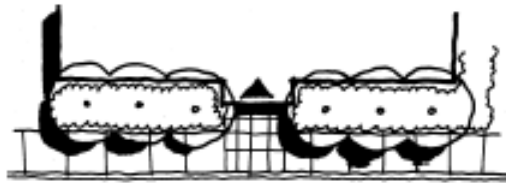
5.3.A USE LOW WALLS AND LANDSCAPING TO SCREEN PARKING



5.3.H & I LANDSCAPE MEDIAN AND ISLAND (SEE TEXT)



5.4.B EMPHASIZE AND INTENSIFY LANDSCAPE AT BUILDING ENTRANCES INCLUDING FLOWER BEDS WITH A VARIETY OF PERENNIALS, ANNUALS, GROUND COVERS AND ORNAMENTAL GRASSES.



5.4.C PROVIDE LANDSCAPING AROUND BASES OF BUILDINGS (SEE TEXT)



5.4.D PROTECT LANDSCAPING FROM PEDESTRIAN AND VEHICULAR TRAFFICE WITH ATTRACTIVE BARRIERS.



5.4.E USE CONTAINERS WITH FLOWERING PLANTS TO ENHANCE SIDEWALK SHOPS, PLAZAS AND COURTYARDS.

Where walkways in medians will not be utilized, the medians may be reduced to a width of 8 feet. (G)

- 3) Provide a minimum of 1 canopy shade tree for each 30 lineal feet of median. (S) In addition to trees, plant each island with either a minimum of 8 shrubs per 30 lineal feet or a durable and hardy ground cover. (S)
- 4) The use of landscape medians is encouraged as a transition slope between parking bays on hillside parking lots (maximum slope of 4:1). (G)
- J. Where head-in parking occurs, locate all shrubs a minimum of 3 feet from the edge of the parking lot curb. (S)

5.4 Building Site Landscaping

Policy:

The coordination of landscape design for individual building sites and larger, multi-parcel projects is essential for creating a consistent, high-quality character. A coordinated design unifies the various buildings and strengthens the cohesiveness of the development. Individual landscape treatments for building sites should compliment the roadway landscapes, create distinctive settings for buildings, reinforce the design of the open space systems, and provide amenities for pedestrians.

Standards and Guidelines:

- A. Use landscaping that is of appropriate scale relative to the proposed adjacent structures.
- B. Intensify landscaping at building entrances. (G)
- C. Provide a minimum planting width of 6 feet adjacent to the building and plant no less than 25% of the building perimeter with multi-stemmed ornamental trees, shrubs, perennial flowers, and ground cover. (S) Emphasis should be given to landscaping along the front building elevation. (G) Provide additional landscaping around the perimeter of buildings to soften the edge between sidewalks/parking lots and structures. (G) To promote irrigation efficiency, no single landscaped area shall be less than 100 square feet, with the exception of deciduous trees planted in grates. (S)
- D. Protect landscaping from vehicular and pedestrian encroachments with raised planting surfaces, depressed walks, and/or curbs. (G)
- E. Use high quality, durable planters with flowering annual and perennial plants to enhance sidewalk shops, plazas and courtyards. (G)
- F. Minimum Landscape Area required within each building site and within the entire development shall be 30% including hardscaped plazas and walkways within open space areas. (S) Hardscape plazas and walkways can account for

a maximum of one-third of the minimum landscape area requirement. (S)

G. Landscaping within Public Easements

- 1) Landscaping within public easements is limited to shrubs, ground covers, and small ornamental trees. (G) No canopy/shade trees may be planted within such easements. (S)
- 2) Berming is generally acceptable within public easements in conjunction with plant material. (G) Berming is not to be used instead of plant material. (S)

5.5 Landscape Irrigation / Water Conservation

Policy:

A significant percentage of the City's treated water supply is used to irrigate plant materials and grasses. Every effort should be made to conserve water by utilizing alternative means for maintaining a suitable landscape environment.

Standards and Guidelines:

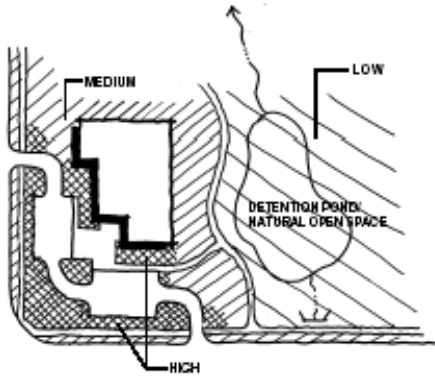
- A. Incorporate Xeriscape Concepts into the landscape design of each commercial development without compromising the intent to establish significant visual amenities through landscaping. Utilize a combination of the following principles to achieve this requirement. (S)

For Example:

- 1) Incorporate a "zoned planting scheme" to reduce water demand by grouping similar varieties of plants that are drought and disease tolerant. (S) The use of water conserving landscapes is encouraged by minimizing manicured grassy areas. (G) The PUD landscape plan should depict what are proposed as low, medium and high water zones. (S) The building permit irrigation plan should calculate GPM/zone. (S)
- 2) Use drought tolerant plant species suitable to this climate that have minimum watering and pruning requirements. (G)
- 3) For all irrigated areas, potential runoff should be avoided through a combination of locating such areas away from hard surfaces and the proper selection of irrigation devices. (G)
- 4) Incorporate heavily mulched planting beds to aid in retaining moisture and to make planting areas easier to maintain. For all grassy areas, soils shall be improved with 3 to 6 yards of organic materials per 1,000 square feet to a depth of 6 to 8 inches. (S)
- 5) Incorporate advanced irrigation measures and scheduling. Install an efficient automatic irrigation system that will incorporate water conservation measures. Spray heads are

recommended for lawn and ground cover areas, with drip irrigation for shrubs and trees. (G)

- B. The developer is encouraged to investigate alternative sources of irrigation water for all landscaped areas. (G) Alternative sources shall be owned and maintained by the developer or an organization formed for such purpose, unless the City otherwise agrees.



5.6.A LANDSCAPE MAINTENANCE ZONES

5.6 Landscape Standards and Plant Material Selections

Policy:

- A. Landscape zones:
Depending on the size and magnitude of an individual parcel, the project's landscape areas should be divided into one or more of the following basic zones (G):
 - 6) High Maintenance Zone (located at site and building entrances and pedestrian areas.) This zone may include:
 - a. Manicured grass that is native to Colorado or hybridized for arid conditions
 - b. Formal plantings of trees and shrubs
 - c. Planters, with annuals and perennials
 - 7) Medium Maintenance Zone (located along perimeter roadways.) This zone may include:
 - a. Drought tolerant native or hybridized grasses, which require less water and maintenance (but still provide a manicured green look during the growing season – including fescue-type grasses)
 - b. Large shrubs
 - c. Large specimen trees
 - 8) Low Maintenance Zone (located in environmentally sensitive areas, along waterways and the balance of the site.) These may include:
 - a. Natural areas and native grasses (which require very low water and maintenance)
 - b. Existing vegetation
 - c. Drought resistant plant species
 - d. Meadow-like, open fields
 - e. Wetlands areas
- B. The City Manager shall by written order adopt a Recommended Plant Materials List for development subject to the CDDSG, which List may be updated periodically by subsequent written order of the City Manager. Prior to adopting any such order, the City Manager may obtain the input of HFAB, the Planning Department, and any other persons regarding such List, and may notice and hold any public meetings the Manager deems advisable to assist in formulating any such order or List. The

Recommended Plant Materials List shall be maintained on file in the Planning Department. All applicants for development subject to the CDDSG shall be advised as to the existence of the Recommended Plant Materials List and a copy thereof shall be made available to such applicants. Selection of plant materials is preferred from the Recommended Plant Materials List (G), and in light of the following standards and guidelines:

