Attachment 2

Land Development Manual, Volume 3 - Community Design Standards and Guidelines:

*Draft Standards and Guidelines**

*This section contains only the draft standards and guidelines under review as part of the TGPA-ZOU Project (underlined). Existing standards and guidelines, shown with a "**"**, will be incorporated into Volume 3 as shown on the draft Table of Contents on the following page. Highlighted areas include references to draft code and/or documents not finalized. These references are subject to change.

Draft Table of Contents For Volume 3: Community Design Standards and Guidelines

LANDSCAPING AND IRRIGATION STANDARDS

Sections:

1.1 Purpose

The purpose of this Chapter landscaping standards that enhance the appearance of development, increase property values, and protect the public health, safety, and welfare by providing buffers; parking lot shading; incentives for outdoor art and water features; a means to reduce impervious surfaces and site runoff by incorporating stormwater best management practices into landscape areas; and requirements for water conservation methods that encourage the use of native, drought tolerant species, reclaimed water and graywater systems. It is further the intent of this Chapter to comply with the Water Conservation in Landscaping Act: Model Water Efficient Landscape Ordinance (Gov. Code 65591 – 65599).

1.2 Applicability

All ministerial and discretionary development for industrial, research and development, commercial, multi-unit residential, civic, or utility uses shall provide landscaping for all areas of a lot that do not include footprints of buildings or structures, sidewalks, driveways, parking lots, decks, patios, gravel or stone walks, other pervious or impervious hardscapes, and other non-irrigated areas designated for non-development (e.g., open spaces and existing native vegetation).

1.3 Exemption

Commercial uses on agricultural and resource zoned land shall be exempt from the requirements of this Chapter; except for the following:

A. A permanent parking lot located adjacent to a public road shall be subject to landscape buffer requirements in compliance with Paragraph 17.33.060.A.1.

B. A permanent paved parking lot shall be subject to the shade requirements under Subsection 17.33.060.C.

1.4 Definitions

As used in this Chapter, the following terms shall have the meanings set forth below:

Backflow Prevention Device. A safety device used to prevent pollution or contamination of the water supply due to the reverse flow of water from the irrigation system.

Certified Landscape Irrigation Auditor. A person certified to perform landscape irrigation audits by an accredited academic institution, a professional trade organization or other program such as the US Environmental Protection Agency's WaterSense irrigation auditor certification program and Irrigation Association's Certified Landscape Irrigation Auditor program.

Check Valve or Anti-drain Valve. A valve located under a sprinkler head, or other location in the irrigation system, to hold water

in the system to prevent drainage from sprinkler heads when the sprinkler is off.

Drip Irrigation or Emitter. Any non-spray low volume irrigation system utilizing emission devices with a flow rate measured in gallons per hour.

Established Landscape. The point at which plants have developed significant root growth into the soil. Typically, most plants are established after one or two years of growth.

ET Adjustment Factor (ETAF). A factor of 0.7 that, when applied to reference evapotranspiration, adjusts for plant factors and irrigation efficiency, two major influences upon the amount of water that needs to be applied to the landscape.

Evapotranspiration Rate. The quantity of water evaporated from adjacent soil and other surfaces and transpired by plants during a specified time.

Infiltration Rate. The rate of water entry into the soil expressed as a depth of water per unit of time (e.g., inches per hour).

Irrigation Efficiency (IE). The measurement of the amount of water beneficially used divided by the amount of water applied. Irrigation efficiency is derived from measurements and estimates of irrigation system characteristics and management practices. The minimum average irrigation efficiency for

purposes of this Chapter is 0.71. Greater irrigation efficiency can be expected from well designed and maintained systems.

Landscape Architect. A person who holds a license to practice landscape architecture in the state of California Business and Professions Code, Section 5615.

Landscape Area. All the planting areas, turf areas, and water features in a landscape plan.

Local Water District. Any entity, including a public agency, city, county, or private water company that provides retail water service.

Low Volume Irrigation. The application of irrigation water at low pressure through a system of tubing or lateral lines and low-volume emitters such as drip, drip lines, and bubblers. Low volume irrigation systems are specifically designed to apply small volumes of water slowly at or near the root zone of plants.

Maximum Applied Water Allowance (MAWA). The maximum allowed limit of annual applied water for the established landscape area based upon its size, reference evapotranspiration, and the ET Adjustment Factor.

Mulch. Any organic material such as leaves, bark, straw, compost, or inorganic mineral materials such as rocks, gravel, and decomposed granite left loose and applied to the soil surface for the beneficial purposes of reducing evaporation, suppressing weeds, moderating soil temperature, and preventing soil erosion.

New Construction. A new building requiring landscaping or other new landscaping without an associated building, such as a park, playground, or greenbelt.

Overhead Sprinkler Irrigation Systems. Systems that deliver water through the air, such as spray heads and rotors.

Plant Factor or Plant Water Use Factor. A factor established in the Department of Water Resources: Water Use Classification of Landscape Species (2000) that, when multiplied by the reference evapotranspiration value (ETo) for the County, estimates the amount of water needed by plants.

Precipitation Rate. The rate of application of water measured in inches per hour.

Reference Evapotranspiration (ETo). A standard measurement of environmental parameters which affect the water use of plants, so that regional differences in climate can be accommodated. It is based on an estimate of the evapotranspiration of a large field of four- to seven-inch tall, cool-season grass that is well watered. The ETo for the County is 47.3 inches per year.

Special Landscape Area (SLA). An area of the landscape dedicated solely to edible plants such as orchards and vegetable gardens, areas irrigated with recycled water, water features, and areas dedicated to active play where turf provides a playing surface, such as parks, sports fields, and golf courses.

Static Water Pressure. The pipeline or municipal water supply pressure when water is not flowing.

Station. An area served by one valve or by a set of valves that operate simultaneously.

WUCOLS. The Water Use Classification of Landscape Species published by the Department of Water Resources, the University of California Cooperative Extension, and the Bureau of Reclamation (2000).

1.5 Landscape Plan

A. A landscape plan shall be required prior to the issuance of any building permit subject to the requirements of this Chapter. Plans shall include a site plan, grading plan, planting plan, irrigation design plan, and all other details and specifications necessary for a complete landscape plan review, on an application form provided by the Department.

B. Where the required landscape area exceeds 1,000 square feet in the whole, said plan shall be prepared by a California licensed landscape architect, civil engineer, architect, or landscaping contractor to the extent that his or her license allows.

C. If a Water Efficient Landscape Plan is required in compliance with Section 17.33.090, further requirements under 17.33.100 will apply.

D. The Director or applicable review authority may approve an alternative landscape plan when unique circumstances apply to the site that makes compliance with the standards of this Chapter infeasible. Consideration shall be given to adjacent land uses, the nature of the change, existing site conditions, and the suitability of the proposed alternative. The review authority must find that the alternative provides comparable buffering and shading, and otherwise meets the intent of this Chapter.

E. Prior to issuance of a certificate of occupancy, the applicant shall provide a Certificate of Completion by the preparer of the approved landscape plan that verifies the landscape improvements have been installed in compliance with the approved landscape plan, on a form provided by the Department.

1.6 Landscape Standards

Landscaping shall conform to the standards set forth below:

A. Landscape Buffers. Landscaped buffers shall be required along a road frontage, or property under a different ownership or zone, as follows:

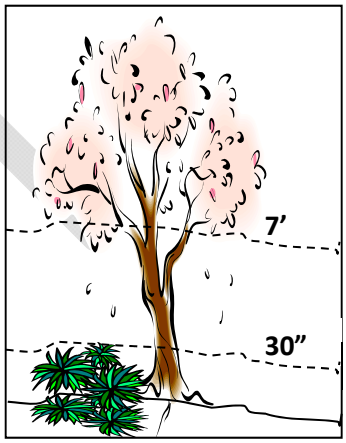
1. Road Frontage.

   a. The required buffers along road frontage shall be a minimum of 10 feet in width outside of the right-of-way and exclusive of any curbs or sidewalks, unless otherwise set forth in the development standards for the zone.

   b. Where industrial, research and development, commercial, civic, or utility uses are located across a county-maintained road from residentially zoned lots and parking is provided facing said lots, either of the following shall be required:
      (1) An ornamental masonry wall not less than three feet in height from grade shall be installed between the parking spaces and the landscape buffer; or
      (2) A minimum three foot high landscaped berm may be provided within the buffer area.

   c. Landscape buffers adjacent to public rights of way or road easements shall maintain line-of-sight visibility subject to the review and approval of the Department of Transportation. No foliage or structural feature between the height of 30 inches and seven feet above grade (Figure 17.33.050.A) shall extend into the cross-visibility area (CVA) defined in Section 17.30.050.B.5 (Fences, Walls, and Retaining Walls):

Figure 1.6.A



2. Property Lines.

   a. The required buffer along property lines shall be a minimum of five feet in width.

   b. Where multiple lots are developed as a single project under common ownership, the landscape buffers shall only be required along the perimeter of the project.

   c. Should two or more adjoining lots under separate ownership be designed as a single project with shared uses of access and parking, the required five foot landscape buffer adjacent to the common property line shall not be required when a shared parking covenant and reciprocal easement is recorded between all concerned parties in a form approved by the County.

   d. Where industrial, research and development, commercial, civic, or utility uses adjoin residentially zoned lots, either of the following shall be required:
      (1) A 30 foot-wide landscape buffer with a minimum of eighteen trees and 72 shrubs per 100 feet of length; or
      (2) A ten foot landscape buffer with an ornamental masonry wall not less than six feet in height installed at the property line and extending to within 15 feet of any road right-of-way or easement. Within the buffer, a row of evergreen conifer trees shall be planted to provide continuous screening.

B. General Landscape Requirements.

1. A minimum of six trees and 24 shrubs shall be provided per each 100 linear feet of required landscape buffer along the property boundaries and public roads, with the exceptions under Paragraph A.2.d, above.

2. All shrubbery and at least 50 percent of required trees shall be evergreen.

3. Where street lights exist or are proposed to be installed, the size, location, and variety of trees shall be reviewed by the Department of Transportation and designed to minimize conflict between the lighting needs and landscaping requirements.

4. No landscaping or tree planting shall be installed or maintained in such a manner that the expected growth of the plant or tree material at 15 years will cast a shadow between the peak solar collection hours of 10 a.m. to 2 p.m. on more than ten percent of the solar absorption panels of an existing solar energy device located on site or on adjoining lots. Trees planted before the installation of affected solar panels or their replacement plantings shall be exempt from this requirement.

5. A minimum of 50 percent drought-tolerant plant species shall be used in all landscape plans required by this Section. Shade trees and drought-tolerant plant species shall be selected from the Director-approved lists in Appendices B and C. Plant species similar to those on the lists may be considered providing they conform to the intent of this Subsection for drought tolerance and adaptability to the area. Species selection shall be based on site elevation in accordance with the lists.

6. To ensure plant diversity, the following standards shall apply to any plant material required to meet the regulations of this Chapter:

    a. Between eight and 23 trees, a minimum of three different species must be used. For 24 trees or more, a minimum of four different species must be used. Existing trees may be included in the calculations.

    b. For 25 shrubs or more, a minimum of three different species must be used.

7. Lawn or turf grasses shall constitute no greater than 10 percent of the required landscaping and shall not be planted on slopes greater than 25 percent where the toe of the slope is adjacent to an impermeable hardscape.

8. Bark, decorative rock, and similar organic materials, when used to enhance the required plant material, shall be replenished on a routine basis in order to maintain a neat and consistent appearance.

9. Any outdoor form of sculpture or other artwork, as well as any water feature such as a fountain, cascade, stream, or reflection pond can be substituted in place of living plant material, with the exception of the buffer and shade requirements, providing:

    a. Artwork or water feature(s) are publicly visible and accessible at the main pedestrian entrance to the building(s) or along a perimeter sidewalk or pedestrian connection;

b. Artwork or water feature does not contain a corporate name, logo, or slogan in its form or appearance, or it will be counted as a sign;

c. Substitution will be at a 1:1 ratio based on the square footage of the footprint of the artwork or water feature. When a water efficient landscape plan is required, the square footage of the surface area of a water feature will be included in estimated water use calculations, in compliance with Section 17.33.100 below;

d. Water features use a recirculating water system and, when available, reclaimed water;

e. Water features are maintained in a clean and non-contaminated condition;

f. Water remains in motion and/or is aerated during hours of operation; and

g. The manner and extent to which artwork or water features replace landscaping shall be reviewed and approved by the Director or appropriate review authority.

10. On-site landscaped areas designed for compliance with either the Western El Dorado County or Lake Tahoe Basin Storm Water Management Plan requirements for storm water retention and bio-filtration purposes can be used to satisfy landscaping requirements under this Chapter providing the minimum buffer, shade, and oak tree replacement requirements are met.

11. The size of plant material shall be the following pot size or equivalent container, such as tree pot, slip, or bare root packaging, as certified by the preparer of the landscape plan:

Trees……..5 gallon minimum
Shrubs……1 gallon minimum

12. The use of landscape fabric shall be prohibited to allow the rejuvenation and self-sufficiency of the underlying soil.

13. A minimum two inch layer of mulch shall be applied on all exposed soil surfaces of planting areas except in turf areas, creeping or rooting groundcovers, or direct seeding applications where mulch is contraindicated. The mulching portion of the seed/mulch slurry in hydro-seeded applications shall meet the mulching requirement. Stabilizing mulching products shall be used on slopes.

14. Landscaping within the 100-year flood plain of the South Fork of the American River shall be consistent with Element 6.5.2.1 of the El Dorado County River Management Plan.

15. For phased projects, or projects for which only a portion of a lot is proposed to be developed, landscaping may be deferred for areas surrounding the undeveloped phases or portions, providing temporary erosion and dust control measures are implemented as required by the County.

C. Parking Lot Landscaping.

1. Landscaping shall be provided in paved parking lots of five spaces or more and shall provide shade over 50 percent of all paved parking areas, as set forth below:

    a. Shade calculations shall assume the sun is directly overhead;

    b. Shade shall be calculated by using the expected diameter of the tree crown at 15 years.

    c. The percentage of area required to be shaded shall be based on the total square footage of all aboveground and uncovered pavement.

    d. Solar panel grids, canopies, and other structures that can be utilized as shade structures and meet the 50 percent shade requirements for the paved parking areas can be substituted for living tree material, providing they are architecturally compatible with the structure(s) on site and the minimum buffer requirements of Paragraph B.1 are met.

2. In addition to the required landscape buffers, landscaping areas within a parking facility shall have a minimum width of five feet and a minimum area of 25 square feet, exclusive of any curbs.

3. Wheel stops or similar devices shall be installed three feet from landscape areas, as measured from the far side of the wheel stop to the edge of curb, to prevent vehicle damage or encroachment onto landscape materials. In lieu of wheel stops, concrete curbing used to separate the landscape area from the parking lot may serve as the wheel stop provided that the planting area width, exclusive of curbing, is increased by a minimum of 2.5 feet for each side adjoining the vehicular encroachment. Plant material designed to grow no higher than six inches shall be planted within the increased planting area.

4. Walkways and/or sidewalks shall be required to provide pedestrian circulation across landscaped areas where necessary to prevent pedestrian traffic from destroying plant material.

1.7 Irrigation Standards

Landscape areas shall be provided with a permanent automatic irrigation system(s) coordinated to meet the needs of various planting areas/hydrozones and water efficiency in compliance with the manufacturers' recommendations. The irrigation system and its related components shall be planned and designed to allow for proper installation, management, and maintenance subject to the following:

A. An irrigation plan shall be submitted with the Landscape Plan application. The irrigation system shall be designed to prevent runoff, low head drainage, overspray, or other similar conditions where irrigation water flows onto non-targeted areas, such as adjacent property, nonirrigated areas, hardscape, roadways, or structures.

B. When reclaimed water is available within the region containing the project lot(s), or when a reclamation master plan indicating the availability of reclaimed water in the future has been adopted by either the local water district or the County, the applicant shall incorporate the use of reclaimed water into the project design subject to public health and safety regulations.

C. Domestic graywater systems for subsurface landscape irrigation can be utilized subject to the provisions of the Department of Water Resources California Graywater Standards, the Uniform Plumbing Code (UPC), and the building code.

D. Temporary irrigation systems that will be utilized to establish native, drought tolerant landscaping or xeriscaping, or other alternative irrigation methods, shall be subject to the review and approval of the Director.

1.8 Maintenance and Protection

All landscaping shall be maintained in accordance with the approved landscape plan, as set forth below:

A. All plant materials shall be maintained in a healthy and attractive manner and kept free from weeds, debris, and undesirable materials for fire safety as well as aesthetic purposes. Plant materials showing damage from insects, disease, or lack of maintenance shall be replaced in accordance with the approved landscape plan.

B. Plant materials shall not be allowed to become overgrown, so as to compromise the CVA (cross-visibility area), pedestrian or vehicular circulation, or public safety.

C. All existing plant material to be retained on site shall be subject to the protection measures set forth in the Design and Improvement Standards Manual during grading and construction activities.

D. The Director may cause an inspection of landscaping at any time following the installation of said landscaping to determine compliance with this Section. Any costs associated with said inspection or to insure compliance shall be paid by the property owner.

E. If loss of landscaping occurs due to lack of water during a declared water shortage, or due to other mandatory water conservation measures, all plants shall be replaced within a reasonable time after the water shortage has ended.

1.9 Non-conforming Landscaping

When a change in use occurs on a site that contains landscaping that is non-conforming to the standards of this Chapter, the following shall apply:

A. When a proposed new use requires no expansion of the parking area, the Department shall verify that the existing landscaping is maintained consistent with the requirements of the site when the previous use was established. Replacement landscaping consistent with minimum plant material, plant diversity, and shade requirements in compliance with Section 17.33.050 may be required if the landscaping has not been properly maintained.

B. Whenever additional parking is required due to an intensification of use or expansion of a structure that does not exceed the thresholds under Section 17.33.090, the landscaping for the entire site shall be consistent with minimum plant material, plant diversity, and shade requirements in compliance with Paragraphs 17.33.050.B.1, B.4, B.6, and C.1-3.

C. Whenever the structure(s) on a site are enlarged, modified, or redeveloped to the level of thresholds under Subsection 17.33.090.A below, the provisions of this Chapter shall apply to the entire site.

1.10 Water Efficient Landscape Plan

A. A Water Efficient Landscape Plan is required for the following:

1. New construction and rehabilitated landscapes requiring a permit with a landscape area equal to or greater than 2,500 square feet for industrial, research and development, commercial, civic, or utility uses, and developer-installed landscaping in single- and multi-unit residential development.

2. New construction landscapes that are homeowner-provided and/or homeowner-hired in single- and multi-unit residential projects, with a total landscape area equal to or greater than 5,000 square feet and only when a building or grading permit is required for said landscaping installation.

3. New and rehabilitated cemeteries limited to a Water Efficient Landscape Worksheet (Appendix A), landscape and irrigation maintenance schedule, irrigation audits or surveys, and irrigation water use analysis by the local water district.
4. Existing cemeteries and landscapes limited to irrigation audits or surveys and irrigation water use analysis by the local water district addressing water waste prevention.

B. The following shall be exempt from this Section:

1. Registered local, state, or federal historical sites.

2. Ecological restoration projects where the site is intentionally altered to establish a defined, indigenous, historic ecosystem and that do not require a permanent irrigation system.

3. Mining reclamation projects that do not require a permanent irrigation system.

4. Plant collections, as part of public arboretums and botanical gardens.

5. Commercial agricultural operations.

1.11 Water Efficient Landscape Plan Requirements

In addition to the submittal requirements set forth in Section 17.33.040, additional information related to water use and efficient application shall be submitted as follows:

A. Landscape Documentation Package. A Landscape Documentation Package, as provided in Subsection B, shall be submitted to the Department for review and approval prior to permit issuance. A copy of the approved Landscape Documentation Package shall be provided to the property owner or site manager along with any other information normally forwarded to the property owner or site manager as part of the permit process.