- 1) Select plant materials on the basis of suitability to climate, setting, long-season of visual appeal (multi-season plants, good architectural appeal, long bloom time, branching structure or ornamental grasses, for instance), and compatibility with other development plantings, character and functions. (G)
 - 2) Select plant materials that are free of disease and harmful insect problems. (S)
 - 3) To avoid the spread of disease, avoid planting more than 20 percent of a site with any single plant species. On small sites (less than 2 acres), some flexibility may be granted to achieve specific design objectives, subject to review and approval of the City Forester. (G)
 - 4) The quality of plant material selected will follow the guidelines of the "American Standard for Nursing Stock" by the American Association of Nurserymen. (S)
 - 5) Proper drainage is required for all major plantings to ensure the establishment of a good root system and healthy growth. (S)
 - 6) The installation of all landscaping shall be done by an established landscape contractor who follows the procedures set forth by the American Association of Landscape Contractors and its local agencies. (S)
 - 7) All landscaping and landscape material shall be backed by a warranty of the owner and the Contractor for a minimum of one year, as detailed in the development agreement. (S)
 - 8) A performance guarantee is required to ensure completion of landscaping. (S)
 - 9) Artificial plants of any type, size or color are not allowed as exterior landscaping within any development parcel. (S)
- C. Grasses should provide an immediate cover. In less irrigated/non-irrigated areas, plant drought-tolerant plants. A temporary irrigation system should be maintained for a minimum of one year. (G)
- D. Choose plant materials that provide variety and year-round color and screening. Select materials, which highlight each season (G).
- 1) Spring: Flowering Plants
 - 2) Summer: Shade
 - 3) Fall: Leaf color
 - 4) Winter: Branch form and texture



5.6.E PLANT FLOWER BEDS IN VISIBLE AREAS

- E. Edging is required to separate grass areas from shrubs, ground cover and mulch. (S)
- F. Utilize porous paving materials for paths, plazas, etc., such as patio bricks, inter-locking pavers, concrete stepping stones and/or sandstone. (G)
- G. Plant annual and perennial flower beds in visible areas such as pedestrian plazas, building entries. (S)
- H. Mulching:
 - 1) All planting beds should be mulched with wood or decorative rock to stabilize soils, control erosion, and conserve water use. (S)
 - 2) Use organic mulch materials that are best suited and adapted for the local area. (S)
 - 3) Decorative rock may not constitute more than 50% of the total mulched area. (S)
 - 4) In parking lot landscape islands, rock mulch may be used as an edger to protect the organic mulch, which should be the primary mulch material. (S)
- I. Use landscape or weed barrier fabric within all shrub beds and mulched areas to control weeds. (G)
- J. All Landscape Plans should be prepared by a qualified Landscape Architect or landscape designer. (G)

5.7 Planting Size Standards

Policy:

An immediate landscape impact is desired within all commercial developments, and to facilitate this, minimum plant size standards are required. Larger sizes are encouraged for shrubs and perennials.

Standards and Guidelines:

- A. Provide landscaping according to the following minimum sizes: (S)
 - 1) Deciduous shade/canopy trees: 2.0" caliper*
 - 2) Ornamental trees: 2.0" caliper*, however, 1.5" caliper ornamental trees may be sufficient in some cases.
 - 3) Evergreen trees: 6'-8' height (with a minimum of 25% 8' in height)
 - 4) Multi-stem Ornamentals: 8'-10' height
 - 5) Shrubs: 5 gallon container
 - 6) Ground Cover/Perennials: 2¼" pots*
 - 7) Vines: 1 gallon container

*Measured by ANSI standard Z60.1.

5.8 Landscape Maintenance and Replacement

Policy:

The property owner is responsible for providing, protecting and maintaining all landscaping in a healthy and growing condition.

Standards and Guidelines:

- A. The property owner will remove and replace dead plant materials immediately with the same type, size and quantity of plant material as originally installed. If material is diseased or insect-infected, replacement with same species is not advisable unless solution has been found for disease or infestation. Replacement may not be identical, yet should provide same form and function, subject to City Staff review and approval. (S)
- B. Avoid replacing landscape materials during the dry winter months between December and February and in midsummer. (G)
- C. Contact the Planning Division for specific time requirements for landscape material replacement. (G)



5.8.A REMOVE AND REPLACE DEAD OR DISEASED PLANT MATERIALS IMMEDIATELY.

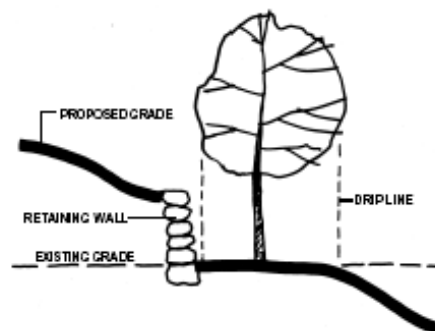
5.9 Existing Vegetation

Policy:

Special attention should be paid to preserving within each commercial development those natural features and vegetation which are significant because of their unique character, history, size, variety, or growth habits. This includes all mature trees greater than 3 inches in diameter and significant understory plants and shrubs.

Standards and Guidelines:

- A. Provide an inventory of all existing trees and significant woody vegetation that identifies size, health, and species and trees to be retained and removed. (S) The inventory is to be prepared by a botanist, licensed arborist or landscape architect. (S)
- B. Locate site and building improvements to preserve significant natural vegetation. (G)
- C. Preserve and incorporate into the landscape plan, any existing health tree 6" caliper or larger, and located more than 20 feet from any proposed building location. (S) Preserve all trees over 24" caliper unless deemed unhealthy or unsuitable for preservation. (S)
- D. During construction of site improvements, erect suitable protective barriers (generally located beyond the drip line) around trees to be preserved, making sure trunks, branches and root structures are not damaged by construction equipment. (S)
- E. Incorporate tree wells or retaining walls as necessary in the landscape plan to protect existing trees. (G) Maintain historic drip lines. (G)



5.9.E USE TREE WELLS OR RETAINING WALLS TO MAINTAIN GRADE AROUND EXISTING TREES



5.10.A PROVIDE ATTRACTIVE, FUNCTIONAL OUTDOOR SEATING



5.10.C PROVIDE ATTRACTIVE, HEAVY DUTY TREE GRATES IN PLAZA AREAS.



5.10.D ENCLOSE AND LANDSCAPE AROUND ALL TRASH DUMPSTERS.

5.10 Site Furniture and Features

Policy:

Site furnishings include benches, waste receptacles, planters, railings and bollards. Visual consistency of these elements is desired throughout each development. All components of outdoor site furniture should be low maintenance, highly durable and resistant to vandalism, graffiti, and theft.

Standards and Guidelines:

- A. Outdoor Seating
 - 1) Use outdoor seating that is comfortable, attractive, durable and easy to maintain. (S)
 - 2) Locate benches at major building entryways, drop-off areas, transit stops, pedestrian courtyards and plazas. (S)
 - 3) Locate benches in areas that receive direct sunlight in the winter, are sheltered from winds and shaded in the summer. (G)
 - 4) Where seating is fixed, provide a variety of arrangements (both linear and grouped), which accommodate two (2) to six (6) persons. (G)
- B. Planters and Waste Receptacles
 - 1) Design planters and waste receptacles to coordinate with other furniture. (G)
 - 2) Use materials and colors similar to those used for benches. (G)
- C. Tree Grates
 - 1) Use of tree grates is discouraged unless used in conjunction with structural soils. If necessary, use tree grates to prevent excessive soil compaction and to give added interest to the pavement. (G)
 - 2) Choose tree grates that are fabricated of a strong, durable material. (S) In areas which receive heavy use, tree guards may be appropriate to give added protection to young trees. (G)
- D. Trash dumpsters
 - 1) Provide a concrete pad a minimum of 8 feet wide to provide truck access to dumpster locations. (S)
 - 2) Enclose and landscape around all trash dumpsters. (S) (See also Section 4.7, Service Entrances and Loading Areas and Section 6.0, Screen Walls and Fences.)