B. Elements of the Landscape Documentation Package.

1. Project Information:

   a. Applicant/owner names and contact information;

   b. Site address and Assessor's Parcel Number (APN);

   c. Total landscape area (in sq ft);

   d. Project type, such as new, rehabilitated, public, private, cemetery, homeowner-installed;

   e. Water type, such as potable, reclaimed, well; and

   f. Applicant signature and date with statement, "I agree to comply with the requirements of the water efficient landscape ordinance."

2. Water Efficient Landscape Worksheet. A project applicant shall complete the Water Efficient Landscape Worksheet for the project, as follows:

   a. A hydrozone information table (Appendix A, Section A); and

   b. A water budget calculation (Appendix A, Section B). Water budget calculations shall adhere to the following requirements:

   (1) For the calculation of the Maximum Applied Water Allowance (MAWA) and Estimated Total Water Use (ETWU), a project applicant shall use the Reference Evapotranspiration (ETo) value of 47.3 inches per year for El Dorado County (CIMIS Reference Evapotranspiration Zones Map, Department of Water Resources, 1999).
   (2) The plant factor used (Appendix A, Section B.2) shall be from the Water Use Classification of Landscape Species (WUCOLS). For purposes of this Ordinance, the plant factor shall range from 0 to 0.3 for low water use plants, from 0.4 to 0.6 for moderate water use plants, and from 0.7 to 1.0 for high water use plants.
   (3) All surface area of water features, as defined in Article 8, shall be included in the high water use hydrozone and temporarily irrigated areas shall be included in the low water use hydrozone.
   (4) All Special Landscape Areas (SLA), as defined in Section 17.33.030, shall be identified and included in calculating the MAWA. A statement shall be included with the landscape design plan designating recreational areas to be used for such purposes.

3. Landscape Design Plan. For the efficient use of water, a landscape shall be carefully designed and planned for the intended function of the project. A landscape design plan meeting the following requirements shall be submitted as part of the landscape documentation package:

   a. Plant Selection and Grouping. Plant selection shall be in compliance with Section 17.33.040 (Landscape Standards) providing the recommended ETWU does not exceed the Maximum Applied Water Allowance and the plants meet the following specifications:

(1) Plants having similar water use shall be grouped together in distinct hydrozones with the exception of hydrozones with plants of mixed water use, in compliance with Subparagraph 4.d.(1) below.
(2) Plants shall be selected appropriately based upon their adaptability to the climatic, geologic, and topographical conditions of the site, as well as their horticultural attributes, such as size and invasiveness, in order to minimize damage to property or infrastructure.
(3) Fire-prone plant materials and highly flammable mulches shall be avoided.
(4) Soil amendments shall be incorporated according to recommendations of the soil management report and what is appropriate for the plants selected.

b. Landscape Design Plan Requirements. The landscape design plan shall be drawn on a base project or permit site plan sheet at a scale that accurately and clearly delineates, labels, and identifies, at a minimum:
(1) Square footage of the total landscaped area.
(2) Existing and proposed trees, shrubs, ground cover, turf, and other vegetation. Existing vegetation shall be clearly distinguished between what is to be retained and what is to be removed. Planting symbols shall be clearly drawn and vegetation shall be labeled by botanical name, common name, container size, spacing, and quantities of each group of plant material indicated;
(3) Each hydrozone by number, letter, or other method;
(4) Each hydrozone as low, moderate, high, or mixed water use for calculating the water budget;
(5) Where reclaimed water is used for plant irrigation or water features;
(6) Special landscape areas and their type;
(7) Type and surface area of water features;
(8) Location and installation details of any applicable stormwater best management practices (BMPs) used for on-site retention and infiltration of stormwater. Stormwater BMPs are not subject to water budget calculations.
(9) Hardscape areas and type (pervious and impervious);
(10) Tree staking, plant installation, soil preparation details to include amendment types and quantity, mulch types and application depth, and any other applicable planting and installation details.
(11) The following statement bearing the signature of a licensed landscape architect, licensed landscape contractor, or any other person authorized to design a landscape: "I have complied with the criteria of the ordinance and applied them for the efficient use of water in the landscape design plan".

4. Irrigation Plan. For the efficient use of water, an irrigation system shall meet all the requirements listed in this Section and the manufacturers' recommendations. The irrigation system and its related components shall be planned and designed to allow for proper installation, management, and maintenance.

a. Irrigation Plan Requirements. An irrigation plan shall be drawn on project or permit site plan base sheets. It shall be separate from, but shall use the same format as the landscape design plan. The scale shall be the same as that used for the landscape design plan described in Subparagraph 3.b above, and shall contain:
(1) Location and size of separate water meter(s) for landscaping.

(2) Separate hydrozone areas designated by number, letter, or other designation.

(3) Location, type, and size of all components of the irrigation system, including controllers, main and lateral lines, valves, sprinkler heads, moisture sensing devices, rain switches, quick couplers, pressure regulators, and backflow prevention devices. Designation of the areas irrigated by each valve, and a number assigned to each valve. This valve number shall be used in the Hydrozone Information Table as part of the water efficient landscape worksheet. The table can also assist with the irrigation audit and programming the controller.

(4) Static water pressure at the point of connection to the public water supply.

(5) Flow rate (gallons per minute), application rate (inches per hour), and design operating pressure (pressure per square inch) for each station.

(6) Reclaimed water or domestic graywater irrigation systems, if applicable.

(7) Date and signature of a licensed landscape architect, certified irrigation designer, licensed landscape contractor, or any other person authorized to design an irrigation system after the following statement: "I have complied with the criteria of the ordinance and applied them accordingly for the efficient use of water in the irrigation design plan".

b. Design Requirements. The following design requirements shall be included in the irrigation system, as appropriate:

(1) Automatic irrigation controllers utilizing either evapotranspiration or soil moisture sensor data for scheduling in all irrigation systems.

(2) If the static pressure is above or below the required dynamic pressure of the irrigation system, pressure-regulating devices such as inline pressure regulators, booster pumps, or other devices installed to meet the required dynamic pressure of the irrigation system within the manufacturer's recommended pressure range for optimal performance.

(3) Sensors (rain, freeze, wind, etc.), either integral or auxiliary, that suspend or alter irrigation operation during unfavorable weather conditions customary for the climate area.

(4) Manual shut-off valves, such as a gate valve, ball valve, or butterfly valve, as close as possible to the point of connection of the water supply to minimize water loss in case of an emergency, such as a main line break, or for routine repair.

(5) Backflow prevention devices to protect the water supply from contamination by the irrigation system.

(6) Sprinkler heads and other emission devices having matched precipitation rates, unless otherwise directed by the manufacturer's recommendations.

(7) Sprinkler spacing designed to achieve the highest possible distribution uniformity using the manufacturer's recommendations.

(8) Swing joints or other protection components on all risers adjacent to high traffic areas that are subject to damage.

(9) Check valves or anti-drain valves.

c. Design Standards. The irrigation system must be designed and installed to meet or exceed the irrigation efficiency criteria used in calculating the MAWA. The following design standards shall be included in the irrigation system, as appropriate:

(1) Narrow or irregularly shaped areas less than eight feet in width in any direction, including turf, shall be irrigated with subsurface irrigation or a low volume irrigation system.
(2) Overhead irrigation shall not be permitted within 24 inches of any non-permeable surface. Allowable irrigation within the setback from non-permeable surfaces may include drip, drip line, or other low flow non-spray technology. The setback area may be planted or unplanted. The surfacing of the setback may be mulch, gravel, or other porous material. These restrictions may be modified if:
(a) The landscape area is adjacent to permeable surfacing and no runoff of water beyond the landscape area occurs;
(b) The adjacent non-permeable surfaces are designed and constructed to drain entirely to landscape areas; or
(c) The irrigation designer specifies an alternative design or technology, as part of the Water Efficient Landscape Plan, and clearly demonstrates strict adherence to irrigation system design criteria in Subsection 17.33.060.A. Prevention of overspray delivered beyond the target area and runoff must be confirmed during the irrigation audit.
(3) Slopes greater than 25% shall not be irrigated with an irrigation system with a precipitation rate exceeding 0.75 inches per hour. This restriction may be modified if the landscape designer specifies an alternative design or technology, as part of the Water Efficient Landscape Plan, and clearly demonstrates no runoff or erosion will occur. Prevention of runoff and erosion must be confirmed during the irrigation audit.
(4) Incorporation of relevant information from the soil management plan, such as soil type and infiltration rate.
(5) Static water pressure, dynamic or operating pressure, and flow reading of the water supply measured at the point of connection. Pressure and flow reading measurements shall be conducted at the design stage. If the measurements are not available at the design stage, the measurements shall be conducted at installation.
(6) Conformance to the hydrozones of the landscape design plan.
(7) The use of low volume irrigation in mulched planting areas to maximize water infiltration into the root zone.

d. Hydrozones.
(1) Each valve shall irrigate a hydrozone with similar site, slope, sun exposure, soil conditions, and plant materials with similar water use subject to the following exceptions:
(a) Individual hydrozones that mix plants of moderate and low water use, or moderate and high water use, may be allowed if:
i. Plant factor calculation is based on the proportions of the respective plant water uses and their plant factor; or
ii. The plant factor of the higher water using plant is used for calculations.
(b) Individual hydrozones that mix high and low water use plants shall not be permitted.
(2) Sprinkler heads and other emission devices shall be selected based on what is appropriate for the plant type within that hydrozone.
(3) Where feasible, trees shall be placed on separate valves from shrubs, groundcovers, and turf.

e. Irrigation Scheduling. For implementation of the irrigation schedule, total annual applied water shall be less than or equal to MAWA. Irrigation schedules shall meet the following criteria:

(1) Irrigation scheduling shall be regulated by automatic irrigation controllers using current reference evapotranspiration data (e.g., CIMIS) or soil moisture sensor data.

(2) Overhead irrigation shall be scheduled between 8 p.m. and 10 a.m. unless weather conditions prevent it. If allowable hours of irrigation differ from the requirements of the local water district, the stricter of the two shall apply. Operation of the irrigation system outside the normal watering window is allowed for auditing and system maintenance.

(3) Parameters used to set the automatic controller shall be developed and submitted for the plant establishment period, the established landscape, and any temporarily irrigated areas.

(4) Each irrigation schedule shall consider for each station all of the following that apply:

(a) Irrigation interval (days between irrigation);

(b) Irrigation run times (hours or minutes per irrigation event to avoid runoff);

(c) Number of cycle starts required for each irrigation event to avoid runoff;

(d) Amount of applied water scheduled to be applied on a monthly basis;

(e) Application rate setting;

(f) Root depth setting;

(g) Plant type setting;

(h) Soil type;

(i) Slope factor setting;

(j) Shade factor setting; and

(k) Irrigation uniformity or efficiency setting.

f. Landscape and Irrigation Maintenance Schedule. Landscapes shall be maintained to ensure water use efficiency. A regular maintenance schedule shall be submitted with the Certificate of Completion to include, but not be limited to:

(1) Routine inspection; adjustment and repair of the irrigation system and its components; aerating and dethatching turf areas; replenishing mulch; fertilizing, pruning, and weeding in all landscape areas; and removing obstruction to emission devices.

(2) Repair of all irrigation equipment with the originally installed components or their equivalents.

g. Irrigation Audit Report or Survey. For new construction and rehabilitated landscape projects under Section 17.33.090.A, the applicant shall submit the following:

(1) An irrigation audit report, conducted by a certified landscape irrigation auditor, to the local water district for their review and approval. The irrigation audit report may include, but not be limited to irrigation schedule, inspection report, system tune-up schedule, system test with distribution or emission uniformity, and method of reporting overspray or run off that causes overland flow.

(2) Where an irrigation survey is allowed in lieu of an audit report in compliance with this Section, or as determined by the local water district, it shall

include, but not be limited to inspection, system test, and written recommendations to improve performance of the irrigation system.
(3) A filed copy of the approved irrigation audit report or survey, or other form of documentation indicating approval by the local water district, to the Department with the Certificate of Completion.

5. Grading Plan. For the efficient use of water, grading of a project site shall be designed to minimize soil erosion, runoff, and water waste. As part of a grading permit, the grading plan shall be separate from, but at the same scale as the landscape design plan and shall indicate finished configurations and elevations of the landscape area and stormwater retention improvements, if applicable.

   The grading plan shall contain the following statement: "I have complied with the criteria of the ordinance and applied them accordingly for the efficient use of water in the grading design plan" and shall bear the signature of a licensed professional as authorized by law.

6. Soil Management Report. In order to reduce runoff and encourage healthy plant growth, a soil management report shall be completed by the project applicant prior to grading, as follows:

   a. Soil samples shall be submitted to a laboratory for analysis and recommendations in accordance with laboratory protocol, including protocols regarding adequate sampling depth for the intended plants.

   b. The project applicant shall submit the soil management report to the Department as part of the Landscape Documentation Package.

   c. The project applicant shall make the soil management report available to the professionals preparing the landscape design plans and irrigation plans to allow them to make any necessary adjustments to the design plans in a timely manner.

   d. The project applicant shall submit documentation verifying implementation of the soil management report recommendations to the Department with the Certificate of Completion.

7. Certificate of Completion. The signer of the landscape design plan, the signer of the irrigation plan, or the licensed landscape contractor shall conduct a final field observation and provide a Certificate of Completion to the Department (see Appendix A, Section C), as follows:

   a. The Certificate shall specifically indicate that the landscape project has been installed in compliance with the approved Landscape Documentation Package. Where there have been significant changes made in the field during construction, these "as-built" drawings shall be included with the certification.

   b. The project applicant shall submit the signed Certificate to the Department for review.

c. The Department shall approve or deny the Certificate. If the Certificate is denied, the Department shall provide information to the project applicant regarding reapplication, appeal, or other assistance.

d. The project applicant shall ensure that copies of the approved Certificate are submitted to the local water district and property owner or his or her designee.

C. Provisions for Existing Landscapes.

1. All existing landscaped areas, one acre or more in size, to which a local water district provides water, including golf courses, green belts, common areas, multi-unit residential development, schools, businesses, parks, cemeteries, and publicly owned landscapes, shall have a landscape irrigation audit at least once every five years. An audit shall not be required if the local water district determines, based on an irrigation water use analysis of meter readings and billing data, that the existing landscape area does not exceed the MAWA for the project site.

2. The audit shall be in accordance with the California Landscape Water Management Program, as described in the Landscape Irrigation Auditor Handbook version 5.5 (Dept. of Water Resources: Water Conservation Office), or with criteria established through a local water district program, whichever is stricter.

MOBILE HOME PARK DESIGN STANDARDS

Sections:

The following provisions shall apply in all mobile home park districts unless and until a variance is obtained from the planning commission:

A. Minimum parcel area, ten acres;
B. Maximum overall density, seven units per gross acre;
C. Landscaped perimeter side and rear buffer areas of fifteen feet; landscaped front setbacks and yards adjacent to public used road rights-of-way, twenty-five feet;
D. Recreation area, a minimum of twenty percent of the total site area shall be devoted to indoor and outdoor community activity and service facilities wh

ich may include but shall not be limited to the following:

1. Community center building (minimum size based on twenty-five square feet per mobile home space),
2. Swimming pool,
3. Golf putting greens,
4. Landscaped open space,
5. Bicycle paths,
6. Tennis and badminton courts,
7. Shuffleboard and horseshoes,
8. Hobby and craft shop,
9. Sewing room,

10. Small indoor gymnasium for winter sports such as handball, etc.
In computing the size of this area, landscaped open spaces such as might be provided by buffer areas, pedestrian pathways and boat and storage areas may be taken into account. However, open areas such as roads and parking spaces shall be excluded from computation;

E. Lot area, no mobile home shall have less than two thousand seven hundred square feet of lot area nor a width of less than thirty feet and no double less than three thousand six hundred square feet of lot area nor a width of less than fifty feet. No double shall occupy a space designed for a single unit;

F. Yards: side yards, a five-foot minimum setback from the outer edge of any structure or mobile home to the mobile home lot line shall be maintained, encroachment into the setback area shall not be permitted; rear yard, a five-foot minimum setback from the outer edge of any structure or mobile home to the mobile home lot line shall be maintained, encroachment into the setback area shall not be permitted; front yard, a fifteen-foot minimum setback from the outer edge of any structure or mobile home to the mobile home lot line shall be maintained, encroachment into the setback area shall not be permitted. (Prior code §9422(b)(1)–(6))

G. Building Height: thirty-five feet (35'). (Ord. 4236, 1992)

2.1 Pedestrian Circulation.

Pedestrian circulation and pedestrian ways shall be provided as a part of the park design to allow normal circulation patterns to take place between adjacent parcels and recreational areas. (Prior code §9422(b)(7))

2.2 Street Width.

The minimum driveway or road within a mobile home park shall be no less than twenty-five feet of clear width. The roads shall be surfaced as directed by the director of public *El Dorado County Zoning Ordinance (Revised September 2013) 213* works. All access drives, parking bays and connections to county roads shall be subject to county encroachment permits issued by the director of department of transportation. (Ord. 3766 §67, 1987: prior code §9422(b)(8))

2.3 Access.

All mobile home spaces shall be served from internal private streets within the mobile home park and there shall be no direct access from a mobile home space to a public street or alley. Ingress and egress roads shall have a clear and unobstructed access to a public thoroughfare. (Prior code §9422(b)(9))

2.4 Parking.

The developer shall provide two off-street parking spaces for each mobile home unit on the mobile home lot. The two off-street parking spaces may be in tandem and shall be designed so that a parked vehicle

will not encroach into the street or pedestrian way area. One off-street guest parking space for each two mobile home units shall be provided within convenient distance. (Prior code §9422(b)(10))

2.5 Boat and Trailer Storage.

All pleasure boats, trailers, campers or motor coaches shall be stored in an area set aside for such storage on the approved plans. The area shall be screened from view and shall provide a minimum of one boat or trailer space for every four mobile home sites. Such storage shall not be allowed on any street or individual mobile home lot. (Prior code §9422(b)(11))

2.6 Landscaping.

A detailed landscaping plan shall be submitted for consideration with each special use permit application. All open areas except driveways, parking areas, walkways, utility areas, decks, patios or porches shall be well landscaped and maintained. Landscaping shall be used as a buffer between mobile home units and adjoining property. Tree

s shall be planted throughout the development. Whenever possible, plants that are indigenous to this area shall be incorporated into the landscaping plan. All required planting shall be permanently maintained in good growing condition and repaired or replaced whenever necessary. (Prior code §9422(b)(12))

2.7 Utilities.

All utilities shall be installed underground. (Prior code §9422(b)(13))

2.8 Profile.

To lower the profile of a mobile home so that it more closely resembles a conventional residential structure, wheels may be removed, but hubs and running gear are to remain intact.