¹ Revised: Ordinance 1422, Series 2003.



6. SCREEN WALLS AND FENCES

Goal:

Fences and walls should be decorative and contribute to the visual quality of the project and the overall development. Walls, fences, and landscape materials shall be used to screen service areas, loading areas, and outdoor storage or sales areas. When not required for security, screening, or grade transitions, the size of walls and fences should be minimized. When required, however, fencing should be as inconspicuous as possible, and walls should be low.

6.1 Wall and Fence Design and Materials

Policy:

Fencing and walls shall be constructed of materials that are compatible with the adjacent building architecture and their appearance softened with landscape materials.

Standards and Guidelines:

- A. Avoid using retaining walls in excess of 30 inches in height (G). Where taller retaining walls are required, provide safety protection in the form of railings, fences or hedges, or create a terrace with two (2) shorter walls. (S)
- B. Incorporate architectural treatment on both sides of perimeter walls. (S)
- C. Provide landscaping in combination with walls and fences to soften their appearances. (G)
- D. Chain-link fencing with or without wood slatting is not an acceptable screen material. (S)
- E. Break up long expanses of fences or walls, with periodic columns, insets or change in materials. (S)
- F. Construct walls and fences from durable materials such as stone, brick, or metal with dark finishes (wrought iron or similar), or a combination of these materials. (G) Wood is not an acceptable fence/screening material. (S)
- G. Concrete walls are permitted if faced with masonry or stone, or if the surface is scored or textured. (G)



6.1 A AVOID USING RETAINING WALLS IN EXCESS OF 30 INCHES IN HEIGHT.



STAGGERED WALL



WALL AND PLANTERS



WALL WITH BREAKS

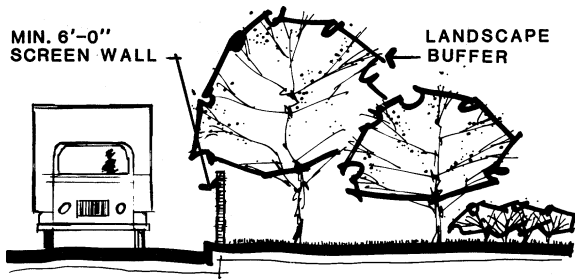
6.1 E BREAK UP LONG EXPANSES OF FENCES OR WALLS WITH COLUMNS, INSETS OR CHANGES IN MATERIAL

6.2 Screening Requirements

Policy:

A project must include adequate screening of meters, transformers, and loading and service areas.

Standards and Guidelines:



**6.2 A MAKE SCREENING FOR LOADING DOCKS AND SERVICE AREAS
A MINIMUM OF 6 FEET HIGH.**

- A. Make screening for loading docks and service areas a minimum of 6 feet high and constructed of the same materials and finishes as the main building. (S)
- B. All authorized outside storage shall be screened. (S)
 - 1) Screen from view all outdoor areas used for the display, storage, or sale of seasonal inventory. (S)
Use fencing, walls, and/or landscaping. (S)
- C. Screen all utility equipment, meters and transformers from view with fencing, walls, and/or landscaping. (S)



**6.2 B & C ALL AUTHORIZED OUTSIDE STORAGE, UTILITY EQUIPMENT,
METERS, AND TRANSFORMERS SHALL BE SCREENED.**



8. EXTERIOR SITE LIGHTING

Goal:

Exterior lighting should be used to provide illumination for the security and safety of entry drives, parking, service and loading areas, pathways, courtyards and plazas, without intruding on adjacent properties. Site lighting shall be architecturally compatible and consistent in design between sites.

8.1 Fixture Design and Illumination Level

Policy:

Exterior light fixtures should be compatible and relate to the architectural character of the buildings on a site. Site lighting should be provided at the minimum level to accommodate safe pedestrian and vehicle movements, without causing any off-site glare.

Standards and Guidelines:

- A. Poles and fixtures should be designed to be architecturally compatible with structures and lighting on adjacent properties. (G)
- B. Poles and fixtures shall be compatible with all other fixtures on site. (S)
- C. Illuminate all intersections with perimeter public roads with similar poles and fixtures used internal to the development. (G)
- D. Select and locate all lighting fixtures to shield or confine light spread within a site's boundaries. (S)
- E. To facilitate security, specify lighting levels that are adequate for visibility, but not overly bright. All building entrances should be well-lighted. (G)
- F. Use metal halide or other white light fixtures. High pressure sodium is not allowed in any application. (S)
- G. Maximum height of all poles within landscaped and plaza areas is 20 feet, measured from grade. Poles within these areas may be set on pedestals no more than 8 inches in height. (S)



8.1 LIGHT FIXTURES SHOULD BE COMPATIBLE AND RELATE TO THE ARCHITECTURAL CHARACTER OF THE BUILDINGS.

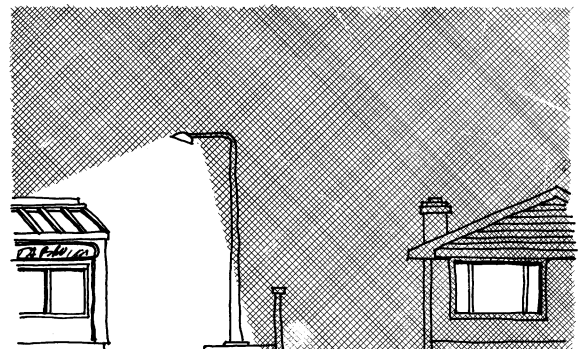


8.1 A POLES AND FIXTURES SHOULD BE COMPATIBLE WITH ADJACENT STRUCTURES AND LIGHTING.

8.2 Decorative Architectural Lighting

Policy:

Special lighting that accents building features and creates visual interest is permitted in commercial developments, provided that design continuity is maintained among buildings.



8.1 D SELECT AND LOCATE LIGHT FIXTURES TO CONFINE LIGHT SPREAD.

Standards and Guidelines:

- A. Lighting fixtures mounted directly on structures may be allowed when utilized to enhance specific architectural elements or to help establish scale or provide visual interest. (G)
- B. "Wall paks" are permitted only in loading and service areas, and should be down-lit and shielded from view. (S)
- C. Neon tubing is not acceptable as a building accent or to accentuate the building's form. (S)
- D. Integrate illuminators or fixtures used to light building mounted signage, building facades, or pedestrian arcades into a building's architectural design. (G)
- E. Consider highlighting entrances, art, terraces, and special landscape features. (G)

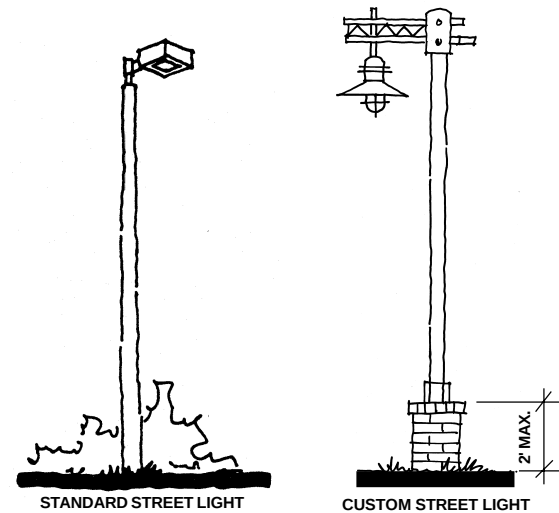
8.3 Parking Lot Lighting

Policy:

Parking lot lighting should be unobtrusive and provide safe light for orderly functions.