A. The utility island sewer connection shall be set as low as possible, consistent with state law.
B. Whenever possible and consistent with proper drainage and minimum state cross-ventilation requirements, the mobile home shall be positioned by accepted and appropriate grading practices to improve its setting.
C. The height limit is two stories. (Prior code §9422(b)(14))

2.9 Fences.

The planning commission may require that the park property be enclosed by fence and/or thick screen planting for control of view, light, sound and adequate security. (Prior code §9422(b)(15))

2.10 Signs.

Park identification signs shall be subject to architectural review by the planning department. No flashing or revolving signs will be permitted. Identification signs shall be limited to one eighty square foot sign per park, not to exceed a height of thirty-five feet above the ground. *214 (Revised September 2013) El Dorado County Zoning Ordinance* Each mobile home park shall maintain an additional directory sign showing the location and house number of each mobile home unit. Incidental signs may be permitted upon approval by the planning commission. (Prior code §9422(b)(16))

2.11 Garbage Disposal.

A trash and garbage disposal system shall be installed in compliance to the regulations of the county health department. (Prior code §9422(b)(17))

2.12 Drainage.

Developers shall provide adequate drainage facilities to prevent damage by storms and shall dispose of drainage waters in a natural watercourse. (Prior code §9422(b)(18))

2.13 Sewage.

Sewage disposal shall be provided in compliance with county health department requirements. (Prior code §9422(b)(19))

2.14 Water.

All mobile home parks shall procure water from an approved water facility. (Prior code §9422 (b)(20))

2.15 Fire Protection.

Prior to construction, the applicant shall confer with the State Division of Forestry or appropriate local entity and shall provide the installations necessary for protection against fire pursuant to the Health and Safety Code. (Prior code §9422(b)(21))

2.16 Demonstrator Homes.

Demonstration of model mobile homes shall be permitted as long as it does not constitute a retail sales yard for mobile homes located off the premises. This is not intended to prohibit the sale of a single mobile home on an approved site. (Prior code §9422(b)(22))

2.17 Occupancy Requirements.

No mobile home parks shall be occupied until all requirements of the planning commission, health department, drainage control, director of departm

ent of transportation, building inspection departments and fire protection requirements have been met. (Ord. 3766 §68, 1987: prior code §9422(b)(23))

2.18 Additional Requirements.

Additional development requirements may be prescribed as conditions of special use permit approval when the requirements are determined to be necessary to insure the protection of the character of neighboring properties, the compatibility of land uses and the health and safety of mobile home park occupants and other county residents. (Prior code §9422(b)(24))

OUTDOOR LIGHTING

Sections:

3.1 Purpose and Intent

The purpose of this Section is to minimize high intensity lighting and glare by establishing standards for lighting practices and systems that will balance lighting levels, minimize light trespass, and conserve energy in concert with state and federal requirements, while maintaining night-time safety, utility, and security consistent with prudent safety practices.

3.2 Definitions

For the purposes of this Section, the following terms shall be defined as follows:

"Design Professional" means a licensed electrical engineer or contractor, or a licensed architect.

"**Direct Light"** means light emitted directly from the lamp, off the reflector or reflector diffuser, or through the refractor or diffuser lens of a luminaire.

"Fixture" means the assembly that holds the lamp (bulb) in a lighting system, which can include all or some of the following elements designed to give light output control: housing, mounting bracket or pole socket, lamp holder, ballast, reflector (mirror), and/or refractor (lens).

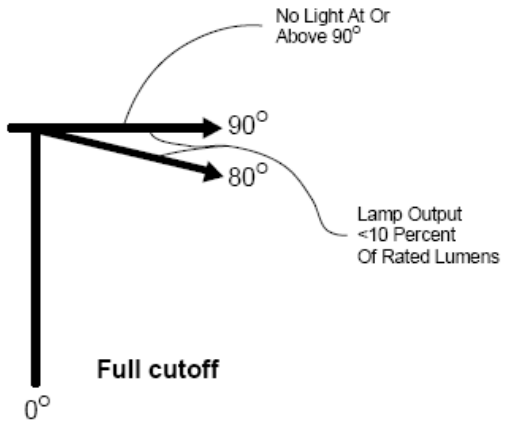
"Flood light" or **"Spot light"** means any light fixture or lamp that incorporates a reflector or a refractor to concentrate and intensify th

e light output into a directed beam.

"Footcandle (horizontal or vertical)" means the amount of light striking a vertical or a horizontal plane measured as one lumen per square foot.

"Full-cutoff (fco)" means the light distribution of a luminaire where zero units of light intensity occurs at an angle of 90 degrees and greater above nadir, which is the vertical point directly below the luminaire when it is pointed down (0 degrees), and does not exceed 10 percent of lumen output at a vertical angle of 80 degrees above nadir, as demonstrated in Figure 3.2.A, below. This applies to all lateral angles around the installed luminaire to include any tilt or other non-level mounting condition. [Illuminating Engineering Society of North America (IESNA) Standards]. Full cut-off does not have the same meaning as and cannot be used interchangeably with the terms 'cut-off', 'full shielding' or 'fully shielded'.

Figure 3.2.A



"Glare" means discomfort experienced by an observer with a direct line of sight to a light source, often resulting in visual impairment.

"Indirect Light" means light resulting

from direct light being reflected or scattered off of other surfaces.

"Inventory of lighting" means a complete list of all exterior lamps to be utilized on site, including illuminated signage. The inventory shall include the lamp type, number and wattage of each type, lighting plan key ID letter or number, initial lumen output rating per lamp or, in the case of luminous tube lighting, the length of the lamp measured in feet. The total project area expressed in net acreage or percentage thereof shall be required. Maximum allowable and project-related lumens per acre will be calculated based on this information.

"Lamp" means the component of a luminaire that produces the actual light, commonly referred to as the 'bulb'. Lamp types consist of light-emitting diodes (LED), high intensity discharge (HID) such as metal halide, mercury vapor, and high or low pressure sodium, and incandescent, fluorescent, and luminous tubes containing neon or argon. Certain lamps are more useful for specific uses, such as incandescent, fluorescent and metal halide where color rendition is important, or high and low pressure sodium for security lighting in such areas with little or no nighttime activity.

"Lamp efficacy or efficiency" means the total luminance emitted by a lamp divided by the power input, expressed in lumens per watt. As an example, the efficiency of various lamps can be compared in the Table 3.2.B, as follows:

Table 3.2.B

	Lamp Type				
	Incandescent	**Fluorescent**	**Metal Halide**	**High-Pressure Sodium**	**Low-Pressure Sodium**
Wattage	25-150	18-95	50-400	50-400	18-180
Output (Lumens)	210-2700	1000-7500	1900-30000	3600-46000	1800-33000
Efficiency (lumens/watt)	8-18	55-79	38-75	72-115	100-183

"Light source" means the bulb and lens, diffuser, or reflective enclosure.

"Light trespass" means direct or indirect light projected onto a property from a luminaire not located on that property.

"Lumen" means the measure of brightness of the light exiting a bulb, provided by the manufacturer. For the purposes of this Chapter, the lumen-output values shall be the initial lumen output ratings of a lamp shown on the manufacturer's specification sheet.

"Luminaire" means the complete lighting system to include the light source and the fixture. Luminaire types consist of bollard or post-top for walkways and ground lighting, pole mounted for roadways and parking lots, soffit and wall systems for structures, and floodlights for building facades, signage, landscaping, and sports fields.

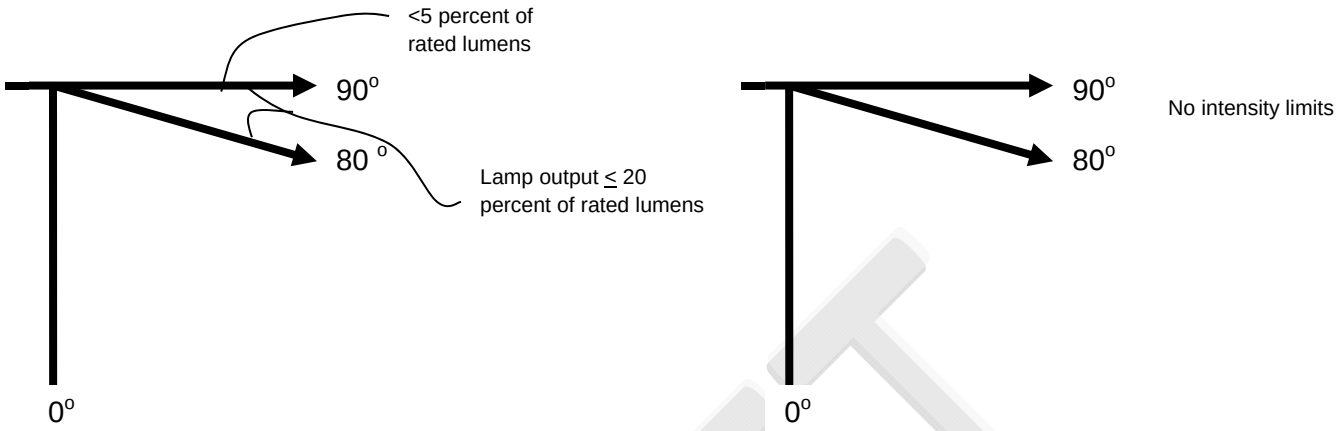
"Net acreage" means, in addition to the definition in Article 8, lots containing those uses that are exempt from the lumens per acre

caps under Paragraph 17.35.040.A.4 shall also exclude from the net acreage calculations the area devoted to the specific use, such as the vehicle sales lot, the fuel pump canopy, or the outdoor performance area.

"Outdoor Lighting" means the night-time illumination of an outside area or object, including signage, by any man-made device that produces light by any means.

"Semi-cutoff or non-cutoff" means a light fixture which does not cut off all upward transmission of light pursuant to IESNA Standards as demonstrated in Figure 3.2.C, below:

Figure 3.2.C



"Temporary outdoor lighting" means the specific illumination of an outside area or object, to include signage, by any m

an-made device that produces light by any means for a period of 45 days or less, with at least 180 days passing before being used again.

3.3 Lighting Plans Required

All public and private outdoor lighting installed in the County shall be in conformance with the requirements established by this Chapter, subject to the following:

A. Any applicant of a commercial, industrial, multi-unit residential, civic, or utility project that proposes to install outdoor lighting shall submit plans for such lighting, to be reviewed and approved by the Director as a part of an Administrative Permit.

B. If the project requires a Design Review, Conditional/Minor Use Permit, or Development Plan Permit, said lighting plan shall be included as a part of that application, and shall be subject to approval by the review authority.

C. Lighting plan shall be subject to the submittal requirements provided in the application form prepared by the Department and shall include, at a minimum, lighting specifications, a site plan, photometric plan, and Lighting Inventory (Appendix D).

D. The Lighting Inventory shall be completed and certified by the design professional prior to building permit issuance (Section B.1 and 2 of Appendix D) and by the licensed contractor prior to final occupancy (Section C of Appendix D).

3.4 Outdoor Lighting Limits

Lumens per acre limits shall be applied toward outdoor lighting based on the specified zone and its location within a General Plan designated Community Region, Rural Center, or Rural Region, subject to Table 3.4.A below:

Table 3.4.A Outdoor Lighting Limits

	LUMENS / ACRE		
Zones	**Community Regions (CR)**	**Rural Centers (RC)**	**Rural Regions (RR)**
C, CPO, CG, I, R&D, RFH	100,000	50,000	25,000
RM, NS, RFL, OS, TC	50,000	25,000	

A. In mixed-use zones, lighting limits shall be based on the sum of each percentage of the site dedicated for commercial and residential uses. For example, a lot in a Community Region developed as mixed-use, with 60 percent commercial and 40 percent multi-unit residential, would be calculated, as follows:

100,000 x 0.60 = 60,000 lumens/acre (Commercial use)

+ 50,000 x 0.40 = 20,000 lumens/acre (Multi-unit residential use)

80,000 lumens/acre Total Site Limit

B. The following uses are e

xempt from the lighting limits of this section:

1. Automobile sales/rental lots for the outdoor vehicle display area, only;

2. Canopied fuel station dispensing areas; and

3. Performance areas in compliance with Section 17.34.050.C.

Full-cutoff fixture design, light trespass requirements, and certification from Building Services regarding energy efficiency standards shall still apply to these areas. The remaining net acreage shall be subject to applicable lumens per acre limits.

3.5 Outdoor Lighting Standards

A. The following standards shall apply to all development in commercial, industrial, research and development, and multi-unit residential zones, as well as civic and utility lighting in all zones:

1. Pole mounted fixtures shall be limited to a maximum height of 20 feet, as measured from the highest point of the luminaire to the finished grade directly below it.

2. Top-mounted luminaires to illuminate parapet signs shall be limited to a maximum height of 25 feet, as measured at the highest point of the fixture to the finished grade directly below it. Illuminated signs shall also comply with Chapter 17.37 (Signs).

3. Roof-mounted luminaires are prohibited.

4. Security lighting shall be activated by motion sensors and remain in the "on" mode for a maximum of 10 minutes.

5. Light fixtures mounted under gas station or convenience store pump area canopies shall meet full cut-off requirements. Light fixtures shall not be mounted on the roof or sides (fascias) of the canopy and the fascias of the canopy shall not be illuminated in compliance with Chapter 17.36 (Signs).

6. Lots within the Historic District (-DH) Combining Zone may be exempt from full cut-off requirements in order to maintain a certain visual character in keeping with the historic period.

7. Outdoor display lighting, such as vehicle sales and rental lots, and building material sales display areas, shall be turned down to 25 percent or less of the existing illumination level or switched to security lighting, in compliance with Paragraph 4 above, by the follo

wing curfew times or within 30 minutes after the close of business, whichever comes later, in accordance with Table 3.4.B:

Table 3.4.B Curfew Times for Authorized Outdoor Display Lighting

Lighting Zone		
Community Region	Rural Center	Rural Region
11:00 pm	10:00 pm	9:00 pm

Under eave or canopy soffit lighting on buildings will be allowed to remain on until dawn in Community Regions and Rural Centers.

8. Search lights, laser source, or similar high intensity lighting shall not be permitted except in emergencies by police, fire, or other emergency personnel.

9. Mercury vapor lamps shall be prohibited.

B. Residential lighting, including single- and multi-unit development, shall conform to the following standards:

1. Lighting installation shall be limited to those areas adjacent to buildings, walkways, driveways, or activity areas (swimming pools, spas, outdoor dining areas, barns, and other similar uses) in close proximity to the residence or activity area.

2. An outdoor luminaire shall be full-cutoff if rated greater than 1,000 initial lumens, which is equivalent to one 60 watt incandescent lamp.

3. Security lighting shall be in compliance with Paragraph A.4, above.

4. Mercury vapor lamps shall be prohibited.

C. **Outdoor Sports and Performance Facilities** have unique lighting needs. Illumination levels vary, depending on the nature of the event. The regulations in this Subsection are intended to allow adequate lighting for such events while minimizing light pollution or sky glow, reducing glare and unwanted light trespass onto surrounding streets and properties, and maintaining energy efficiency. Outdoor sports and performance facility lighting shall conform to the following standards:

1. A lighting plan, prepared by a design professional, shall be submitted with the proposed lighting installation. The lighting plan shall be based on a dual system separating the performance area, such as the playing field, track, stage, or arena from the remainder area of the site, as defined in Paragraph C.2 below. The design plan shall include a discussion of the lighting requirements for the performance area and how those requirements will be met based on the following:

    a. The performance area shall not be subject to pole height or lumens per acre limitations;

    b. Floodlights

    in the performance area should not be aimed above 62 degrees from the vertical plane, and should use internal louvers and external shields to focus light on the performance area in order to eliminate light trespass in compliance with IESNA recommendations, as amended from time to time.

2. The remainder area, including but not limited to grandstand, public seating, concession areas, pedestrian walkways, and parking lots shall be subject to the lighting plan requirements under Section 3.3 above.

3. The main lighting of the performance area shall be turned off no later than 30 minutes after the end of the event.

4. The remainder of the site shall be subject to the lighting curfews under Table 3.4.B (outdoor display lighting).

PARKING AND LOADING

Sections:

4.1 Purpose and Intent

The purpose of this Chapter is to ensure the provision and maintenance of safe, adequate, and well-designed off-street parking facilities in conjunction with a use or development in order to protect the public health, safety, and welfare. The intent is to reduce road congestion and traffic hazards, to promote storm water quality and management practices, to provide safe and convenient access to businesses, public services, and places of public assembly, and to promote an attractive environment through design and landscape standards for parking areas.

4.2 Definitions

"**Active use area (AUA)**" shall mean all developed areas within a building except for storage areas, restrooms, and employee lunchroom/cafeteria(s).

"**Gross floor area (GFA)**". See Article 8

"**Outside use area (OUA)**" shall mean the total square footage of an area enclosed by fences, gates, walls, buildings, landscaping or other features which define the perimeter of the outdoor area where uses and activities are or may be conducted, including, but not limited to recreational use, retail sales, rentals, and restaurant seating.

"Transportation Demand Management Plan (TDM)" shall mean a program designed by an employer to reduce the amount of traffic generated by either new nonresidential development or the expansion of existing nonresidential development, by using a combination of services and incentives to maximize the potential for alternative transportation usage and encourage efficient utilization of existing transportation facilities.

4.3 Parking Plan Required

A. A parking plan showing all off-street parking spaces, parking aisles, and access to parking areas shall be required, as follows:
   1. At the time of submittal of an application for a building permit for construction of any building or structure that requires parking under this Section;

2. For an expansion or addition to increase the floor area, lot coverage, or seating capacity of an existing use or structure that requires additional parking under this Chapter;

3. When a more intensive land use is established requiring more parking than a previous use; or

4. At the time of submittal of any discretionary application.

B. The parking improvements shown on the approved plan shall be constructed prior to occupancy of any structure, or the commencement of any approved use.

C. Minor revisions to an approved parking plan may be approved by the Director. If the parking plan was approved as a part of a discretionary permit, the Director shall refer revisions to the review authority if the revisions have the potential to raise new issues that were not reviewed or are substantial enough to warrant further review at public hearing.

4.4 Special Parking Requirements and Adjustments

The following special requirements and adjustments may apply to the parking standards set forth in Section 17.35.040:

A. Increases and Decreases in Requirements. The required number of parking spaces may be increased or decreased by the Director or review authority, as part of a discretionary permit, as follows:

1. The number of parking spaces required by this Chapter may be increased when it is determined that the proposed use would have a parking demand in excess of the requirements of this Chapter.

2. The number of parking spaces required for commercial and industrial uses may be decreased from the requirements of this Chapter where the review authority finds all of the following:

   a. The intent of the parking ordinance is preserved;

   b. The parking provided is sufficient to serve the use for which it is intended; and

   c. The modification will not be detrimental to the public health, safety, or welfare.

3. In considering requests for an increase or decrease in the number of parking spaces, the review authority shall consider:

   a. Size and type of use or activity;

   b. Composition and number of tenants;

   c. Peak traffic and parking loads;

d. Rate of turnover based on the following criteria, as applied in Table 17.35.040.1:
   (1) High intensity areas are those having rapid turnover of less than two hours;
   (2) Medium intensity areas are those where vehicles are parked from two to four hours;
   (3) Low intensity areas have minimum turnover and few repeat users, such as long-term and employee parking lots.

e. Availability of public transportation including carpools or employer-provided transportation.

f. Payment of in-lieu fees authorized by the County Transit Authority for public transportation facilities, if available, or other options that support mass transportation alternatives.

g. The extent and effectiveness of a proposed TDM program including its monitoring plan.

B. Reduction Methods. The following reductions in required parking can be applied separately or in concert with each other, providing findings under Paragraph A.2 above can be made.

1. Reduction for On-street Parking. Where on-street parking is available on public streets fronting the subject property, the required off-street parking may be reduced by one space for each available on-street space adjoining the property. Determination of availability of on-street parking shall be made by the review au

thority after consultation with the Department of Transportation and the local fire district.

2. Reduction for Rear-lot Parking. The required off-street parking for commercial and civic uses located in a community region or rural center may be reduced by 10 percent when the project locates the parking area behind the structure(s) so that the parking area is not visible from the road frontage, sidewalks or other pedestrian accessways are available, and a transit stop is within 300 feet of the site.

3. Shared Parking. Shared parking shall be permitted as follows:

a. Where two or more nonresidential uses on a single site or adjacent sites are developed, a parking analysis shall be required demonstrating parking demand based on distinct and differing hours of use and peak traffic periods. Table 4.4.A below shall be the default method of calculation, however, variations may be allowed subject to Director review and approval.

Table 4.4.A Calculating Shared Parking by Use Types (in percents)

Use Type	Weekday		Weekend		Nighttime
	Daytime	Evening	Daytime	Evening	12:01am –

	8 am - 6 pm	6:01 pm – 12am	8 am - 6 pm	6:01 pm – 12am	7:59am
Office/Industrial	100%	10%	10%	5%	5%
Retail/Service	60	90	100	70	5
Lodging	75	100	75	100	75
Restaurant	50	100	100	100	10
Recreation/Entertainment	40	100	80	100	10
Churches/Assembly	40	80	100	100	5
Schools	100	75	40	40	5

b. Shared parking shall be calculated as follows:

(1) Parking shall be determined for each use as though it were a separate use, based on Table 4.4.A;

(2) Each amount of required parking shall be multiplied by the corresponding percentage for each time period;

(3) The parking requirement shall be totaled for each column; and

(4) The column with the highest value shall be the total parking space requirement.

Example: Calculating Shared Parking Requirement

For a development of office, retail, and restaurant uses that require the following number of spaces for each separate use:

Office	50
Retail	75
Restaurant	60

185 Total required spaces

Under shared parking requirements using Table 4.4.A:

Use Type / Space Requirements	Weekday		Weekend		Nighttime
	Daytime 8 am - 6 pm	Evening 6:01 pm – 12am	Daytime 8 am - 6 pm	Evening 6:01 pm – 12am	12:01am – 7:59am
Office / 50	(50 x 100% =) 50	(50 x 10% =) 5	(50 x 10% =) 5	(50 x 5% =) 3	(50 x 5% =) 3
Retail / 75	(75 x 60**% =)** 45	(75 x 90% =) 68	(75 x 100% =) 75	(75 x 70% =) 53	(75 x5 % =) 4
Restaurant / 60	(60 x 50% =) 30	(60 x 100% =) 60	(60 x 100% =) 60	(60 x 100% =) 60	(60 x 10% =) 6
Total	125	133	**140**	116	13

The "weekend daytime" is the highest use period and the hypothetical mixed use project would require 140 parking spaces, thereby reducing the parking requirement by 45 spaces.

c. The following restrictions shall apply to shared parking provisions:
   (1) Reserved parking spaces shall be prohibited.
   (2) Where shared parking occurs on adjoining lots, a maintenance agreement, in a form acceptable to the County. Said agreement shall provide for common maintenance of the parking area and shall state that any change in occupancy shall be subject to proof that sufficient parking is available.

4. Off Site Parking. Required parking for commercial or industrial uses may be located off site when all of the following requirements are met:

a. Off-site parking is located on a site where parking is otherwise allowed and is located within 500 feet of the site which it is intended to serve.

b. Parking requirements shall be met for both on site and off site uses either in total or as allowed by any of the reduction methods under this Subsection.

c. There shall be no hazardous traffic safety conditions for pedestrians utilizing an off site parking facility.

d. An off site parking easement is granted ensuring the continued availability of the off-site parking facilities for the life of the use that it is intended to serve, in compliance with Chapter 17.65 (Covenant of Easement).

C. Handicap Parking. Parking for the physically handicapped shall be provided as required in the building code, in compliance with the Americans with Disabilities Act (ADA).

D. Compact Car Spaces. Where 10 or more parking spaces are required for commercial, industrial, recreational, or civic uses, compact spaces may be incorporated for up to ten percent of the required spaces. Multi-unit residential developments containing ten or more units may incorporate compact spaces for up to 20 percent of the required visitor parking. All compact parking spaces shall be clearly marked by surface paint or signage reserving each parking space for compact car use, only. Compact spaces shall be evenly distributed throughout the parking lot.

E. Carpool/Vanpool. Voluntary installation of carpool/vanpool parking may be allowed in return for a reduction in total parking requirements as part of a Transportation Demand Management Plan approved by the review authority.

F. Motorcycle Parking. Parking areas accommodating 100 cars or more shall designate five percent of their required parking space for motorcycle use, rounded to the nearest whole number. General space requirements shall measure four feet wide by eight feet long per motorcycle, with adequate maneuvering space around the motorcycle. Two such spaces shall count as one car space.

G. Bicycle Parking. Bicycle racks shall be designed to enable a bicycle to be locked to the rack and shall be installed in a manner that allows adequate access to the bicycle. General space allowances shall measure two feet wide by six feet long per bicycle, with a five foot maneuvering space behind the bicycle. Surfacing shall be consistent with adjacent sidewalk or parking areas. Bicycle parking shall be required for the following development:

1. Office and Retail Commercial. One bicycle space per every five required vehicle parking spaces up to the first 25 vehicle spaces. An additional bicycle space is required for every ten additional vehicle spaces or portion thereof. The maximum number of bicycle spaces required is 20, unless more are deemed necessary by the Director for major employment and commercial facilities.

2. Community Services - Minor and Public Recreation Facilities. Thirty percent of the required number of vehicle spaces, to a maximum of 25 bicycle spaces, unless more are deemed necessary by the Director.

3. Elementary, Middle and High Schools. One bicycle space per student at 25 percent of peak enrollment.

H. Drive-through Facilities. Sites containing these facilities shall be in compliance with the following circulation and traffic control standards:

1. A drive-through facility shall be located at the rear or side of a commercial structure and not within any front setback area.

2. Ingress to and egress from a drive-through facility shall be prohibited from driveway(s) directly facing a residential zone.

3. A drive-through facility, including stacking areas for vehicles awaiting service, shall be a minimum of 50 feet from the nearest property line of any residentially zoned lot.

4. Stacking lane(s) shall be physically separated from other traffic circulation on the site by concrete or asphalt curbing. The stacking lane(s) shall accommodate a minimum of four cars per drive-through window in addition to the car receiving service. The lanes shall be a minimum width of ten feet.

5. Signage shall be provided to indicate the entrance, exit, and one-way path of drive-through lanes in compliance with Chapter 17.37 (Signs).

6. Stacking areas shall not block access to any parking area or space required of a business. Lane striping to separate drive-through traffic from parking areas shall be provided from the nearest point of site access, as feasible, to the stacking lane(s).

7. Where a facility exceeds the standards of Paragraphs 1 through 6 above, and is not located within a development that is subject to a discretionary permit, such as a Conditional Use, Design Review, or Development Plan Permit, a Conditional Use Permit shall be required.

8. When a drive-through facility requires a Conditional Use Permit or is within a development that is subject to a discretionary permit, the review authority may impose a greater setback than is required under Paragraph 3 above, when it is determined necessary to mitigate impacts from noise, air pollution, lights, or other land use conflicts. The review authority may deny any application for a drive-through facility if it finds that the facility will add to the cumulative air quality impacts for a specified pollutant and the County is found to be in non-attainment status of either federal or state air quality standards for that pollutant.

I. Historic Structures. The following exemptions and reductions in parking standards shall apply to all historic structures, as designated by the County:

1. When a change or increase in intensity of use occurs in a historic structure no additional parking spaces shall be required.

2. When expansions or additions to an historic structure increase its square footage by more than 25 percent, additional parking shall be required. The revised parking requirement shall be calculated on the resultant total square footage of the structure, whether such total increase occurs at one time or in successive stages, such as with a phased project.

4.5 Material and Passenger Loading/Unloading Areas

A. Materials. All uses which require the receipt or distribution of materials or merchandise by vehicle shall provide off-street loading spaces in the amount specified under Table 4.5.A, based

on the projected demand intensity for the use as provided by the applicant, subject to approval by the review authority:

Table 4.5.A Loading Bay Requirements

	NUMBER PER LOADING BAY DEMAND		
Use Area (in square feet)	**High**	**Medium**	**Low**
Less than 10,000	1	0	0
10,000 to 30,000	2	1	0
30,001 to 60,000	3	2	1
60,001 to 100,000	4	3	2
100,001 to 150,000	5	4	3
Each additional 50,000	1	0.5	0.25

1. Area(s) provided for passenger loading and unloading required under Subsection B below, may be utilized for material loading/unloading at the discretion of the review authority based on the type of use and material, expected demand for loading/unloading the material, time of material delivery, and other relevant factors.

2. Industrial sites shall be self-contained and capable of handling all truck loading, maneuvering, and docking on site. The use of public roads for staging and/or maneuvering is prohibited.

3. The review authority may modify the loading zone requirements in special circumstances based on the specific nature of the use or combination of uses, the design characteristics of the project and site dimensions, the impacts to surrounding properties, and public safety.

B. Passengers. Vehicle turn-out lanes for passenger loading and unloading shall be provided outside of the normal circulation lane for the following uses:

1. Apartments/condominiums containing 50 units or more.

2. Retail sales and service uses containing 30,000 square feet or more of building area.

3. Hotels/motels containing 50 units or more.

4. Schools and child day care facilities with 50 or more students.

5. Public buildings open for general use by the public.

6. Public transportation facilities.

7. River recreational use areas.

8. Ski areas.

C. All loading/unloading areas shall conform to the dimensions under Table 4.5.B:

Table 4.5.B Dimensions of Loading/Unloading Areas

Use Type	Width	Length	Vertical Clearance
Commercial Office, Recreational, and Civic	12 ft.	25 ft.	14 ft.
Other Commercial and Industrial	12 ft.	40 ft.	14 ft.

D. All loading and unloading areas shall be marked appropriately with curb painting and/or signs that prohibit parking.

4.6 Recreational Vehicle Parking

A. Recreational vehicle (RV) parking spaces shall be required as set forth in Table 17.35.040.1.

B. In residential zones, RV parking or storage shall be limited to one such vehicle per lot. RV parking or storage shall not encroach into any required setback area and shall be screened from public view.

C. Where RV parking and storage areas are provided in association with a mobile/manufactured home park, townhouse, apartment, or other multi-unit residential development, such parking shall be screened with fencing or landscaping.

4.7 Parking Lot Design Standards

The following standards shall apply to all parking lots required under this Chapter.

A. Parking Lot Dimensions. Parking lot dimensions shall conform to requirements under the El Dorado County Standard Plans Manual, Standard Plan RS-90.

B. Controlled Access. Every parking and loading stall shall be accessible from the drive aisle without displacement of other vehicles.

C. Public Road Access. Except for single-unit residential dwellings, as defined in Article 8, parking stalls shall be designed so as to prohibit the backing of vehicles directly into any public road right-of-way or easement in order to exit the site.

D. Vertical Clearance. Every parking stall and drive aisle shall have a minimum of eight feet vertical clearance.

E. **Snow Removal Storage.** Parking areas located at the 4,000 foot elevation or higher shall provide snow removal storage areas. Such storage areas shall be equivalent to 10 percent of the surface used for parking and access and shall not utilize any required parking spaces. Landscaping areas may be utilized for this purpose in compliance with Section 17.34.060 (Maintenance and Protection).

F. **Parking Area Gradient.** All parking areas shall be graded to provide adequate drainage of all surface areas into an on-site drainage improvement or stormwater drainage system, in compliance with the gradient standards in the Land Development Manual (LDM).

G. **Landscaping Required.** Landscaping shall be required for all parking lots consistent with the requirements set forth in Chapter 17.33 (Landscaping Standards).

4.8 Parking Lot Construction and Maintenance Standards

Based on parking lot turnover set forth in Table 4.8.A, all required parking and loading areas shall conform to the following surfacing requirements, as provided in the LDM, unless otherwise allowed under Article 4 for a specific use:

Table 4.8.A Parking and Loading Area Surfacing Requirements

	Location	PARKING LOT TURNOVER		
		High	Medium	Low
A.	Community Region	Asphalt / Concrete	Asphalt / Concrete	Asphalt / Concrete
B.	Rural Center	Asphalt / Concrete	Asphalt / Concrete	Chip Seal
C.	Rural Region	Asphalt / Concrete	Chip Seal	Gravel

Wheel Stops.

1. All parking spaces adjacent to sidewalks or landscaping, other than for single-unit residential dwellings, shall provide concrete wheel stops a minimum of three feet between the farthest edge of the wheel stop and the nearest edge of the sidewalk or landscaped area.

2. Wheel stops may be eliminated adjacent to landscape areas in compliance with Paragraph 17.33.050.C.3 (Landscape Standards).

3. Wheel stops shall be anchored securely to the asphalt.

D. Directional Arrows and Signage. Aisles, approach lanes, pedestrian crossings, and loading/unloading areas shall be clearly marked with directional lines, arrows and/or signs to facilitate traffic movement and ensure pedestrian safety.

E. Maintenance. All parking and loading areas, drive aisles, and access drives shall be maintained in good condition and kept free of outside storage and debris.

4.9 Non-conforming Parking

No additional parking spaces shall be required for those existing uses made noncompliant with parking standards on the effective date of this Chapter, subject to the following:

A. Whenever the existing use is enlarged, expanded, or intensified, additional parking spaces shall be provided only for the enlargement, expansion, or intensification subject to the standards in this Chapter.

B. Whenever the existing use is changed to a new use where the parking requirement becomes 50 percent higher, parking for the entire site shall be consistent with the requirements and standards of this Chapter.

RESEARCH AND DEVELOPMENT ZONE DESIGN STANDARDS

Sections:

5.0. Architectural Design.

Architectural treatment shall be applied to all elevations of a building facing public areas, to include roads, parking lots, pedestrian walkways, open space, and adjacent residential developments. To eliminate design review discretion while ensuring continuity among buildings, the architecture of any structure allowed in the Research and Development zone shall be deemed in compliance with acceptable community design criteria when:

a. Any of the following building materials are used:

1. Glass curtain-wall;
2. Poured-in-place concrete and precast concrete siding;
3. Brick or stone masonry;
4. Tile;
5. Wood;
6. Plaster or stucco finishes; and
7. Pre-finished metal paneling not to exceed twenty-five percent of the exterior wall surface.

b. The following architectural standards are applied:

1. Two exterior wall materials plus one accent material listed under Paragraph 1.a is required. Window framing, doors, and door framing shall not be counted as part of this requirement.
2. Two exterior building colors plus one accent color is required. Primary colors are not allowed. Glass curtain-wall(s) will count as a basic color, however, tinted window glass will not.

5.1 Landscaped Buffers and Shade Requirements.

All setback and parking areas shall be landscaped and shaded as set forth in Volume III, Chapter 1, Section 4 (reference?) of the Land Development Manual (Parking and Loading).

5.2 Other Screening and Buffering Standards.

The following requirements shall apply to all development in the Research and Development zone:

a. Loading. All loading and unloading of goods shall be conducted within a building or an area fenced for outdoor storage. Loading bays and roll-up doors shall not be located on

any building elevation facing a street frontage. Additionally, if proposed loading areas are visible from the street, they shall be screened from view by using any combination of decorative fence, wall, or landscaped earth berms.

b. Trash Collection Areas. All refuse collection areas shall be visually screened with a solid six-foot-high enclosure of masonry, and shall be compatible in appearance with the buildings on site. Gated trash enclosures shall remain closed when not in use.

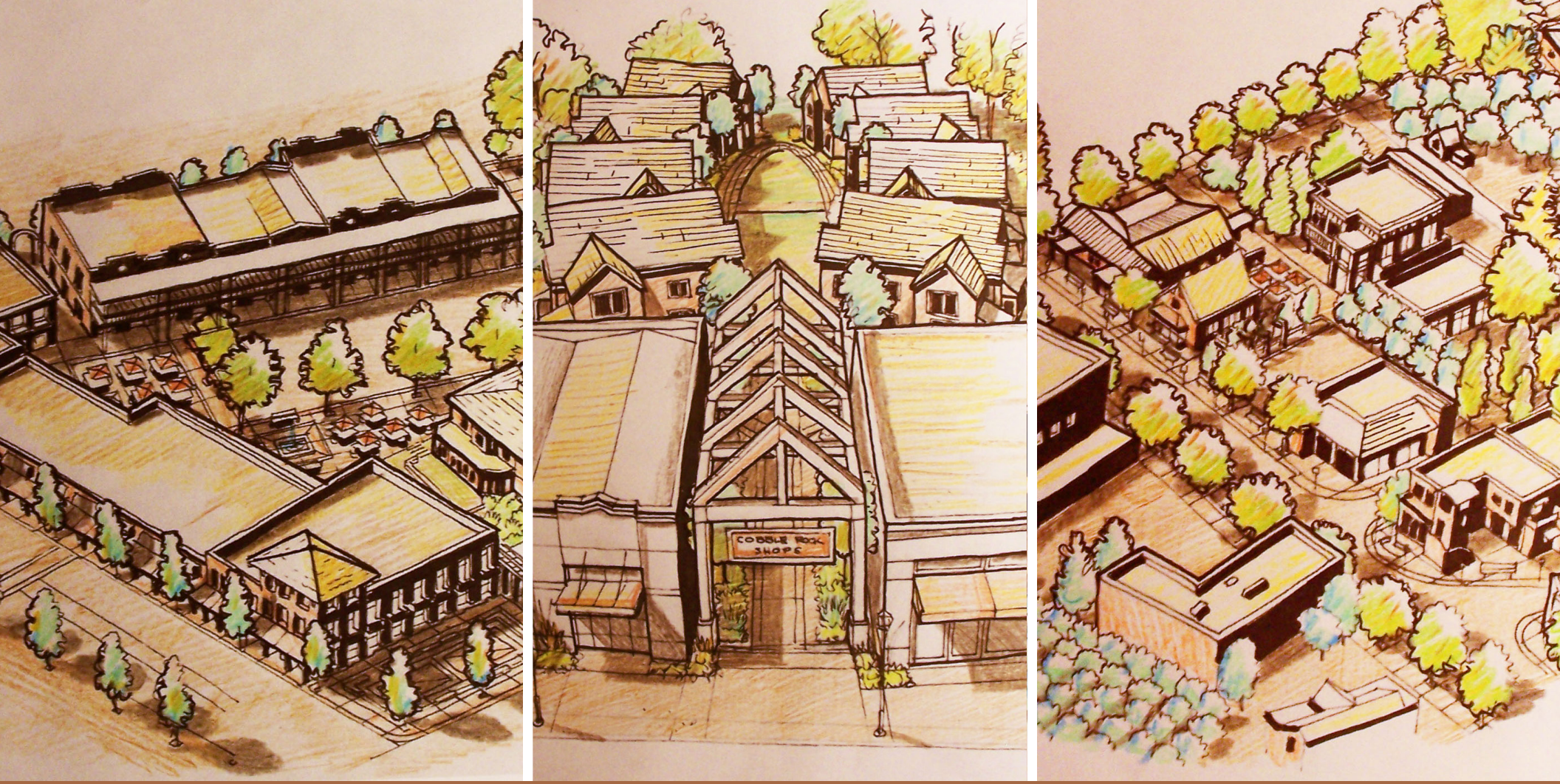
c. Rooftop Equipment. Rooftop mechanical equipment shall be screened from view by using screens or parapets as high as the mechanical equipment. Screens must be architecturally consistent with the building in design, material(s) and color(s). Vents and ducts are encouraged to be screened; however, those not screened shall be painted to match the building or roof, in whichever color results in the least visual impact.

d. Other Storage. Any article, goods, material, machine, equipment, vehicle, or similar items to be stored other than in an enclosed building shall be screened from view by any combination of decorative fence, wall, or landscaping so it is not visible from the public areas included under Subsection A.1 above.

5.3 Standards Under an Approved Development Plan.

Development, design, and architectural standards under an approved development plan may supersede the requirements of this Section where applicable.