Standards and Guidelines:

- A. Make all parking lot light fixtures similar in design for all surface parking areas. (S)
- B. Select metal halide lighting with a concealed light source of the "cut-off" variety to prevent glare and "light trespass" onto adjacent buildings and sites. (S)
- C. Provide separate, pedestrian scale lighting for all pedestrian ways through parking lots. (G)
- D. Maximum height of parking lot poles is 24 feet measured from finished grade. (S)
- E. Locate poles in medians wherever possible with a maximum base height of two (2) feet. (G)



8.3 PARKING LOT LIGHT FIXTURES (SEE TEXT).

8.4 Pedestrian Area Lighting

Policy:

Walkway lighting should be scaled to the pedestrian and should provide for safe use of pathways and pedestrian areas. Walks should be lighted for the safe passage of pedestrians as should areas which are dangerous if unlit, such as stairs, ramps, intersections, and underpasses.

Standards and Guidelines:

- A. Use of lighted bollards or other low level fixtures is encouraged to identify pedestrian walkways and drop-off areas at entrances to buildings. (G)
- B. Emphasize pedestrian-to-vehicle intersections with low level decorative street lights. (G)
- C. Illuminate all primary walkways, steps or ramps along pedestrian routes. (G)



8.4 A USE LIGHTED BOLLARDS TO IDENTIFY PEDESTRIAN AREAS.

- D. Incandescent or metal halide lamps are strongly encouraged. (G)
- E. Use building mounted fixtures for walkways or plazas near buildings. (G)

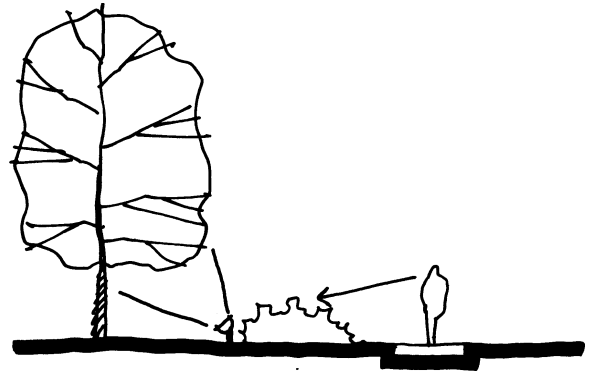
8.5 Landscape Lighting

Policy:

Landscape lighting should enhance and complement, not overpower, the landscape materials.

Standards and Guidelines:

- A. Design the landscape lighting to work for all seasons of the year and through the life of the landscape. (G)
- B. Conceal fixtures where possible (ie. in trees, by landscape, behind rocks), control glare, and avoid extreme bright spots on the surrounding landscape. (G)



8.5 B CONCEAL LIGHT FIXTURES WHERE POSSIBLE.

8.6 Site Security Lighting

Policy:

Security lighting is anticipated in some sites, but it should not negatively impact the site and building architecture as well as adjacent parcels.

Standards and Guidelines:

- A. No light source (bulb) shall be directly visible from adjacent parcels. (S)
- B. Provide only as much light/illumination as necessary to provide safety and security of the area. (G)

8.7 Light Intensity

Policy:

The light intensity levels within all areas should correspond to use and potential hazards.

Standards and Guidelines:

- A. A photometric lighting plan is required for all proposed commercial developments to ensure adequate and appropriate light levels are provided for each site condition. (S)

B. The following levels of illumination should be maintained for each of the specific locations*: (G)

1) Building Entrances	5.0 footcandles
2) Sidewalks	2.0 footcandles
3) Bikeways	1.0 footcandles
4) Courts/Plazas/Terraces	1.5 footcandles
5) Ramps	5.0 footcandles
6) Stairways	5.0 footcandles
7) Underpasses	5.0 footcandles
8) Waiting Areas	1.0 footcandles
9) Parking Lots	1.0 footcandles
10) Roadways	1.5 footcandles

* Values given area in minimum average maintained horizontal, footcandles which are measured at the average point of illumination between brightest and darkest areas, 4'-5' above the ground surface. (Source: IES Lighting Handbook - 4th Edition).

C. Site lighting should provide consistent levels of illumination, avoiding pockets of very high or low levels of illumination. (G)



9. SPECIAL DESIGN GUIDELINES FOR LARGE RETAIL ESTABLISHMENTS

Goal:

Large retail establishments, such as “superstores” containing more than 30,000 square feet allocated to a single user, depend on high visibility from major public streets. Correspondingly, the design of these buildings will shape much of the character and attractiveness of the major streetscapes in the commercial areas of Louisville. It is important that these large individual developments contribute to and integrate with the city in a positive way. The following policies, standards and guidelines are meant to provide a means to address the community-wide and regional impacts of large retail store developments and are in addition to the preceding standards and guidelines in this document.

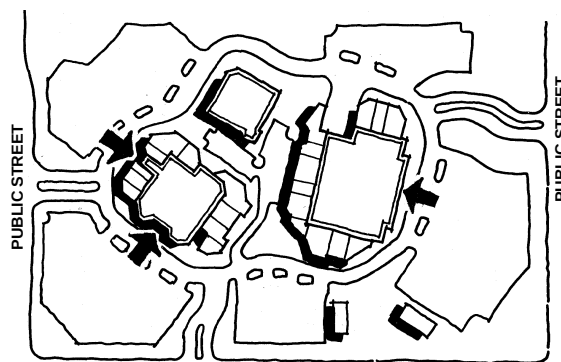
9.1 Parking Lot Orientation

Policy:

Parking should be distributed around large buildings in order to shorten the distance to the buildings and public sidewalks.

Standards and Guidelines:

Locate no more than 75% of the off-street parking area for the entire property between the front facade of the principal building(s) and the primary abutting street. (G)



9.1 DISTRIBUTE PARKING TO MINIMIZE WALKING DISTANCES.

9.2 Rear of Buildings

Policy:

The rear or sides of buildings should be attractive. Architectural and landscape screening techniques should be employed to mitigate the aesthetic impacts of blank walls, loading areas, storage areas, HVAC units and garbage receptacles.

Standards and Guidelines:

- A. Provide a minimum 35 foot building setback from the nearest property line along the rear and sides of buildings. (S)
- B. Where the parcel is adjacent to a residential use, plant evergreen trees at 15 foot intervals, or in clusters that accommodate mature tree diameter and provides appropriate screening. (S)

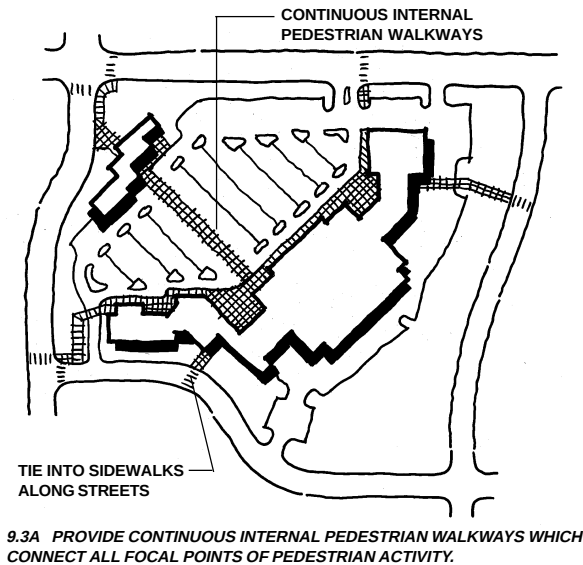
9.3 Pedestrian Accessibility

Policy:

Pedestrian accessibility provides linkages with surrounding areas and uses and opens auto-oriented developments to the neighborhood, thereby reducing traffic impacts and enabling the development to project a friendlier, more inviting image.