Draft Mixed Use Development Design Manual



El Dorado County Mixed-use Design Manual

Public Review Draft | March 19, 2014

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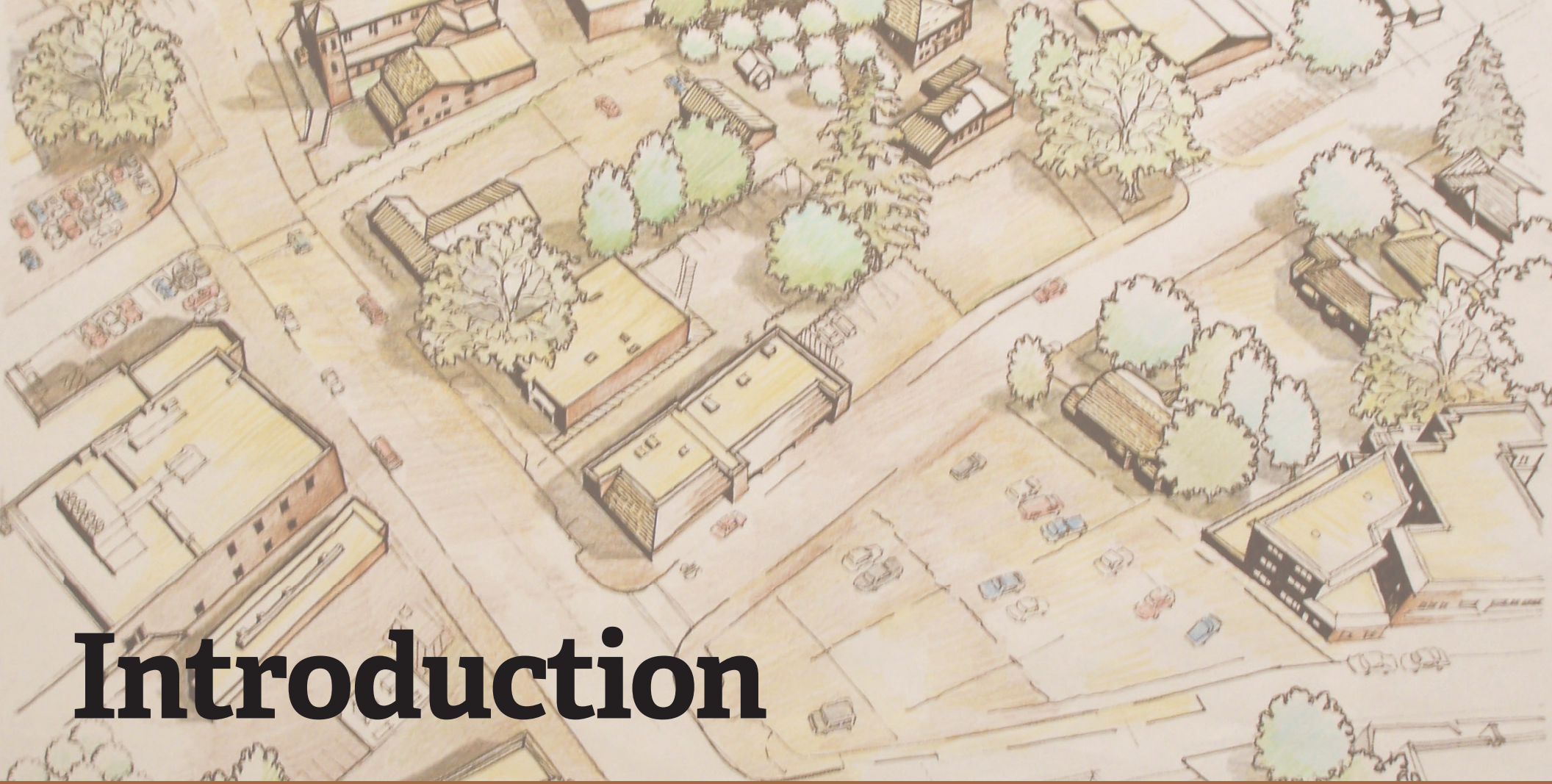


Introduction

Introduction

The best qualities of historic communities are those that provide connections between the elements meaningful to both the past and future. Those connections could be between people and a sense of community, between places and buildings, or between heritage and growth. The El Dorado County Mixed-use Design Guide describes the unique character and essential characteristics of mixed-use developments that citizens know and cherish. The Guide presents the County's vision for perpetuating those characteristics along with strategies applicable to revitalization and new development projects that achieve well designed mixed-use projects. As such, this Guide was developed on the expectation that new mixed-use development be harmonious with the unique and historic character and traditions of El Dorado County communities. Future mixed-use buildings planned, designed, and developed using this manual will reflect the good characteristics of the county's existing buildings and public realm.

Good design can help jump start economic and cultural revitalization while respecting historical foundations. Mixed-use development in El Dorado County's communities is a return to their original mixed-use roots. The present and historic characteristics of the communities are the foundation

for design guidelines that attempt to lay a path to the future. For example, current regulations and market conditions may encourage construction of new "suburban-style" buildings that would be significantly larger than historic structures, or require extensive site or parking infrastructure that would seem out of place in these historic communities.

The Mixed-use Design Guidelines are intended to provide clear and useful recommendations for the design, construction, review, and approval of mixed-use development in unincorporated El Dorado County. The benefits of mixed-use development include:

- **More housing options.** Mixed-use development can provide greater housing variety, both in location and cost. El Dorado County has many single-family homes, but that type of housing may not be ideal for singles, young people, and seniors.

- **Shorter trips.** Mixed-use development reduces the distance between housing, workplaces, shops, restaurants, and other destinations.

- **Stronger neighborhood character.** Mixed-use development can bring people together, help promote an identity for the area, and strengthen ties between residents, business owners, and visitors.

- **More cycling and walking.** When home, work, and shopping are all close by, it can be easier and more pleasant to walk or bike. Shifting trips to bicycling and walking reduces traffic and pollution.

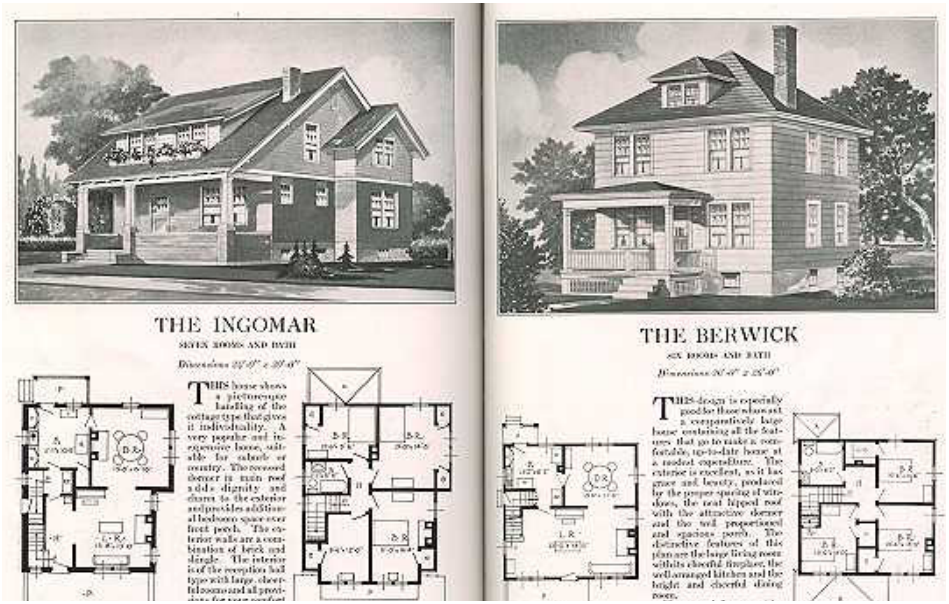
Mixed-use development can work well in small communities. Mixed-use development in small communities may be a single apartment over a store, or several cottages behind a small office building. Guidelines and design prototypes in this manual are specifically tailored to encourage mixed-use development for El Dorado County's historic small communities and other appropriate unincorporated areas. The Guide illustrates how to plan and design mixed-use development.

Purpose and Intended Use

Historical Context for the Design Guide

As communities developed throughout the western United States in the 19th and early 20th centuries, they evolved through a series of booms in which thousands of new buildings were constructed. Despite this rapid construction, buildings were carefully crafted and organized to meet specific needs with public amenities that invited people to interact. It was common for structures to have a variety of architectural styles with proportioned and ornamented facades. Windows, doors, roof forms, and porches all followed a complex, but complementary design principle. Similarly, there was a balance between individual expression of each building and harmony with which they work together to create a unified community form.

This seemingly coincidental outcome of early community development did not occur by chance. Architects, designers, and developers of the time used what are called pattern books or builders handbooks, to design and construct buildings. These pattern books contained the principles for design detail that presented clear direction of traditional styles and established the rules or structure in which each builder interpreted his or her own expression of a building. The result can be seen in the pre-World War II communities, which offers a balance of individual expression and inviting public spaces.



Following WWII there was a major expansion of communities and pattern books fell out of favor. Architects focused on modernist styles in place of traditional architecture, development regulations separated uses, and builders relied on mass production methods to design and build new neighborhoods and communities. Consequently, today's builders often operate without access to the conventions of early pattern books that historically enabled

individual buildings and a mix of uses to work together to create cohesive public spaces.

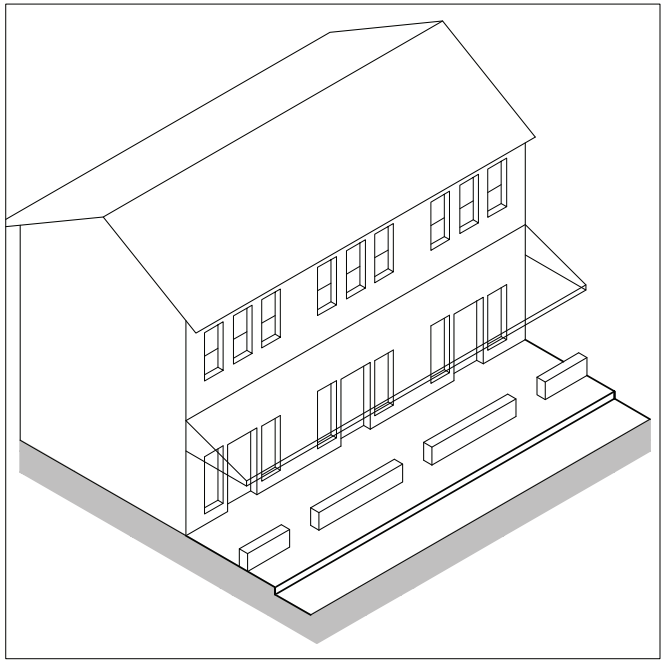
Newer zoning codes that are based on patterns long established in nearly every town in America incorporate a variety of commercial and residential types and uses into mixed-use zoning. A mix of uses reduces driving distances and makes it easier for people to walk or bike to their daily destinations because homes, workplaces, stores, schools, and services are closer together. Allowing mixed-use development to occur helps encourage residential growth in towns and reduces the likelihood of scattered businesses in rural areas that encourage more spread-out development and fragmented land. These guidelines are intended to use the pattern book tradition to help restore among builders, designers, and property owners a common understanding of mixed-use development that created the character and charm of El Dorado's communities.

Purpose

These guidelines provide the tools needed to design mixed-use buildings that enhance the historic character of El Dorado communities and create inviting public spaces. They also provide residents and decision-makers a sample of different types of mixed-use development through realistic sketches, or prototypes, of the finished results. The guidelines enable residents and decision-makers to see how new mixed-use development can fit within established communities.

The standards and guidelines contained in this manual are not intended to tell property owners or developers what they can't do. Rather, this document helps envision and provide direction on what they can do in regards to developing mixed-use projects. As such, this document is intended to be proactive, providing an organized set of standards and guidelines for building mixed-use projects that fit the historic context of El Dorado County communities and a set of mixed-use prototypes that spark the imagination and support the design concept for mixed-use development. The Mixed-use Design Guidelines should be viewed as a package of tools that give architects, designers, and builders the flexibility to create a range of mixed-use projects, while still maintaining the distinct characteristics of traditional El Dorado County communities.

The purpose of this manual is to provide guidance for future mixed-use development in El Dorado County. These guidelines are not binding in the same way as zoning ordinance standards, but they are meant to illustrate the County's expectation for successful mixed-use development. This guidebook provides a common sense approach to developing financially feasible, attractive mixed-use developments that are integrated with the character of El Dorado County.



Simple, clear graphics illustrate the standards and guidelines.

This guidebook is for anyone with an interest or stake in mixed-use development in El Dorado County. Real estate developers will find it a useful tool for designing a mixed-use project in the county. County planners will use the guidelines to evaluate the compatibility of proposed projects. Property owners can use this manual to decide if mixed-use development is the right fit for their parcels. Decision-makers will use the guidelines to review mixed-use projects. To make the guidelines and design prototypes accessible to everyone, they include illustrations and straightforward language.

To use this guidebook to the fullest, use the guidelines and standards to inform your mixed-use development project. The descriptions and diagrams in the guidelines should make the Zoning Ordinance standards clearer, allowing you to design and plan your project more efficiently. The design prototypes provide examples of how the guidelines can be applied in a successful, appropriate manner that enhances the project as well as the surrounding community.

The Introduction and Context sections of this Guide describe the setting for mixed-use development within El Dorado County. This is a starting point to become familiar with the county's communities and the design goals of each community. Prospective mixed-use developers and designers should familiarize themselves with the historic character of a community in which a development is being considered and the surrounding buildings that will interact with the new project.

Compliance with the guidelines is strictly voluntary. The guidelines are "performance-based," in that they describe the desired outcome of a particular design element, and offer alternative methods of meeting those requirements. For example, they do not dictate a design style. In some cases it may be possible to meet the basic design intent with means other than those described. The County will consider alternatives when the broader design objectives for the area can still be met.

El Dorado County staff, Planning Commission, and Board of Supervisors are responsible for the review and approval of each individual project within the unincorporated county. This guide helps to ensure that high quality designs are developed for mixed-use projects.

Guidelines for new construction (buildings, roads, and site development) should emphasize the context and guidelines for rehabilitations, additions, or modernizations and should focus on principles for maintaining historic structures as they exist. In a few communities change has been more substantial and greater flexibility in new construction is appropriate.

Rehabilitation could focus on removing obtrusive alterations, restoring damaged features, and re-purposing older buildings with new uses. The greatest departure from the historic character in some neighborhoods may be the loss of buildings because they are outdated and the cost to upgrade to modern codes doesn't make economic sense.

The guidelines in this book respond to this development atmosphere by modifying the zoning ordinance standards with guidelines that encourage buildings and sites that are appropriately scaled. For each guideline we ask these questions:

- Will the integrity of the community be preserved or enhanced if the guideline is followed?

- Will this guideline help the community meet its economic, cultural, and design goals? A guideline must register a "yes" to each in order to appear in this manual.

Community Context

El Dorado County's Zoning Ordinance has standards for all types of development in the unincorporated county. The standards have a broad reach, and include zoning district definitions, development standards, and allowed uses. The Zoning Ordinance allows mixed-use development in four commercial zoning districts and one residential zoning district:

- **Commercial Professional Office (CPO).** This zone is intended to regulate the development of land suitable for professional, administrative, and business offices, and offices mixed with low-to-high intensity residential uses. It is intended that the zone be used as a transition between residential areas and higher-intensity commercial uses.
- **Commercial, Limited (CL)**. This zone designates areas suitable for low-intensity retail and office uses oriented to serving the surrounding residential area while minimizing conflicts with the residential uses and outside traffic into the area. Mixed-use development compatible with surrounding uses would also be appropriate.
- **Commercial, Main Street (CM).** This zone allows a wide range of pedestrian-oriented retail, office, and service uses, and mixed-use development comprised of commercial and residential uses. Flexible development standards are applied to facilitate preservation of historic structures and to encourage new development compatible with the identity of each unique community.

- **Commercial, Community (CC).** This zone provides for the retail sales, office, and service needs of the residents living with in the surrounding community and accommodates the commercial and service needs of visitors to the county. Mixed-use development compatible with General Plan densities is appropriate in this zone.

- **Residential, Multi-unit (RM).** This zone identifies those lands which are most capable of supporting the highest density of development within the county. It is applied to regulate and promote the development of multi-unit dwellings, including apartments, condominiums, and townhouses, while ensuring compatibility with surrounding lower-density residential neighborhoods.

The five zoning districts that allow mixed-use development are generally clustered in El Dorado County's communities of Camino, Diamond Springs, El Dorado, Georgetown, Pollock Pines, and Shingle Springs. There are also smaller pockets of mixed-use zoning districts in the county. These zoning districts make up a tiny fraction of all unincorporated land in El Dorado County, but cover some of the most populated areas and busiest business districts.

Mixed-use Context

El Dorado County's communities each have a unique character, and diversity exists within each community as well. In general, these different areas are distinguished by land use, building type, and influences from other regional elements. For example, the central blocks or main street in a town may be composed of traditional commercial storefront buildings, whereas residential areas may be characterized by single family homes or apartments. Architectural surveys helped develop descriptions of individual building styles and components and field surveys to define overall community character and relationships among historic resources. The goal is to describe the features that should be respected and incorporate these descriptions into the guidelines so that everyone can understand the context that will be protected, enhanced, or altered.

Most of El Dorado County's small towns were historically established by Sierra foothill pioneers seeking to tap the region's abundant opportunities in mining, forestry, agriculture, ranching, and railroad building. The rural villages that they formed combined commerce, civic, and residential uses into common buildings or in compact neighborhoods that are core attributes of a mixed-use community.

Today, vertical mixed use in El Dorado County's communities is rare, as single-story buildings are common. In two-story buildings different uses may occupy different floors, but they are typically part of the same establishment. For example, the Georgetown Hotel has hotel rooms above a pub. Some stores have their offices above the store itself. Typically, single-story horizontal mixed-use development is inexpensive, especially if land costs are low. This economic reality has shaped the existing built environment of these communities. In many of the communities, homes often sit next to or behind commercial buildings. While horizontal mixed-use development is less compact and somewhat less walkable than vertical-mixed use development, the small size of these communities ensures that residential uses are near commercial uses.

Community Character

The communities of El Dorado County share a common past that began with the discovery of gold in the Mother Lode region of California in 1848. The influx of wealth and population led to the formation of many new settlements. Directly or indirectly, all of the communities discussed below are a product of the gold rush. Despite the common beginnings, each community developed a unique identity. These divergent identities were in part a result of the different roles each community had in the gold rush. Their unique identities were further established by the nature of the surrounding land. Ranch land, forests, rivers, lakes, and mountains shaped these communities and imbued them with the character that is seen today.

Areas zoned for mixed-use development are primarily located in unincorporated smaller-population centers that are nestled among the rolling foothills and forested Sierras, and are outside the larger communities. These areas, primarily made up of villages and historic towns, have long histories in the county as agricultural, forestry, railroad, and Gold Rush mining centers. The current character of each area feels authentic, individualistic, and organic, rather than master-planned and of uniform character.

The region has grown to become a recreational playground, an emerging high-quality wine production and fruit-growing region, an affordable rural haven for active retirees, a desirable home base for flocks of commuters to regional job centers, and an authentic tourist destination due to the natural beauty and character of historic small towns. The mixed-use standards and guidelines in this manual are sensitive to all of the different users, uses, and historical contexts in today's El Dorado County.

Camino

In its early days Camino served as a stopping point on the Pony Express Route from Sacramento to St. Joseph, Missouri. Camino is located in the Apple Hill area, a community of 55 ranches that produce apples, wine, Christmas trees, and other products. Apple Hill is a tourist attraction, particularly in autumn. Carson Road forms the spine of Camino, a community that now stretches along Highway 50. The heart of Camino is along Carson Road between Larsen Drive and Cable Road. In this area residential density is relatively high, and Carson Road is lined with historic homes and small shops and restaurants.

Diamond Springs

Diamond Springs was founded in 1848 and named for its crystal clear springs. During the gold rush Diamond Springs was one of the richest spots in El Dorado County. Today, lumber, lime production, and agriculture continue to sustain its local economy. As of 2010 Diamond Springs has a population of 11,037 and has been growing rapidly in the past decade. Diamond Spring's main street is along Highway 49, and has historic structures similar to those found in El Dorado. Diamond Springs also has several large areas of undeveloped land near the commercial core that could be developed as mixed-use infill. There is new development in Downtown Diamond Springs along Fowler Lane. This development uses El Dorado County's historic buildings as inspiration for the architecture.

El Dorado

El Dorado, first known as "Mud Springs," was once an important camp on the old Carson Emigrant Trail. By 1850 it had become the center of a mining district and a crossroad for freight and stage lines. At the height of the gold rush, El Dorado was home to several thousand residents. Today, El Dorado's business district is clustered at the intersection of Highway 49 and Pleasant Valley Road. El Dorado's post office, El Dorado Grocery and Deli, Poor Red's Bar-B-Q, and Bennett Gallery and Awards buildings serve as excellent examples of the historic charm of El Dorado. Mixed-use developers could use them as inspiration for what works well. Several of these buildings have charming arcades along the front facade to welcome pedestrians.

Georgetown

Georgetown was founded in 1848 by George Phipps as Growlersburg, a name that referenced the gold that "growled" in miners pockets and pans. Boarding houses and hotels were built to house the miners that flocked to the mines near Georgetown. One, the American River Inn, is still in operation today. In modern times Georgetown serves as a jumping-off point for visitors taking advantage of all of the recreational opportunities nearby, from rafting to all-terrain vehicle trails. Tourists also come to see the gold-rush charm of Georgetown itself. Georgetown's business district is located along Wentworth Springs Road and Georgetown Road (Highway 193). Of all of the communities listed in this section, Georgetown has the best preserved historic downtown. It's structures also form a continuous streetwall along the northwestern side of Wentworth Springs Road. Simple arcades along most buildings help to unify the community's character.

Pollock Pines

Pollock Pines grew in importance during the gold rush years for its timber resources. Miners needed the wood to shore up mines and build new homes, and Pollock Pines mills met the demand. Timber has always been important to the Pollock Pines economy, but as early as the 1950s, the area began to cater to tourists attracted to the nearby forests, lakes, and streams. As the name suggests, much of the present-day character of Pollock Pines comes from the large pine trees along Lincoln Highway, the community's main street. Many of the commercial buildings are set behind one or more rows of evergreen trees. The businesses along Lincoln Highway are further apart than some of El Dorado County's other communities; the feeling in Pollock Pines is more rural than Georgetown or Diamond Springs.

Shingle Springs

Like many communities in El Dorado County, Shingle Springs began as a bustling California gold mining settlement. The first post office was established in 1853, the first general store in 1865, and the first railroad in 1866. The town boomed as a railroad terminus, but eventually the gold miners moved on. As they left, ranchers arrived to take advantage of the surrounding hills. Today, Shingle Springs is located near the Highway 50/South Shingle Road interchange. Shingle Springs does not have the same historic main street that some of the other communities in El Dorado County have. Instead, most of the commercial development is centered along the Durock Road/Mother Lode Drive corridor in auto-oriented retail buildings.

Other Unincorporated Areas

In addition to the communities described above, mixed-use development may also occur on isolated parcels throughout the county that are zoned to allow mixed use. The character of these areas varies greatly and any proposed mixed-use development would not have the same context as projects located in a community.

Characteristics of Mixed-use Areas

In addition to the characteristics described for each community, the following challenges and circumstances exist in one or more of the communities and/or areas zoned for mixed-use development:

Parcelization

Parcels are located on level or very shallow sloped ground; towns tend to be located in geographically desirable flat areas. In the topographic map below, Georgetown is on a flat valley surrounded by hills.

Utilities

Electric power/communication infrastructure (i.e., power poles/lines) is overhead and on main streets. Power lines and poles conflict with potential or existing second and third floor developments and obstruct the walkability of streets.

Road Network

There are mixed roadway types, ranging from narrow residential streets to two-lane primary or State highways. Roads are generally in good to fair condition, but are rural in character (i.e., limited shoulders, no sidewalks, or open swale gutters). Main streets tend to accommodate local and regional traffic that challenges "architecture in low-speed" (i.e., lower-speeds = more design detail and intimate experience, while higher-speeds = less design detail and are functional).

Community Design

Community architectural styles are varied and ad-hoc. Pre-1950s structures (left) tend to be more decorative and reflective of historic themes, while post-1950 structures tend to be more generic and uniformly suburban (right).

Community landscape character is without a consistent theme. Trees are sparse, canopy-shaded parking is limited, and decorative plantings and vegetative screening is inconsistent in application and design. Modern sidewalks and suburban-type infrastructure in newer developments contrast with established, more historic developments and areas. New construction has altered the "ad-hoc" vernacular character of existing areas. An example is the substantial new suburban-type development with curbs, gutters, and sidewalks in Diamond Springs that is inconsistent with the historic character of the community (bottom).

Assumptions for Mixed Use in El Dorado County

The remarkable history and current conditions of El Dorado's communities require a unique approach to mixed-use development. The type of large, vertical mixed-use project that would work in a city would not work in El Dorado County. The county's communities are small and there is no economic market for large vertical mixed-use projects. Such a project would also not fit the character of El Dorado County. Based on the character and context described previously, the design guidelines for mixed-use development in El Dorado County are based on the following key assumptions:

The historic character of El Dorado County's communities is a valuable asset. Few places in the United States have a history as exciting or iconic as the gold rush towns of El Dorado County. In many communities historic structures still remain and set the tone for their commercial districts. These historic resources should be preserved and enhanced by any mixed-use development.

El Dorado County's communities are rural and rustic. Many of the residents of these communities still make their living from the land, in logging, mining, ranching, or agriculture. A growing number of residents serve the retail and tourism needs of the area. Tourists are attracted to these communities in part because of their proximity to open space. A part of this rustic character comes through in the organization of the communities. They all have an ad-hoc character to them; these towns do not feel master planned. Future mixed-use development should not have an urban feel, but instead look to the rustic character of existing buildings for inspiration. Any developer of a large-scale project should organize the buildings in a way that does not clash with the historic organization of these communities.

El Dorado County's communities are small towns, not suburbs. These communities are independent, both historically and physically. Shingle Springs, El Dorado, and Diamond Springs are all standing in the path of increased suburban growth along Highway 50, and their individual identities are threatened. New mixed-use development should not feel like typical "suburban sprawl," but instead promote the unique character of the town.

Small businesses are an important part of the local economy. Small businesses form the heart of El Dorado County's economy and will continue to do so. New development that includes affordable commercial space for shops, restaurants, and small offices will be a better fit for communities than large corporate offices or manufacturing facilities. New small businesses could inject more life into main streets and help attract more visitors.

El Dorado's communities are cultural and recreational gateways. Many visitors use these communities as "jumping off" points to excursions in the nearby open space. New development should preserve as much open space as possible and take care to maintain views. If a new development is built near a historic or cultural site, the development should be respectful of the site and view it as an asset or amenity.

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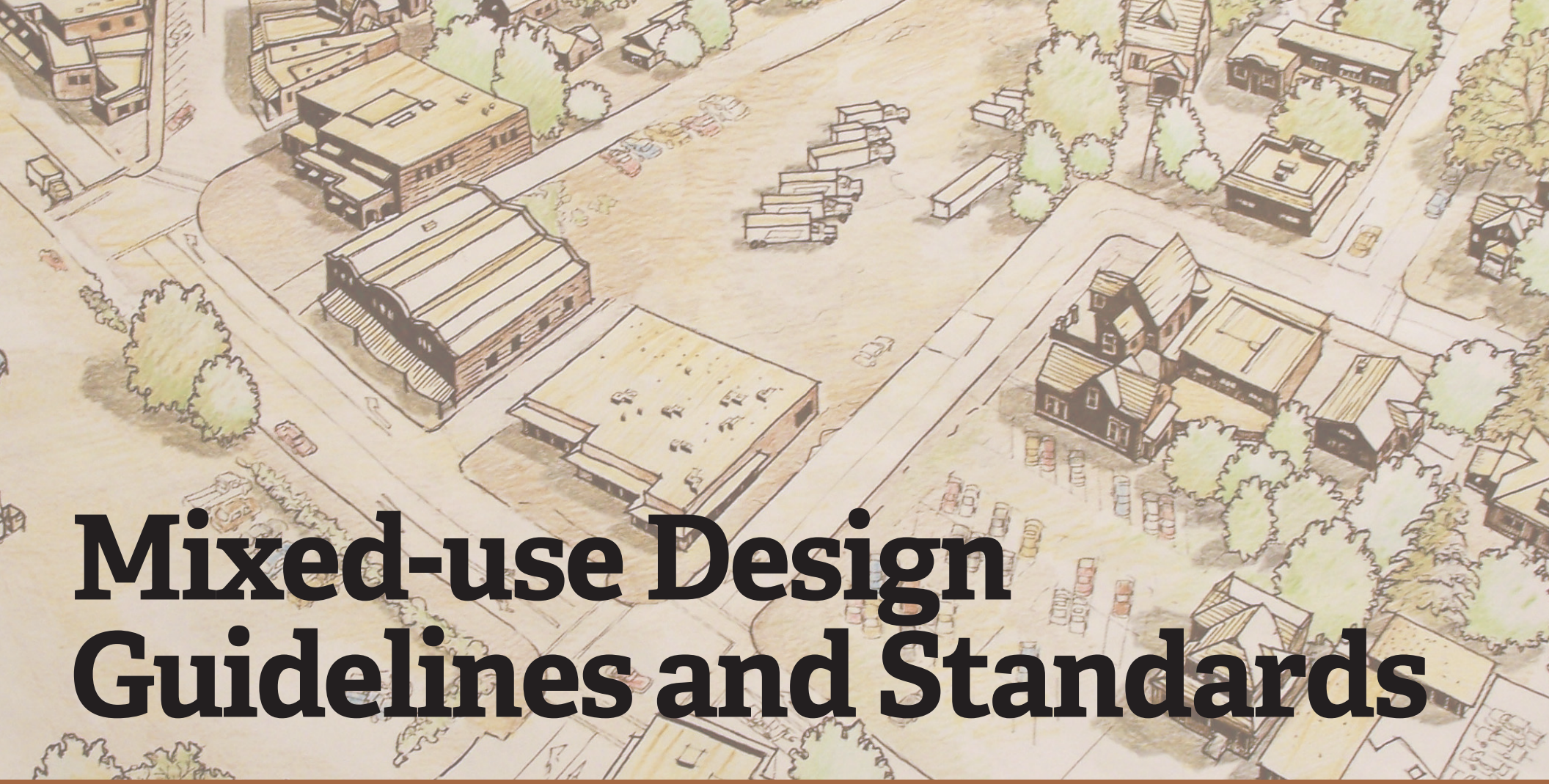


Mixed-use Design Guidelines and Standards

This section of the Mixed-Use Design Guide contains development standards and design guidelines, which can help property owners, designers, architects, and developers achieve the County's goals for mixed-use development. Communities are complex systems consisting of many different elements. The most appealing and remarkable communities are those in which harmony exists among these elements, such as the widths of sidewalks, the placement and height of buildings, the architectural character, and the landscape details. The following standards and guidelines illustrate the important relationships among the various elements that make up a mixed-use development project.

Organization

The guidelines in this manual are divided into four topic areas:

- **Project Dimensions.** Guidelines in this topic area focus on designing mixed-use projects with the right size and shape for the context.
- **Development.** Guidelines in this topic area focus on the site and elements within it, including site amenities, signage, paths, and parking.

- **Environment.** Guidelines in this topic area focus on three of the largest potential conflict points in mixed-use developments: light, noise, and odor.

- **Building Design.** Guidelines in this topic area focus on the design of the buildings, including windows, entrances, and facades.

Within each topic area, guidelines are broken up further into topics. Topics each have four sections:

1. **Context.** This section defines the topic in relation to mixed-use development and describes the current state of the topic in El Dorado County's communities. For example, the context section for "Entrances" describes the typical arrangement of entrances in existing buildings, and any historical precedents for entrances.

2. **Standards.** This section describes the standards found in the Zoning Ordinance.

3. **Guidelines.** The guidelines recommend ways to meet the standards in the Zoning Ordinance while preserving and enhancing the character of El Dorado County's communities.

4. **Diagrams and images.** Many of the topics feature diagrams and images that illustrate the guidelines.

Guidelines provide recommendation to create high-quality buildings and site plans that will result in attractive, pedestrian-friendly, and historically-sensitive mixed-use districts. The guidelines aim to be prescriptive enough to create a framework for design and respect the historic character of El Dorado County's communities, but flexible enough to allow for creativity in design and planning. The development standards in the Zoning Ordinance must be met, but guidelines are recommendations and are not required, just encouraged.

GENERAL

Mixed-use Definitions

Standards

H V L Mixed-use development shall be defined as any development that incorporates two or more different use categories on one parcel or in one structure. Valid use categories include: residential, retail, or office. Mixed-use development must include residential uses unless the uses are stacked in a vertical mixed-use configuration.

H Horizontal mixed-use development shall be defined as any development that incorporates two or more different use categories alongside one another, either in one mixed-use building, or as two or more separate buildings on one parcel.

V Vertical mixed-use development shall be defined as any development that incorporates two or more different use categories stacked in one multi-story mixed-use building.

L Large-scale mixed-use development shall be defined as any development that incorporates two or more different use categories on a parcel larger than two acres. Large-scale mixed-use development must include a residential component and/or a vertical mixed-use component.

Each standard and guideline has one or more letters in black boxes directly to its left. These letters indicate whether the standard or guideline is applicable for horizontal mixed-use development (H), vertical mixed-use development (V), or large-scale mixed-use development (L). If a letter appears next to a standard or guideline, that standard or guideline applies to that mixed-use project type.

H

*This **horizontal** mixed-use development features retail, offices, and residences spread across one parcel.*

V

*This **vertical** mixed-use building stacks offices above retail.*

L

***Large-scale mixed-use** developments in El Dorado County may consist of single-family homes with a town center, all surrounded by forests, hills, or agriculture. (Source: Middle Green Valley Specific Plan)*

PROJECT DIMENSIONS

Residential Density

Context

Single-family homes make up the vast majority of El Dorado County's housing stock. As a result, El Dorado County's communities have a low residential density. Some of the homes closer to commercial centers are closer together, but lot sizes can be one acre or more within one half mile of a commercial center.

Standards

H V L The maximum density for the residential use component shall be 20 dwelling units per acre in Community Regions and ten dwelling units per acre in Rural Centers or developments without a public sewer connection.

L Projects with a residential component shall be built at a minimum residential density of eight dwelling units per acre in Community Regions.

a. **Calculation:** Residential density should be measured as an average over the gross land area of only the residential portion of the planned site or assembly of parcels.

b. **Exemption:** When residential uses in a mixed-use project are all contained in vertical mixed-use buildings, the project should be exempt from this minimum residential density requirement and be considered as part of the maximum allowed FAR.

c. **Credit for Residential Density in Vertical Mixed-Use Buildings:** When a project contains land area devoted to residential uses in single-purpose buildings, any additional residential dwelling units contained in vertical mixed-use buildings within the Mixed-Use project may be credited toward meeting this minimum residential density standard.


8 DWELLING UNITS PER ACRE


20 DWELLING UNITS PER ACRE

The standard or guideline is applicable for:

H Horizontal mixed-use **V** Vertical mixed-use **L** Large-scale mixed-use

PROJECT DIMENSIONS

Maximum Building Height

Context

Most of the buildings in El Dorado County's communities are one or two stories tall. Single-use buildings are common, particularly single-family homes and one-story retail and office buildings. In the historic commercial areas, it is common to see two-story buildings with residential uses or offices above retail uses.

Standards

H V L The maximum allowed building height for mixed-use buildings shall be 50 feet. (*Section 17.22.030*)

H V L Chimneys; church spires; elevator, mechanical and stair housings; flag poles; towers; vents; and other similar structures which are not used for human activity may be up to 20 percent higher than the allowable maximum height in all zones where the excess height is not prohibited by Section 17.27.020 (Airport Safety Combining Zone). The use of towers or similar structures to provide higher ceiling heights for habitable space shall be deemed a use intended for human activity. No such structure shall be employed for any commercial or advertising use unless specifically allowed by the applicable zone, except that antennas and associated equipment may be located within such structures. (*Section 17.30.040*)

Guidelines

H V L Do not exceed 125 percent of the average height of buildings located on the same and facing block faces.

H V L When a planned mixed-use building is wider than the buildings nearby, vary the building height in a manner that reflects historic lot widths.

H V L Provide a sensitive transition between land uses of different intensities by limiting building height to 40 feet within 100 feet of a single-story home.

Spires, chimneys, and other projections can exceed the maximum building height by up to 20 percent.

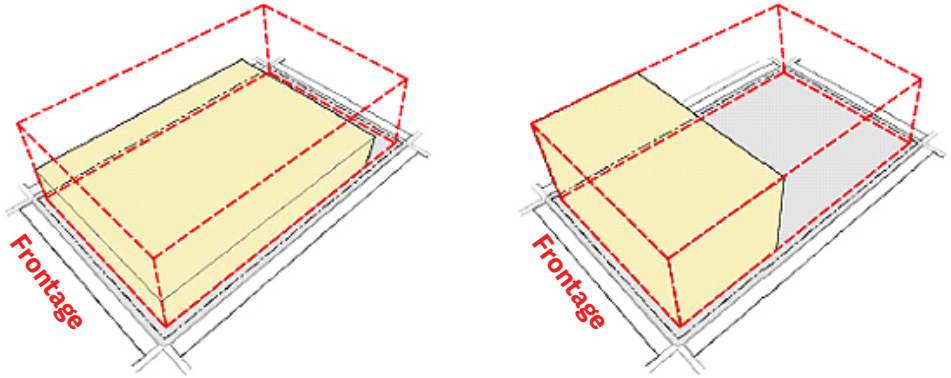
The standard or guideline is applicable for:

H Horizontal mixed-use **V** Vertical mixed-use **L** Large-scale mixed-use

Floor Area Ratio

Context

The communities of El Dorado County have a range of Floor Area Ratios (FAR). Floor area ratio (FAR) is the ratio of the gross building square footage on a lot to the net square footage of the lot[1]. The FAR defines the maximum allowable gross building area on a given lot. The historic mining-era districts have a relatively high FAR due to the smaller lot sizes and building coverage. For example, along Main Street in Georgetown, these historic, one-story structures can result in FARs around 0.8. In newer development or older structures further away from the historic cores, it is not uncommon for FARs to be 0.2 or less.



A floor area ratio of 0.85 can result in two different building forms on the same lot. The building on the left lot covers 85 percent of the lot with a one-story building, while the two-story building on the right lot covers 42.5 percent of the lot.

Standards

H **V** **L** The FAR of mixed-use districts is as follows:

	CPO	CL	CM	CC	RM
Floor Area Ratio	0.85	0.85	2.0	0.85	N/A

(*Sections 17.22.030, 17.24.030*)[2]

Guidelines

H **V** **L** Use the maximum FAR allowed in the zoning district to promote walkable, successful mixed-use districts.

[1] *FAR Definition from the El Dorado County General Plan: Ratio of allowable floor area (square footage) to site area (square footage). The FAR can be calculated over an entire integrated development rather than on a project-by-project basis under the following circumstances: 1) the aggregate average FAR within applicable land use designations does not exceed the General Plan maximum; or 2) satisfactory evidence is provided that demonstrates on a site-specific basis that measures will be imposed to keep traffic at levels associated with the applicable FAR threshold.*

2 General Plan Policy 2.5.1.3: Areas within Community Regions and Rural Centers shall also be analyzed to identify opportunity sites where clustering of development may be appropriate, including increases in the allowable floor-to-area building ratio (FAR) in Community Regions.

The standard or guideline is applicable for:

H Horizontal mixed-use **V** Vertical mixed-use **L** Large-scale mixed-use

PROJECT DIMENSIONS

Lot Dimensions and Coverage

Context

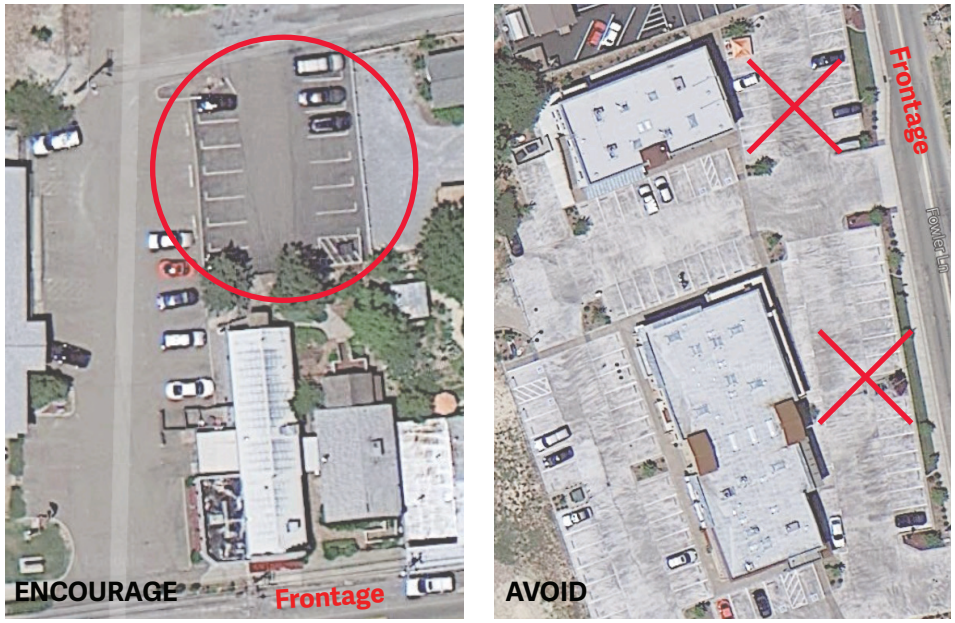
Lot dimensions and lot coverage varies widely in El Dorado County's communities. In commercial centers lots are smaller and buildings cover a majority of the lot. In rural contexts lots are larger and buildings do not cover a majority of the lot.