Standards and Guidelines:

- A. Provide continuous internal pedestrian walkways, a minimum of 8 feet wide, from the public sidewalk or right-of-way to the principal customer entrance of all principal buildings on the site. (S) Such walkway can include crosswalks. (G)
- B. Provide sidewalks, not less than 8 feet wide along any facade that contains a customer entrance, is adjacent to a parking area, or which would provide functional pedestrian connections. (S)
- C. Except where features such as arcades and entry ways are part of the facade, provide a 6 foot wide planting bed between the facade of the building and the adjacent sidewalk. (S)
- D. Distinguish all internal pedestrian walkways from driving surfaces with durable, low maintenance surface materials such as concrete or brick pavers. (S)
- E. Provide weather protection features such as awnings or arcades within 30 feet of all customer entrances. (G)



9.4 Central Features and Community Spaces

Policy:

Large retail establishments should offer attractive and inviting pedestrian scale features, spaces, and amenities within the overall development area.

Standards and Guidelines:

- A. Configure entrances and parking lots to be functional and inviting with walkways conveniently tied to logical destinations. (G)
- B. Incorporate bus stops and drop-off/pick-up points as integral parts of the development. (G)
- C. Anchor pedestrian ways with special design features such as arcades, porticos, pedestrian-scale light fixtures, bollards, planter walls, towers and other architectural elements that define circulation ways and outdoor spaces. (G)
- D. Each large retail establishment within a larger commercial development must contribute to the establishment or enhancement of community and public spaces by providing at least 2 of the following amenities within its site or elsewhere within the overall development: 1) patio/seating area, 2) pedestrian plaza with benches, 3) transit center, 4) bus shelter, 5) window shopping walkway, 6) outdoor playground area, 7) kiosk area, 8) water feature, 9) clock tower, or 10) other such appropriate amenities. (S)

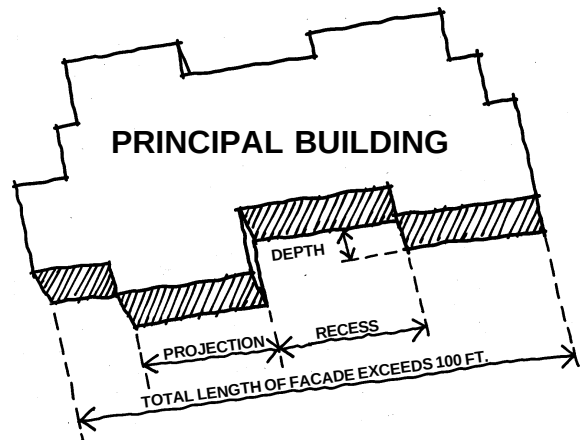
9.5 Facades and Exterior Walls

Policy:

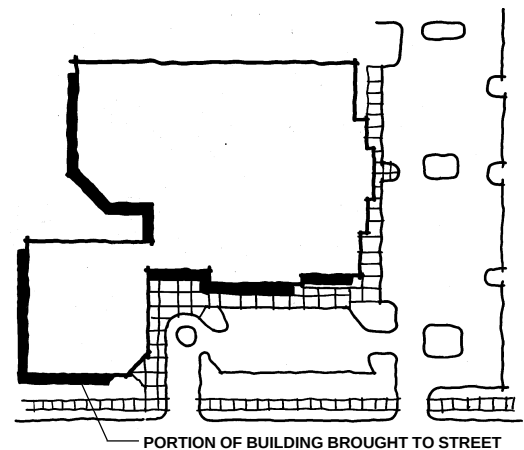
Articulate facades to reduce the massive scale and the uniform impersonal appearances of large retail buildings and provide visual interest that is consistent with Louisville's desired identity, character and scale.

Standards and Guidelines:

- A. In cases of facades more than 100 feet in length, incorporate significant architectural features and treatments to diminish the building mass. (S)
- B. Incorporate arcades, display windows, entry areas, or other such features along at least 60% of the horizontal length of all the ground floor facade with the primary pedestrian entrance. (S)
- C. Incorporate design features that are similar to the front facade in all rear and side facades visible from adjoining properties and/or public streets. (S)
- D. In cases of large buildings for employment, storage or auto related uses that have little relationship to pedestrians, or have a need to limit ground floor windows, bring a part of the building to the street. (G) A setback modification may be authorized for such purpose. (G)



9.5A FACADES MORE THAN 100 FEET IN LENGTH SHALL INCORPORATE SIGNIFICANT ARCHITECTURAL FEATURES AND TREATMENTS.



9.5D IN CASES OF LARGE BUILDINGS BRING A PART OF THE BUILDING TO THE STREET.

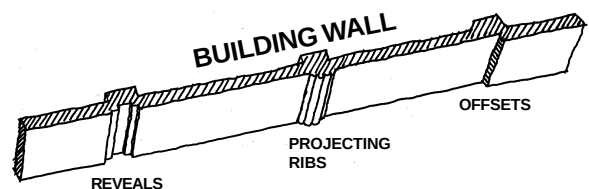
9.6 Detail Features

Policy:

All buildings should incorporate architectural features and patterns that create visual interest, are of a pedestrian scale, and recognize Louisville's desired identity character, and scale.

Standards and Guidelines:

- A. Incorporate a repeating pattern in all building facades, to include the following elements: 1) color change, 2) texture change and 3) material module change. (G) Repeat these elements at intervals of no more than 30 horizontal feet. (G)
- B. Express architectural or structural bays through a change in plane of at least 12 inches in width, such as an offset, reveal, or projecting rib. (G)



9.6B EXPRESS ARCHITECTURAL OR STRUCTURAL BAYS THROUGH A CHANGE IN PLANE.

9.7 Roofs

Policy:

Variations in roof lines should be used to add interest to, and reduce the massive scale of large retail buildings. Roof features should complement the character of adjoining neighborhoods.



9.7A INCORPORATE A VARIETY OF ROOF FEATURES IN LARGE RETAIL BUILDINGS.

Standards and Guidelines:

- A. Incorporate the following features into the roofs of large retail buildings:
For flat roofs:
 - 1) Parapets on all building elevations that conceal flat roofs and rooftop equipment. (S)
If sloping roofs are used, the standards in 2 and 3 below must be applied on all building elevations. (S)
 For sloping roofs:
 - 2) Overhanging eaves that extend no less than 3 feet past the supporting walls. (S)
 - 3) Three or more roof slope planes. (S)
- B. Design roof slopes within the maximum to minimum range of 1:1 to 3:1. (S)

9.8 Materials and Colors

Policy:

Exterior building materials and colors comprise a significant part of the visual impact of a building. Therefore, they should be aesthetically pleasing and compatible with materials and colors used in adjoining neighborhoods and commercial parcels.

Standards and Guidelines:

- A. Incorporate high quality exterior building materials in the design and construction of large retail buildings such as brick, wood, sandstone or other native stone and tinted, textured, concrete masonry units. (G)
- B. Avoid using the following exterior building materials: smooth-faced concrete block, tilt-up concrete panels and pre-fabricated steel panels. (G)

9.9 Building Entryways

Policy:

Entryway design elements should give orientation and aesthetically pleasing character to a building.