Standards

	CPO	CL	CM	CC	RM	RM (Corner lot)
Minimum lot size (in square feet)	6,000	4,000	None	4,000	2,000	3,500
Minimum lot width (in feet)	60	60	20	60	20	20

(*Sections 17.22.030, 17.24.030*)

H V L Locate parking lots behind buildings, where possible, and to the side of buildings when a rear parking lot is not feasible.



The lots at left locate parking to the rear, while the lots at right surround buildings with parking on all sides. Building fronts should be located directly adjacent to streets and parking lots should be located at the rear of a lot.

Guidelines

V L Complement the sizes of nearby lots when subdividing a lot for mixed-use development.

L Create new lots at the minimum allowable dimensions to improve walkability and provide additional density.

H V L In historic commercial areas, cover more than 50 percent of the lot with buildings to complement the coverage of nearby lots.

The standard or guideline is applicable for:
H Horizontal mixed-use **V** Vertical mixed-use **L** Large-scale mixed-use

PROJECT DIMENSIONS

Setbacks

Context

The historic areas in El Dorado County's communities have buildings with narrow front and side setbacks, or no setbacks at all. Some of the historic buildings reflect the rural character of the area and are set back significantly from one or more sides of the parcel. Typically, newer buildings have larger setbacks.

Standards

H V L Front setbacks in mixed-use districts shall conform to the table below:

Street Classification	Minimum (ft)	Maximum (ft)
Local Road	0	5
2-Lane Regional Road	0	5
Major 2-Lane Road	0	10

H V L Mixed-use buildings shall have no minimum side and rear setbacks if the buildings have a fireproof wall with no openings that meet building and fire code requirements. Otherwise, a five foot minimum side and rear setback applies.

H V L Separate parking lots from adjacent residences and buildings by no less than five feet.

Guidelines

H V L Design buildings with commercial uses at the back edge of the public sidewalk in a "zero lot line" configuration, except as necessary to allow room for outdoor seating and service areas, outdoor sales and displays, landscaping, emphasized entryways integral to the building design, and similar pedestrian and customer amenities. If the historic context includes large setbacks, or if the site is constrained, a different setback may be considered.

H V L Where a front setback is necessary, hardscape and landscape the area to accommodate uses that keep the public realm active, such as outdoor dining or seating.

H V L For residential structures use the area between the property line and the front of the building to provide space for privacy, landscaping, private courtyards/open areas, emphasized entryways integral to the building design, and similar residential amenities.

H V L In large buildings incorporate varied setbacks to reflect the scale of nearby buildings and provide visual interest.

H V L If neighboring buildings have no side setbacks, design mixed-use buildings to meet the neighboring building at the lot line to create a continuous street wall.

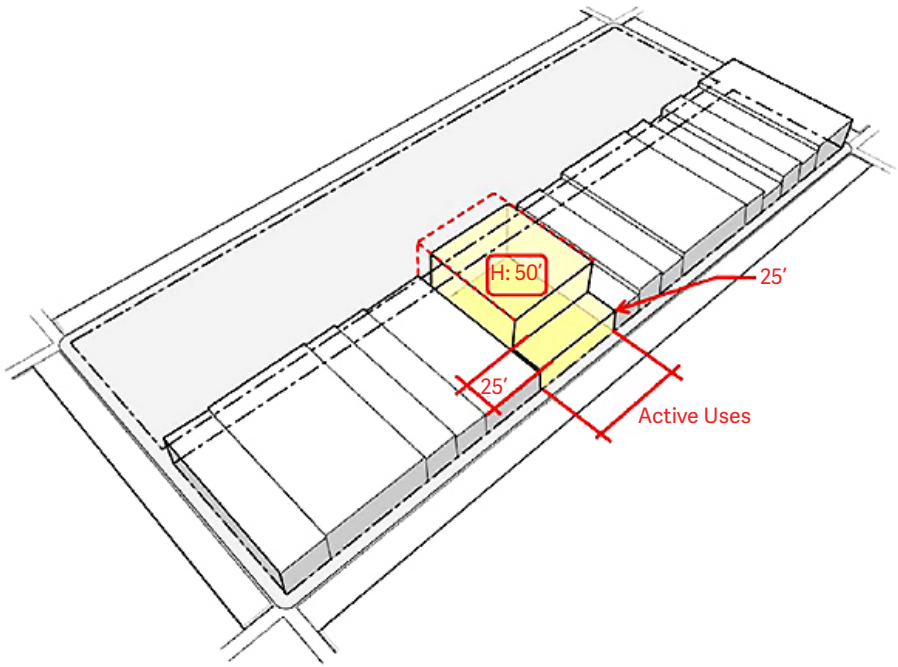
H V L Place buildings at the front of lots and leave room at the back of the lot for parking and other site amenities.

The standard or guideline is applicable for:
H Horizontal mixed-use **V** Vertical mixed-use **L** Large-scale mixed-use

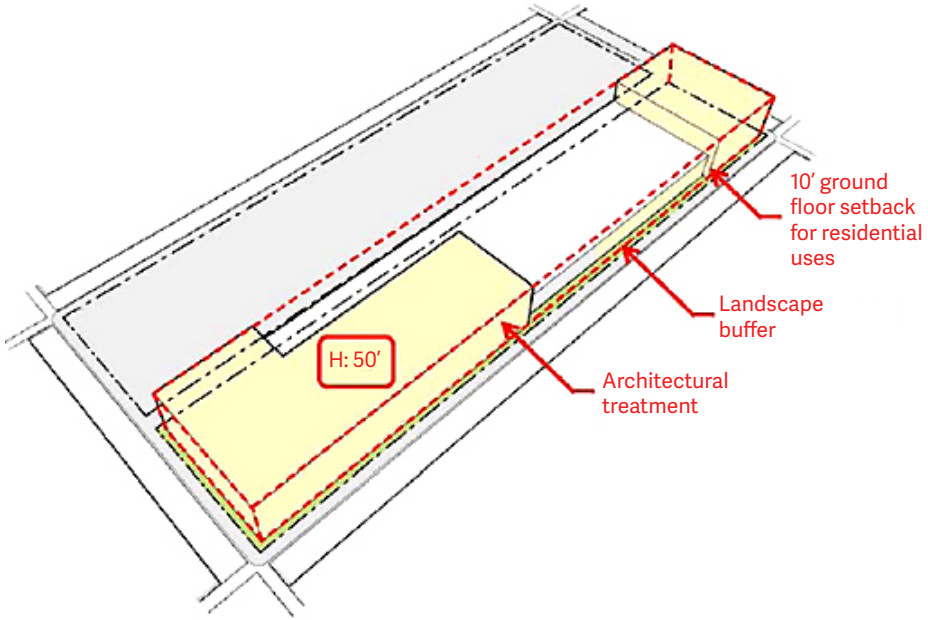
Setback Diagrams

Project dimensions standards and guidelines place some constraints on building form and massing, but also provide opportunities for contextually-sensitive projects. The five example projects in this section demonstrate how setback standards and guidelines can be respected while creating viable mixed-use projects. Building volumes are shown in yellow. The five example projects also relate directly to the five prototype designs found in Chapter 3: Design Prototypes.

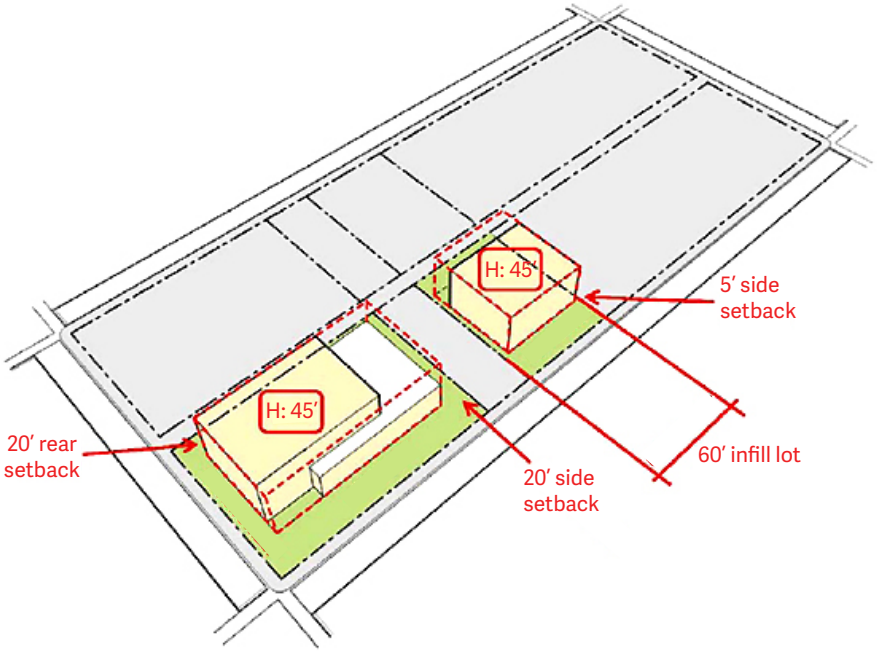
Historic Main Street Infill



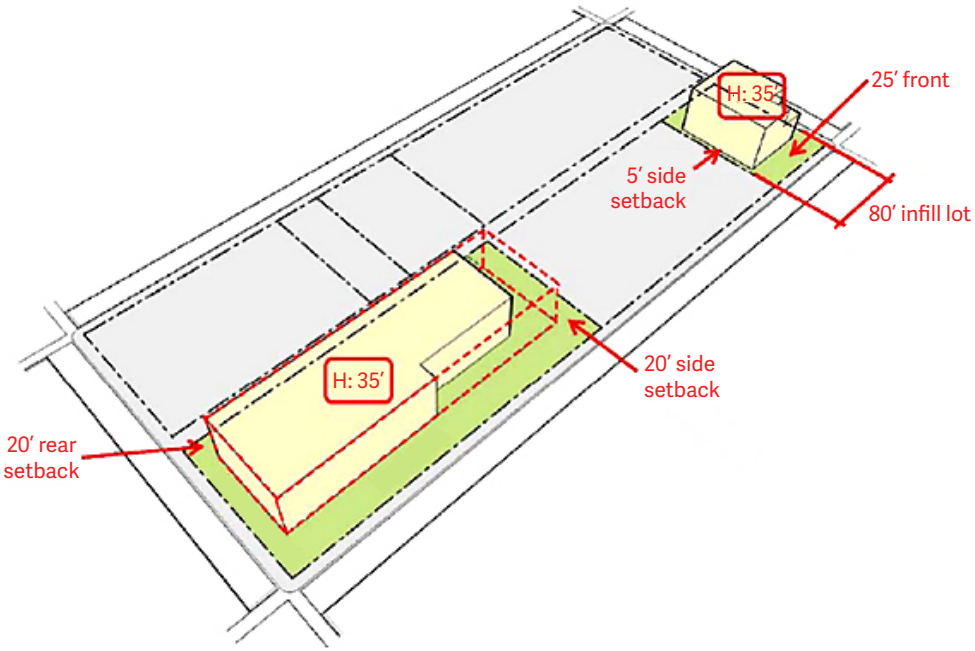
Historic Main Street Conversion



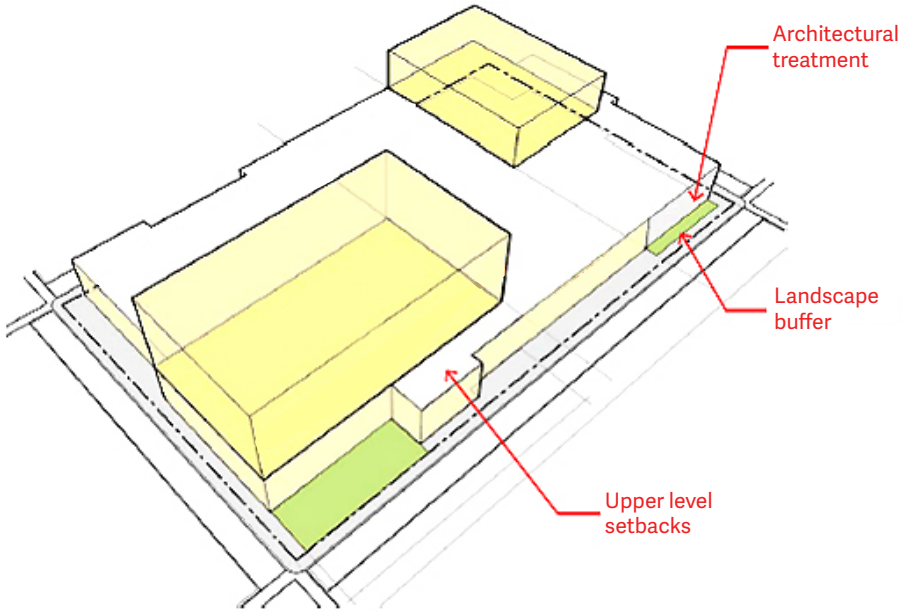
Cottage or Multi-family Addition



Small-scale Phased Development



Large-scale Phased Development



DEVELOPMENT

Screening

Context

Sidewalks and paths along trash receptacles, large parking lots, and other unattractive site features can discourage walking. Pedestrians are key to vibrant mixed-use districts, so the screening of unattractive features is important to supporting the vitality of these districts.

Standards

H V L At least 50 percent of off-street surface parking spaces visible from adjacent properties and from adjacent streets shall be screened from view. Screens shall be built to a minimum height of 36 inches.

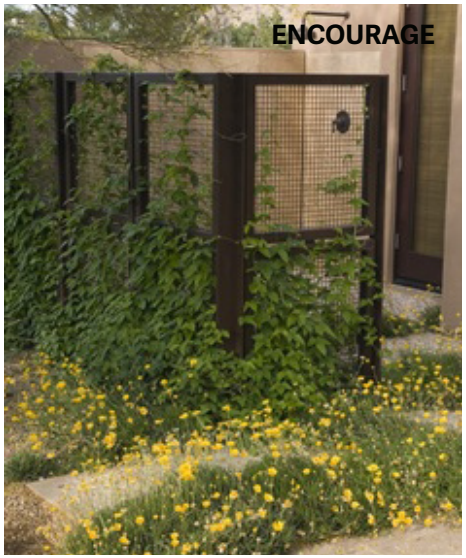
H V L Trash enclosures, loading docks, utility equipment, and similar uses that are visible from a street or neighboring property shall be screened from view.

H V L Rooftop mechanical equipment must be screened using parapets, pitched roofs, or other appropriate screening devices.

Guidelines

H V L Use berms, plantings, and/or picket fences, walls, or similar structures as screening devices.

H V L Design screens to be compatible with the design details and composition of the building facade.



The fence in the photo at left screens trash receptacles while complementing the rustic character of El Dorado County. Unscreened trash receptacles are an eyesore.

The standard or guideline is applicable for:

H Horizontal mixed-use **V** Vertical mixed-use **L** Large-scale mixed-use

DEVELOPMENT

Landscaping

Context

Attractive landscaping can enhance a mixed-use project and the entire surrounding area. Landscaping can provide shade, buffer parking areas and trash receptacles from pedestrians, and create a soft edge along buildings. In El Dorado County's historic communities, landscaping reinforces the rustic, ad hoc nature of the built environment. These guidelines do not recommend neatly manicured flower beds, but instead recommend California-native plants that fit the context and climate.

Standards

H V L Refer to Section 17.33 – Landscaping Standards for landscaping standards.

Guidelines

H V L Emphasize building entrances with special architectural and landscape treatments.

H V L Design site landscape treatments to be attractive, with a consistent design throughout the project.

H V L Design landscaped areas to serve as stormwater management areas (e.g., bioswales) as well as visual amenities.

H V L Select California native, drought-resistant, hardy plants for landscaped areas.

This landscaped area acts as a bioswale. Bioswales remove silt and pollution from surface runoff water.

The standard or guideline is applicable for:

H Horizontal mixed-use V Vertical mixed-use L Large-scale mixed-use

DEVELOPMENT

Parking Lot Design

Context

These standards and guidelines are intended to encourage landscaped off-street surface parking lots that will improve the appearance of a mixed-use project by breaking up expanses of paved areas, reduce the significant solar heat gain from parked automobiles and paved parking areas, improve the management of storm water run-off, and provide a more pedestrian-friendly environment.

Standards

H V L Refer to Section 17.33 – Landscaping Standards for off-street parking lot design standards.

Guidelines

H V L Use permeable paving materials (e.g., crushed stone, open paving blocks, permeable paving blocks).

H V L Design parking access points to minimize conflicts with pedestrian traffic. Shared drives are encouraged and curb cuts should be located away from intersections.

H V L Limit the use of raised concrete curbs and depress planters to capture parking lot drainage using bioswales.

H V L Use wheel stops or similar devices (e.g., railroad ties, large timbers, logs, stones) as necessary to prevent damage to the trees and landscaped planters from vehicle overhang.

H V L Design for continuous circulation within a parking lot that requires drivers to back out when no spaces are available.

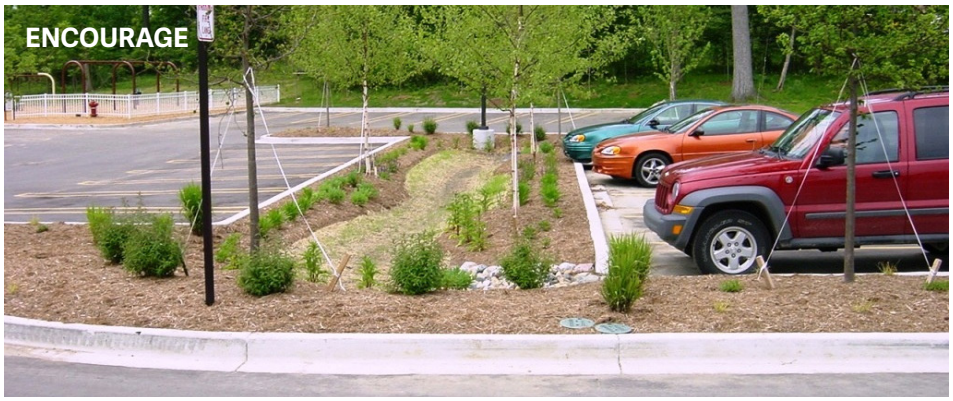
Additional Guidelines for Large Parking Lots (Greater than 20 Spaces)

H V L Provide a pedestrian walkway that extends from the furthest row of parking to either a building entrance or a sidewalk leading to the entrance every 400 linear feet of surface vehicle parking area as measured perpendicular to the walkway.

H V L Provide parking lot trees as follows: at least 1 tree for every 8 parking spaces in lots with 48 spaces or fewer; and at least 1 tree for every 10 spaces for parking lots with 49 spaces or more.

H V L Distribute trees evenly throughout the parking lot to create a canopy effect in the parking lot and locate trees to divide and break up expanses of paving and long rows of parking spaces.

H V L Terminate parking rows and bays in an "island" planter that spans the length of two parking spaces or in "finger" planters that span the length of one parking space.



This parking lot features trees, landscaping, and a bioswale.

The standard or guideline is applicable for:

H Horizontal mixed-use **V** Vertical mixed-use **L** Large-scale mixed-use

Parking

Context

Parking poses a significant challenge to mixed-use development in El Dorado County's unique rural towns. Surface parking requirements can dominate a site or building frontage and reduce the options for site and building design. El Dorado's historic communities did not have large parking lots when they were first established, and satisfying parking standards while complementing historic structures can be challenging. There are a number of strategies and techniques that can be used to meet these challenges. The purpose of these guidelines is to ensure the provision, location, and design of off-street parking areas that accommodate motor vehicles while balancing the needs of pedestrians, bicyclists, and transit users.