Standards and Guidelines:

- A. Incorporate clearly defined, highly visible customer entrances for each principal building on a site. (S)
- B. Enhance each entrance with at least 3 of the following features: 1) canopies or porticos, 2) overhangs, 3) recesses/projections, 4) arcades, 5) raised corniced parapets over the door, 6) peaked roof forms, 7) arches, 8) outdoor patios, 9) display windows, 10) architectural details such as tile work and moldings which are integrated into the building structure and design and 11) integral planters or wing walls that incorporate landscaped areas and/or places for sitting. (S)
- C. Provide at least 1 exterior customer entrance for each additional store located within a principal building (such as a pharmacy or bank located within a supermarket). (G)



9.9 A INCORPORATE CLEARLY DEFINED, HIGHLY VISIBLE CUSTOMER ENTRANCES FOR EACH PRINCIPAL BUILDING.

APPENDIX A

RECOMMENDED PLANT MATERIALS LIST

DECIDUOUS TREES

Common Name	Botanical Name	Height ³	Width ³	Water Requirement	Maintenance Requirement	Street Tree	Remarks
Western Hackberry	Celtis occidentalis	60'	40'	M-L	L	Yes	Great bird attractant; CO native
Kentucky Coffeetree	Gymnocladus dioica	60'	50'	L	L	Yes	Males have flowers but no seeds; slow growth but superior drought tolerance
Norway Maple	Acer platanoides (2)	50-60'	40-45'	M	L	Yes	Good fall color yellow
Black Walnut	Juglans nigra	50-60'	50-60'	M-L	L	No	Stains sidewalks, streets and cars
American Linden	Tilia americana	50-60'	30-35'	M	L	Yes	
Redmond Linden	Tilia euchlora 'Redmond'	50-60'	30-35'	M	L	Yes	
Horsechestnut	Aesculus hippocastanum	50'	40'	M-L	L		
Western Catalpa	Catalpa speciosa	50'	30'	M-L	M		Fruits can be messy
Swamp White Oak	Quercus bicolor	50'	40'	M-L	L	Yes	
Bur Oak	Quercus macrocarpa	50'	40'	L	L	Yes	Tolerates tough conditions
Northern Red Oak	Quercus rubra borealis	50'	30'	M	L	Yes	
Shumard Oak	Quercus shumardii	50'	40'	M	L	Yes	Red fall color; not fussy; tolerant of high pH
English Oak	Quercus robur	45'	35'	M-L	L	Yes	Good fall color; needs shelter
Red Maple very few	Acer rubrum	40-50'	30-40'	M	L	Yes	Good yellow to red fall color
Texas Shumard Oak	Quercus buckleyi	40'	30'	M-L	L	Yes	More drought tolerant
Honeylocust	Gleditsia triacanthos inermis (2)	36'	25'	L	L	Yes	Shademaster, Imperial & Skyline
Little Leaf Linden	Tilia cordata	35-40'	25-30'	M	L	Yes	
Chinese Catalpa	Catalpa ovata	35'	30'	M-L	M	No	
Turkish Hazel	Corylus colurna	30-40'	20-25'	M-L	L	Yes	Tolerates pollution
Amur Corktree	Phellodendron amurense	30-40'	35-45'	M-L	L	Yes	
Japanese Pagoda Tree	Sophora japonica	30-40'	15-20'	M-L	L	Yes	
Ohio Buckeye	Aesculus glabra	30-35'	26'	M-L	L	Yes	Poisonous seeds, good fall color
Yellow	Aesculus flava	30'	25'	M	L	Yes	Yellow flowers,

Buckeye							smooth fruit
Bigtooth Maple	Acer grandidentatum	20-25'	12-15'	L	L	No	Small tree or large shrub; tolerant of dry & alkaline soils; Ft. Collins selection is cherry-red in fall
Western Soapberry	Sapindus drummondii	20-25'	20-25'	L	M		Native to Baca County, poor soil; watch for co-dominant limbs; small tree
American Hornbeam	Carpinus caroliniana	20'	20-25'	M	L	No	Needs some shade; sensitive to salts; gorgeous winter look
Gambel Oak small tree	Quercus gambelli	15-20'	15-20'	L	L	No	Yellow to orange or red in fall

ORNAMENTAL TREES							
Common Name	Botanical Name	Height	Width	Water Requirement	Maintenance Requirement	Street Tree	Remarks
Globe and Purple Robe Locust	Robinia pseudoacacia 'Globe' & 'Purple Robe'	50'	30'	L	L	NA	
Colorado Paper Birch	Betula x andrewsii	40'	20'	M	L	NA	Native of Boulder Cnty., hybrid; white peeling bark
Glen's Form Callery Pear Aristocrat Pear Chanticleer Pear Stone Hill Pear	Pyrus calleryana (2)	35' 35' 30'	25' 15' 12-15'	M-L	M	NA	Narrower & more cold hardy than Bradford; fruit unimportant; clay ok
Downy Hawthorn	Crataegus mollis	30'	30'	L	L	NA	
White Shield Osage Orange	Maclura pomifera	30'	30'	M	L	NA	No thorns; leathery leaves; fruitless
Mayday Tree	Prunus padus	30'	20'	M-L	L	NA	
Shantung Maple	Acer truncatum	25-30'	20-25'	M-L	L	NA	Replacement candidate for Amur Maple; orange-yellow in fall
Cockspur Hawthorn	Crataegus crus-galli	25'	20'	L	L	NA	Thorns, good fall color orange to red
Des Fontanes Cherry	Prunus x fontanesiana	25'	20'	M	M	NA	Cheyenne USDA Research Station intro. – Ft. Collins Nursery
Thornless Cockspur Hawthorn	Crataegus crus-galli inermis	20-30'	25-35'	L	L	NA	Thornless, good fall color orange to red
Washington Hawthorn	Crataegus phaenopyrum	20-30'	15-20'	M-L	L	NA	Good fall color, red
Amur Maackia	Maackia amurensis	20-30'	25-30'	M	L	NA	Wider than tall; nitrogen fixing; tolerate dry,

							alkaline soils
Peking Lilac	Syringa pекinesis	20-30'	15-25'	M-L	L	NA	Showy flowers
Tatarian Maple 'Hot Wings'	Acer tataricum 'Hot Wings'	20-25'	15-20'	M-L	L	NA	June-pink/brilliant red seeds, fall yellow to orange-red; Fort Collins Nursery introduction 2003
Shadblow Serviceberry	Amelanchier canadensis	20-25'	10-15'	M-L	L	NA	Nice fall color yellow to red
Shubert Chokecherry or Canada Red Cherry	Prunus virginiana 'Shubert'	20-25'	15-20'	M-L	L	NA	Red-purple foliage
Eastern Redbud	Cercis canadensis	20'	15'	M - H	L	NA	Showy flowers
Russian Hawthorn	Crataegus ambigua	20'	20'	M-L	M-L	NA	Some thorns, some suckering, fruit persists through winter; flowers in June
English Hawthorn	Crataegus laevigata	15-25'	15-25'	M-L	L		Tough, good for islands, buffers
Flowering Crab	Malus varieties (2)	15-25'	15-25'	L - M	M	NA	
Amur Maple	Acer ginnala	15-20'	15-20'	M-L	L	NA	Good fall color orange to red
Cornelian Dogwood	Cornus mas	15'	12-15'	M	L	NA	Showy flowers
Gray Dogwood	Cornus racemosa	15'	15'	M-L	L	NA	Very attractive
American Smoketree	Cotinus obovatus	15'	12'	M	L	NA	Plume-like flowers
Wafer Ash or Hoptree	Ptelea trifoliata	15'	15'	M-L	L	NA	Elm-like wafers in late summer; fall-yellow; drought tolerant
Japanese Tree Lilac	Syringa reticulata	15'	12'	M-L	L	NA	Showy flowers, good fall color yellow
American Plum	Prunus americana	10-12'	8-12'	L	M	NA	Suckers

DECIDUOUS SHRUBS							
Common Name	Botanical Name	Height	Width	Water Requirement	Maintenance Requirement	Street Tree	Remarks
Thin Leaf Alder	Alnus tenuifolia	15-30'	15-20'	M	L	NA	Nice fall color yellow
Seneca Viburnum	Viburnum sieboldii 'Seneca'	15-20'	10-15'	M-L	L	NA	Hedge, buffer strips, specimen
Yellow-fruited Chokecherry	Prunus virginiana xanthocarpa	12-18'	12'	L	M	NA	Nice flower panicles
Staghorn Sumac	Rhus typhina	10-25'	10-15'	L	M	NA	
Curleaf Mountain Mahogany	Cercocarpus ledifolius	10-20'	8-12'	L	M	NA	
Wavy Leaf Oak	Quercus undulata	10-20'	8-16'	L	L	NA	
Siberian Peashrub	Caragana arborescens	10-15'	8-12'	L	L	NA	Good windbreak; soil tolerant; many varieties
Beautybush	Kolkwitzia amabilis	10-15'	12-15'	L		NA	
Burning Bush	Euonymus alata (2)	10-12'	8-12'	M	M	NA	Nice fall color red
American Plum	Prunus americana	10-12'	10-12'	L	L	NA	Very fragrant flowers; suckering; good for wildlife
Native	Prunus virginiana	8-20'	8-12'	L - M	M	NA	

Chokecherry	melanocarpa						
Scrub Oak	Quercus gambelii	8-20'	6-12'	L	L	NA	
New Mexico Privet	Forestiera neomexicana	8-15'	8-12'	L	M	NA	Fall: yellow; makes excellent hedge
Smooth Sumac	Rhus glabra	8-15'	8-10'	L	M	NA	Nice fall color orange to red; cismontana is native form
Buffaloberry	Shepherdia sp.	8-15'	6-12'	L	M	NA	Silver, Russet and Round-leaf are best
Hairy Mountain Mahogany	Cercocarpus breviflorus	8-12'	8-12'	L	L	NA	Stays evergreen in protected sites
Tallhedge Buckthorn	Rhamnus frangula columnaris	8-12'	3-4'	M	M	NA	
Siberian Weeping Peashrub	Caragana arborescens 'Pendula'	8-10'	8-10'	L	L	NA	Yellow flowers; poor soil and wind tolerant
Thimbleberry or Boulder Raspberry	Rubus deliciosus	8'	6'	L	M	NA	Native, prune out older canes every few years
Silver Fountain Butterflybush	Buddleia alternifolia 'Argentea'	6-8'	6-8'	L	M	NA	Plant Select Winner
Szechwan Fire Cotoneaster	Cotoneaster ignavus	6-8'	4-6'	L	L	NA	Cheyenne USDA Experimental Station intro.; very tough
Forsythia	Forsythia intermedia	6-8'	6-8'	M	M	NA	Showy flowers
Cistena Plum	Prunus cistena	6-8'	4-6'	M	M	NA	
Manchurian Viburnum	Viburnum burejaticum	6-8'	5-7'	M-L	L	NA	Similar to V. lantana in appearance; Cheyenne USDA Station introduction
Singleleaf Ash	Fraxinus anomala	6-20'	6-20'	L	L	NA	Tolerates dry conditions
Saskatoon Serviceberry	Amelanchier alnifolia	6-12'	6-12'	L	L	NA	Nice fall color
Utah Serviceberry	Amelanchier utahensis	6-12'	6-12'	L	L	NA	Native to Western Slope
Butterfly Bush	Buddleia sp. (2)	6-12'	4-8'	M-L	M	NA	

DECIDUOUS SHRUBS							
Common Name	Botanical Name	Height	Width	Water Requirement	Maintenance Requirement	Street Tree	Remarks
Hedge Cotoneaster	Cotoneaster lucidus	6-12'	4-6'	M-L	L	NA	
Silverberry	Eleagnus commutata	6-12'	6-12'	M	M	NA	
Smith's Buckthorn	Rhamnus smithii	6-12'	6-8'	L	L	NA	Tolerates dry; Plant Select Winner
Peking Cotoneaster	Cotoneaster acutifolia	6-10'	6-10'	M-L	L	NA	
Nanking Cherry	Prunus tormentosa	6-10'	6-12'	M-L	L	NA	
Mentor Barberry	Berberis mentorensis	5-7'	5-7'	M-L	M	NA	Thorns, good fall color yellow to red
Western Sandcherry	Prunus besseyi	5-6'	5-6'	L	M	NA	'Pawnee Buttes' is very low, wide spreading
Mountain Mahogany	Cercocarpus montanus	4-9'	4-6'	L	M	NA	
Cliffrose	Cowania mexicana	4-8'	4-8'	L	L	NA	
Honeysuckle	Lonicera (2)	4-8'	3-12'	M	M	NA	Honeyrose, Blue

							Velvet, Arnold Red, Clavey's Dwarf & Miniglobe native
Yucca sp., Soaptree,	Yucca elata,	4-8'	3-7'	M-L	M	NA	
Redleaf Japanese Barberry	Berberis thunbergii (2)	4-6'	4-6'	M-L	M	NA	Thorns
Quince	Chaenomeles spp.	4-6'	4-6'	M-L	M	NA	Showy flowers
Spreading Cotoneaster	Cotoneaster divaricata	4-6'	6-8'	M-L	M	NA	
Cliff Fendler Bush	Fendlera rupicola	4-6'	4-6'	L	L	NA	Native, heat & drought tolerant
Privet	Ligustrum (2)	4-6'	3-4'	L	M	NA	Regal, Cheyenne, 'Densiflorum' & 'Lodense'
Mockorange	Philadelphus (2)	4-6'	4-6'	M-L	M	NA	
Golden Currant	Ribes aureum	4-6'	4-6'	L	M	NA	
Crandall Clove Currant	Ribes odoratum 'Crandall'	4-6'	4-6'	M-L	L	NA	Native; can smell cloves '10-15' away; orange fall color
Emerald Carousel Barberry	Berberis x 'Tara'	4-5'	4-5'	M-L	M	NA	Yellow flowers; very adaptable, cold hardy; persistent red fruit
Privet	Ligustrum vulgare (2)	4-15'	4-15'	M	M	NA	
Viburnum	Viburnum (2)	4-12'	4-15'	M-L	M	NA	Nice fall color varies
Antelope Brush	Purshia tridentata	4'	5'	L		NA	
Gooseberry	Ribes sp. (2)	4'	4'	M-L	M	NA	
Four Wing Saltbush	Atriplex canescens	3-6'	2-4'	L	M	NA	
Apache Plume	Fallugia paradoxa	3-6'	3-6'/	L	L	NA	Native, silver-pink seed heads all summer
Rock Spirea	Holodiscus dumosus	3-6'	3-6'	M-L	L	NA	Good ornamental winter look
Waxflower	Jamesia americana	3-6'	3-6'	L	L	NA	Prefers good drainage
Threeleaf Sumac	Rhus trilobata	3-6'	3-6'	L	M	NA	Nice fall color orange to red

DECIDUOUS SHRUBS							
Common Name	Botanical Name	Height	Width	Water Requirement	Maintenance Requirement	Street Tree	Remarks
Alpine Currant	Ribes alpinum	3-6'	3-6'	L – M	M	NA	
Wood's Rose	Rosa woodsii	3-6'	3-6'	L		NA	
Siberian Spirea	Sibiraea laevigata	3-6'	5-10'	M-L	M	NA	
Littleleaf Mountain Mahogany	Cercocarpus intricatus	3-5'	3-5'	L	L	NA	Very drought tolerant, slow growing, evergreen
Fernbush	Chamaebatiaria millefolium	3-5'	3-6'	L	M	NA	Blooms throughout summer into late fall
Carol Mackie Daphne	Daphne x burkwoodii 'Carol Mackie'	3-5'	3-5'	M-L	L	NA	Part shade; needs good drainage
Fremont's Desert Holly	Mahonia fremontii	3-5'	3-6'	L	L	NA	Very xeric broadleaf evergreen, blue holly foliage
Russian Sage	Perovskia atriplicifolia	3-5'	3-5'	L	M	NA	Must be cut nearly to ground

							in late winter
Blue Mist Spirea	Caryopteris x clandonensis	3-4'	2-3'	L	L	NA	
Blue Stem Joint Fir	Ephedra equisetina	3-4'	5-6'		L	NA	3-4'; red berries against blue foliage
Mountain Ninebark	Physocarpus monogynus	3-4'	3-4'	M-L	M	NA	Orange to red fall color
Aromatic Sumac	Rhus aromatica	3-4'	6-8'	L	L	NA	Non-suckering form; good year-round architecture; 'Gro-low' is low, wide-spreading
Red Lake Currant	Ribes 'Red Lake'	3-4'	3-4'	M-L	M	NA	
Snowberry	Symphoricarpos albus	3-4'	3-5'	M	M	NA	
Lilac	Syringa patula, hyacinthiflora, prestoniae & vulgaris (2)	3-12'	3-12'	M-L	M	NA	All cultivars are drought tolerant
Snowfall Common Ninebark	Physocarpus opulifolius 'Snowfall'	3'	4'	L	L	NA	More compact; larger white-pinkish flowers; fall: yellowish-bronze
Rabbit Brush	Chrysothamnus nauseosus	2-6'	2-6'	L	M	NA	Blue and green varieties
Corallberry	Symphoricarpos sp. (2)	2-6'	3-6'	M-L	L	NA	
Potentilla	Potentilla fruticosa (2)	2-5'	2-5'	M-L	M	NA	Showy flowers
Dwarf Russian Almond	Prunus tenella	2-5'	2-4'	L	L	NA	
Leadplant	Amorpha canescens	2-4'	2-4'	L	M	NA	One of most showy western plants
Broom, Moonlight or Spanish Gold	Cytisus 'Moonlight' & Cytisus purgans 'Spanish Gold'	2-4'	4-6'	L	L	NA	
Wax Currant	Ribes cereum	2-4'	2-4'	L	M	NA	
Rose	Rosa 3	2-4'	2-4'	L – M	M	NA	
Spiraea	Spiraea 3	2-4'	2-4'	M-L	M	NA	
Ponchita Manzanita	Arctostaphylos nevadensis 'Ponchito'	2-3'	3-5'	M-L	L	NA	2-3'; Native, drought tolerant; pink-white flowers Apr-May

DECIDUOUS SHRUBS							
Common Name	Botanical Name	Height	Width	Water Requirement	Maintenance Requirement	Street Tree	Remarks
Rock Cotoneaster	Cotoneaster horizontalis	2-3'	3-6'	M-L	M	NA	
Royal Gold Woadwaxen	Genista tinctoria 'Royal Gold'	2-3'	2-3'	L	L	NA	Great planted in swaths, blooms twice; bright yellow; holds green leaves into winter
St. Johnswort, Sunburst and Hidcote	Hypericum sp.	2-3'	2-3'	L	L	NA	
Soapweed	Yucca glauca	2.5-3'	3-4'	M-L	M	NA	native
Sagebrush	Artemisia (2)	1-6'	2-3'	L	L	NA	
Winterfat	Ceratoides lanata	1-4'	2-4'	L	L	NA	Needs good drainage
Cascade Manzanita	Arctostaphylos nevadensis 'Cascade'	1-2'	3-5'	M-L	L	NA	1-2' high, Ft. Collins introduction; cascading habit;

							FS-PS
Mock-Bearberry Manzanita	Arctostaphylos x coloradoensis	1-2'	3-5'	M-L	L	NA	1-2' high; Ft. Collins introduction; red berries; FS-PS
Coral Beauty Cotoneaster	Cotoneaster dammeri 'Coral Beauty'	1-2'	4-6'	M-L	M	NA	
Creeping Oregon Grape Holly	Mahonia haematocarpa	1-1.5'	3-4'	M-L	L	NA	Red fall color
Cranberry Cotoneaster	Cotoneaster apiculata	1.5-2'	4-6'	M-L	M	NA	
Harriman's	Yucca harrimaniae	.75-1'	1-1.5'	M-L	M	NA	native

EVERGREEN TREES (1)							
Common Name	Botanical Name	Height	Width	Water Requirement	Maintenance Requirement	Street Tree	Remarks
Southwestern White Pine	Pinus strobiformus	80'	40'	M-L	L	No	
Douglas Fir	Pseudotsuga menziesii 'Taxifolia'	75-100'	40'	M	L	No	
Swiss Mountain Pine	Pinus mugo	6-8'	12-15'	L - M	L	No	
Colorado Green Spruce	Picea pungens	60'	30'	M-L	L	No	
Colorado Blue Spruce	Picea pungens 'Glauca'	60'	30'	M-L	L	No	
Serbian Spruce	Picea omorika	50-60'	20-25'	M	L	No	Narrow pyramidal growth; uniform; blue
Austrian Pine	Pinus nigra	50'	20'	M-L	L	No	
Scotch Pine	Pinus sylvestris	50'	30'	M-L	L	No	
Red Cedar	Juniperus virginiana 'Varieties'	40-50'	8-20'	M	L	No	
Ponderosa Pine	Pinus ponderosa	40'	25'	L	L	No	
Rocky Mountain Juniper	Juniperus scopulorum 'Varieties'	30-60'	15'	L - M	L	No	
Bristlecone Pine	Pinus aristata	30'	15'	L	L	No	
Limber Pine	Pinus flexilis	30'	15'	L	L	No	
Pinon Pine	Pinus edulis	25-30'	10-15'	L	L	No	
Smooth Arizona Cypress	Cupressus arizonica var. glabra	20-40'	8-15'	L	L		Blue color
Oneseed Juniper	Juniperus monosperma	10-30'	6-12'	L	L	No	

EVERGREEN SHRUBS							
Common Name	Botanical Name	Height	Width	Water Requirement	Maintenance Requirement	Street Tree	Remarks
Yew	Taxus x media 'Hicksii'	8-12'	3-4'	M-L	M	NA	High drought tolerance
Firethorn	Pyracantha coccinea (2)	8'	8'	M	M	NA	
Oregongrape	Mahonia aquifolium	6'	3'	M	M	NA	Nice fall colors red to purple
Euonymus Manhattan	Euonymus kiautschovicus 'Manhattan'	5'	4'	M	M	NA	
Euonymus Sarcocoe	Euonymus fortunei 'Sarcocoe'	4-6'	4-6'	M	M	NA	
Bigleaf Wintercreeper	Euonymus fortunei vegeta	4-5'	4-5'	M	M	NA	
Gnome Firethorn	Pyracantha angustifolia 'Gnome'	4'	4'	M	M	NA	
Juniper	Juniperus sp. (2)	1-30'	4-15'	L	L	NA	Many species; something for any size
Creeping Hollygrape	Mahonia repens	1'	1'	M	M	NA	Nice fall/winter colors red to purple

PERENNIALS, GROUND COVERS, AND ORNAMENTAL GRASSES

Due to the large quantity, variety, and changing availability of these plants, please consult your local nursery preferably a C.N.A. Member.

Height, color, texture, moisture, light requirement, and heartiness need to be considered when specifying these plants.

Most local nurseries provide a yearly catalog of available plants and their descriptions.

Notes:

1. Mature size of all evergreen trees must be considered when determining location for planting. They are not recommended within 8' of any roadway, walkway, entrance, or window as they will eventually obstruct passage or view. Evergreen trees shall not be placed within roadway site triangles. During winter, icy conditions often occur on the north side of evergreen trees. This must be considered for their placement.

2. These plants have numerous different species, varieties and/or cultivars. Consult a local nursery for current availability and proper selection.

3. Heights and widths are anticipated sizes, but will vary due to environmental issues.