Standards

H V L Mixed-use parking standards:

Use type	Minimum Standard
Accessory Dwelling Unit	None
Commercial Uses	1 space per 400 square feet
Civic Uses	1 space per 400 square feet
Industrial Uses	1 space per 500 square feet
Residential Uses	1 space per dwelling unit
Live/Work	1 space per dwelling unit, plus the lesser of: 1 space per 400 square feet or 1 space for each non-resident employee

H V On-street parking spaces located within 400 feet of the project may be credited to meet up to 50 percent of the minimum required off-street parking spaces. On-street parking allowed by this provision shall not be counted toward the maximum amount of parking allowed.

H V The Planning Director may reduce the minimum off street parking requirements by up to 100 percent for mixed-use projects meeting at least one of the following requirements:

a. The project is sited within one-quarter mile of a public or private parking lot that can accommodate the off-street requirements.

b. The project developer or owner contributes into a "municipal parking lot development fund" based upon the number of required off-street parking spaces.

H V L The use of shared parking may be allowed when the project is under the control of a single owner/developer, contains commercial, retail, office, institutional, or public uses with staggered peak parking demands, and the site is arranged so all uses can share a parking lot.

H V L Neighboring property owners may form a shared parking agreement, subject to approval by the Planning Director and recorded prior to issuance of a building permit. This agreement must be recorded as a deed restriction on all participating properties and cannot be modified or revoked without the consent of the Planning Director. If any requirements for shared parking are violated, the affected property owners must provide a remedy satisfactory to the Planning Director or provide the full amount of required parking for each use.

H V L A minimum of three bicycle parking spaces shall be provided for any mixed-use project with more than 2,000 square feet of commercial or industrial space.

V Mixed-use developments shall provide bicycle lockers equivalent to 0.5 spaces per unit in mixed-use developments with residential units.

H V L Bicycle parking facilities shall be located no further than 100 feet away from a building entrance and be visible from the uses they serve. Facilities shall not be located in places that impede pedestrian or automobile traffic flow or would cause damage to landscaping.

H V L When a mixed-use project site is adjacent to a designated bike route, the Planning Director may reduce the required minimum number of off-street parking spaces by 1 off-street vehicle space for every 5 bicycle spaces, up to a maximum reduction of 5 percent.

H V L When on-site showers/changing rooms and bicycle lockers are provided in a mixed-use development, the Planning Director may reduce the required minimum number of off-street parking spaces by 1 off-street vehicle space for every 5 bicycle parking spaces, up to a maximum reduction of 10 percent.

H V L Buildings shall not be demolished to create parking.

Ample bike parking encourages cycling.

Guidelines

H V L Design short-term bicycle parking spaces to make it easy for a bicyclist to secure their bicycle by means of a lock. An inverted "U" rack (also known as a "staple" rack) is preferred.

H V L Ensure short-term bicycle parking spaces are in public view, close to building entrances, and with sufficient lighting.

The standard or guideline is applicable for:

H Horizontal mixed-use **V** Vertical mixed-use **L** Large-scale mixed-use

DEVELOPMENT

Loading

Context

Businesses often need driveways, loading docks, or parking spaces for delivery trucks. These facilities are essential to commerce and need to be accommodated in mixed-use developments. Trucks and loading activities can create a nuisance for nearby residents, however, and any impacts should be minimized.

Standards

H V L Mixed-use developments shall screen dedicated loading and service areas from view.

Guidelines

H V L Design internal streets and driveways to accommodate vehicles commonly used for loading and unloading.

H V L Use buildings, plantings, walls, that are compatible with the architectural style and character of the area to screen loading and service areas.

H V L Design loading zones and docks to minimize queuing issues in parking lots and adjacent streets.

H V L Locate loading zones and docks in an area to minimize nuisances (e.g., noise, odor) for residential users.

H V L Post signs requesting truck drivers turn off their engines to reduce the sound and odor of an idling engine.

This loading dock's roof screens loading activities from the uses on the second level.

Designated on-street loading zones can minimize queuing issues.

DEVELOPMENT

Mobility and Access

Context

Every business and residence needs safe, convenient connections to the street system. The guidelines in this topic focus on pedestrian and bicycle connections, as they are often not given the same attention as connections for cars. Mixed-use development works best when pedestrians and bicyclists are given safe, convenient access.

Standards

H V L Mixed-use developments longer than 300 feet shall provide a mid-block pedestrian pass-through. Design the pass-through to be safe and visually interesting. Pedestrian pass-throughs shall not be enclosed or locked. Alleys and service areas shall not be considered pedestrian pass-throughs, although alleys may be designed with pedestrian walkways.

H V L Mixed-use developments shall provide safe and convenient bicycle and pedestrian access from existing public bike paths or greenways located adjacent to the site.

H V L Mixed-use developments shall provide pedestrian access by connecting internal pedestrian circulation to any sidewalks or walkways on adjacent properties or in the public right-of-way. Locate these access points to make building entryways directly visible from the public right-of-way.

L Large-scale mixed-use developments shall provide an on-site system of pedestrian walkways, sidewalks, and bikeways that provide continuous access to all land uses within a project site and to land uses on adjacent properties. On-site pedestrian connections shall be provided to and between the following points:

a. The primary entrance or entrances to each building housing a principal use;

b. Existing or planned transit stops, stations, and park-and-ride locations;

c. Greenways or trail systems; and

d. On-site amenities, as provided according to the Design Guidelines.

Guidelines

L Suburban concrete curb and gutter designs are discouraged. Use alternative surfaces, barriers, edgings and drainages in rural, historical, or other locations of similar character.

H V L Design pedestrian walkways with a minimum unobstructed width of five feet, and eight feet for paths expected to serve pedestrian and bicycle traffic.

H V L Design pedestrian walkways to create a safe and uninterrupted pedestrian way and avoid frequent crossings by driveways or streets.

H V L Design buildings to include arcades in areas where they are common. If a new mixed-use building is adjacent to a building with an arcade, design the building to continue the adjacent arcade.

H V L Walkways should provide relief from the paved expanses of parking lots and streets. Design pedestrian walkways as amenity areas with landscaping, benches, lighting, signage, and attractive street furniture.

H V L

Within a mixed-use district, vehicle drivers on the adjacent public rights-of-way should be able to recognize the increased presence of pedestrians and bicyclists, who in turn should perceive the improved accommodation of alternate-mode travel and increased personal safety in these places. All new projects with parking lots on site should incorporate the following guidelines:

a. Provide reduced street widths and travel speeds;

b. Incorporate bulb-outs to reduce the exposure time for a pedestrian to cross the street, slow traffic, and notify the automobile driver of the presence of pedestrians;

c. Reinforce smaller curb returns (to prevent damage from delivery trucks jumping the curb when turning);

d. Incorporate medians and islands into streets for pedestrian refuge;

e. Incorporate on-street parking, which may be diagonal or parallel;

f. Enhance mid-block and intersection crosswalks with respect to paving treatments, curb cuts, and similar elements; and

g. Integrate a pedestrian walkway system into the project's on-site circulation patterns. Emphasis should be placed on connections between front doors and parking.

Arcades create protected pedestrian zones and shape the character of El Dorado County. Restricting access poses a safety risk.

The standard or guideline is applicable for:

H Horizontal mixed-use V Vertical mixed-use L Large-scale mixed-use

DEVELOPMENT

Site Amenities

Context

Site amenities such as patios, plazas, squares, and greens help create a pedestrian-friendly atmosphere. Many of these are not common in El Dorado County's communities, but they would fit well with the community character and help create an environment suitable for walkable, mixed-use development. In many of El Dorado County's communities, pedestrians do not have any significant space dedicated for their exclusive use; site amenities will help make them feel welcome. Site amenities can also reinforce a community's civic image and special character.

Guidelines

H V L Design patios, plazas, mini-parks, squares, and greens to be a proportional size to the project.

H V L Ensure site amenities are visible and easily recognizable as an area that encourages outdoor assembly. Site amenities may be framed by a view corridor, be placed on a high point, or be visually related to a multi-use trail or other walkway.

H V L When a building will be adjacent to a pedestrian plaza, patio, mini-park, square, or green, include at least one of the following elements on the wall facing the amenity:

a. A building entry;

b. Windows facing onto the outdoor amenity;

c. Arcades along the edges of the outdoor amenity;

d. Outdoor seating areas; or

e. A similar feature that will bolster security and encourage pedestrian use of the outdoor amenity.

Amenities such as benches and public art create an attractive pedestrian experience.

The standard or guideline is applicable for:

H Horizontal mixed-use **V** Vertical mixed-use **L** Large-scale mixed-use

DEVELOPMENT

Signage

Context

Private signs are placed because they advertise businesses, but they have other potential as well. Signs are a form of graphic design, and sometimes of sculptural design. If they are treated as an art form that provides information, they can contribute strongly to the liveliness and variety of street environments and establish a district identity. Poorly done, signs can detract from the overall character of a place.

Standards

H V L In live/work units, on-premises signs are limited to no more than two non-animated, non-illuminated wall or window signs collectively not exceeding four square feet in total area.

H V L Signs shall be maintained in good condition, always clean and free from graffiti or other disfigurations.

H V L Lighting for signs shall be extinguished or reduced at night in the vicinity of residential uses to minimize the impact of commercial activity on residents.

H V L Temporary signs and banners, including "A-frame" signs, shall not be allowed.

Guidelines

H V L Design sign elements with a recognizable character that contributes to the design of the building. Reflect the project character through consistency of materials, illumination, sizes, proportions, and locations.

This sign at left complements the facade, features context-appropriate lighting, and uses an easy-to-read font. Temporary banner signs are discouraged.

H V L Use harmonious colors, simple lettering, and durable materials to create an context-appropriate sign.

H V L Integrate signs carefully within the site, landscape, and architectural design context. Make size, shape, and proportions of the signs compatible with the size and scale of the surroundings and do not obscure other design features of the site.

H V L Locate signage at the primary entrances of buildings and parking lots.

The standard or guideline is applicable for:

H Horizontal mixed-use **V** Vertical mixed-use **L** Large-scale mixed-use

Avoid using "A-frame" signs; they often block the pedestrian way and do not reflect the character of El Dorado County. Historically-sensitive hanging signs leave the sidewalk free for pedestrians.

H **V** **L** Design signs to create and enhance a rich pedestrian and interpretive experience. Design signs to deemphasize the importance of the automobile.

H **V** **L** Design signs to safeguard and protect the public health, safety, and general welfare of the community. Avoid signs that create traffic safety hazards caused by visual distractions or obstructions.

H **V** Preserve historic painted signs. These signs are often on the side of buildings and contribute to the history of the community.

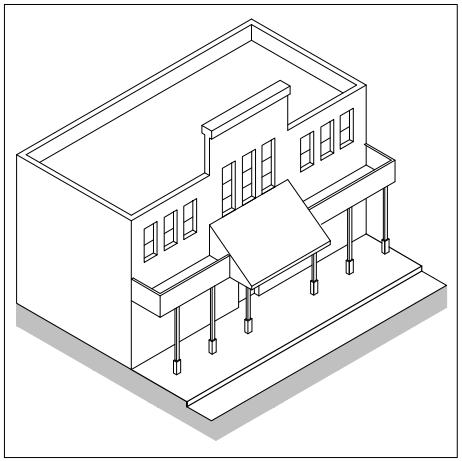
DEVELOPMENT

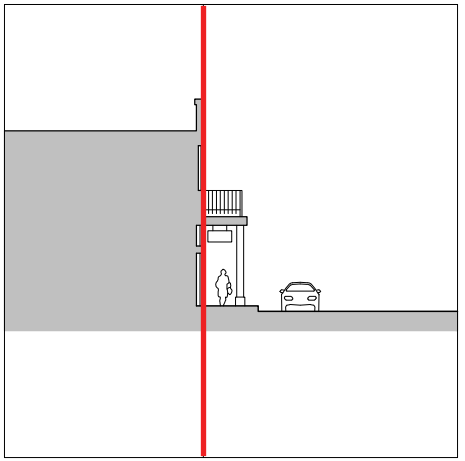
Building Frontages

Building frontages are the places where mixed-use buildings meet the public realm. Successful building frontages encourage pedestrian activity, contribute to the character of the community, and provide an attractive face to the street. This section introduces several frontage types suitable for mixed-use development in El Dorado County. Red lines indicate the right-of-way line.

Gallery

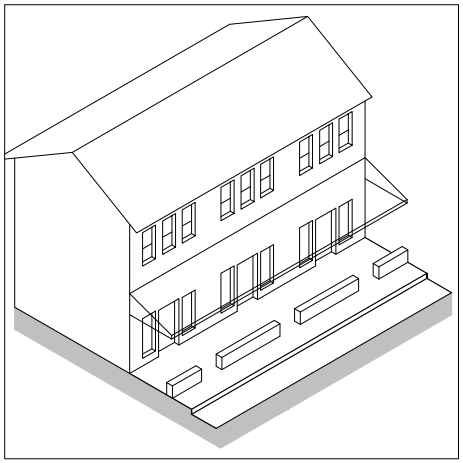
Galleries are storefronts with an attached colonnade that projects over the sidewalk. This frontage type is ideal for retail use, but only when the sidewalk is fully covered by the colonnade so that a pedestrian cannot bypass it.

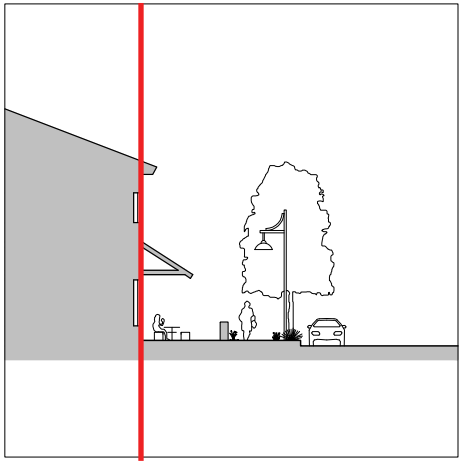




Storefront

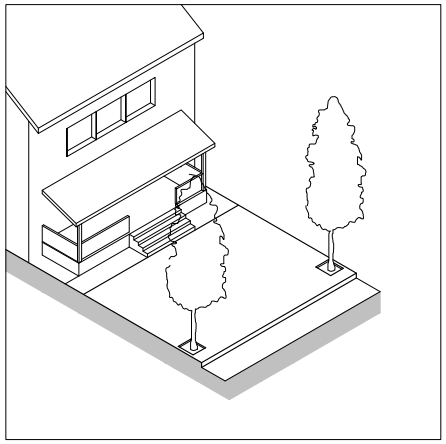
Storefronts are facades placed at or near the right-of-way line, with the entrance at sidewalk grade. Storefronts often have cantilevered shed roofs or awnings. The entrance at sidewalk grade makes residential uses incompatible; residential uses would be more appropriate above the ground floor or behind the storefront use.

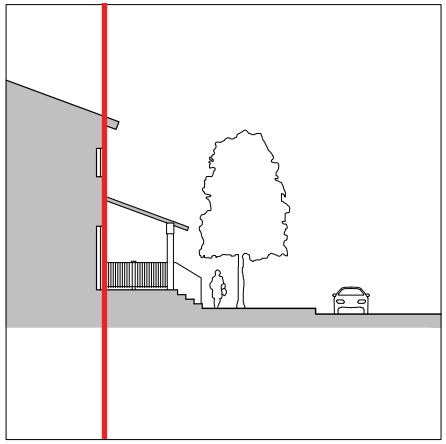




Porch

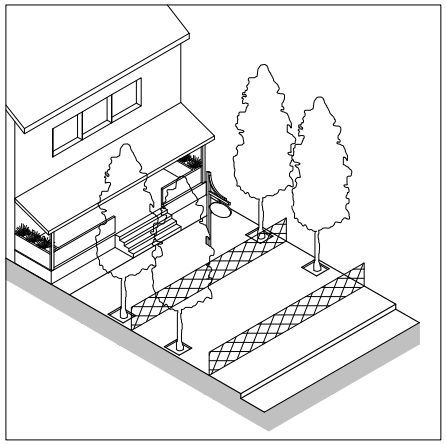
In mixed-use buildings a porch can be used for outdoor display or modified as a courtyard area. A decorative wall at the property line may be used to define the private space of the yard for a café outdoor seating area. A porch may also be attached to the facade. A great variety of porch and fence designs are possible, including a raised front yard with a retaining wall at the property line with entry steps to the yard.

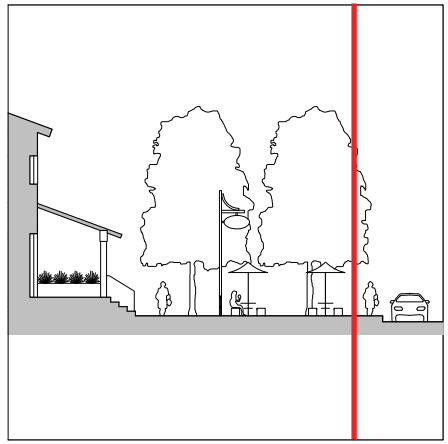




Yard

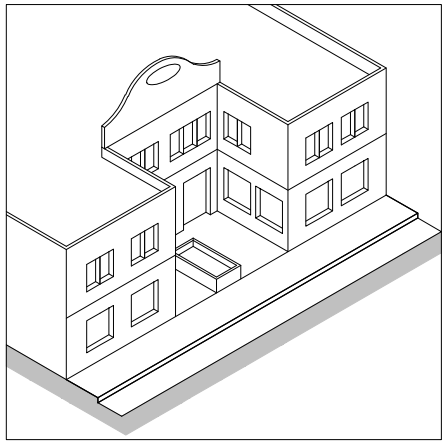
A court is an area with the facade set back a minimum of 15 feet from the property line or frontage line. The front yard created remains unfenced and is visually continuous with adjacent yards, supporting a common landscape. The setback area provides a location for bike parking, outdoor dining, loading, or other uses that mix office, retail, and residential uses.

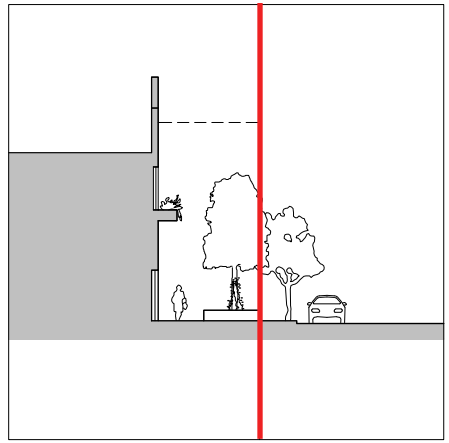




Forecourt

Forecourts are uncovered courts within a storefront, gallery, or arcade frontage where a part of the facade is recessed from the building frontage. The court is suitable for gardens, vehicular drop-offs, and loading. A fence or wall may be used to define the property line. The court may also be raised from the sidewalk, creating a small retaining wall at the property line with entry steps to the court. This type should be used sparingly and in conjunction with storefronts.





ENVIRONMENT

Lighting

Context

Lighting in a mixed-use project is a major determinant of nighttime activity. It should create a sense of safety, particularly for pedestrians, and emphasize key features of the site. At the same time mixed-use projects need to balance the lighting needs of the different uses on the site and reinforce a unified image and identity for the project.

Standards

L A project-wide lighting plan shall be submitted for review at the time a mixed-use concept plan is submitted. A project-wide lighting plan shall address at a minimum the general location and types of lighting and include the following: public and private street lighting, pedestrian lighting, parking lot lighting, residential area lighting, signage lighting, and lighting for service and delivery areas.

H V L Lighting of commercial uses adjacent to or within the immediate vicinity of residential uses shall be designed with fixtures and poles that illuminate commercial uses while eliminating light spillover into residential areas.

Guidelines

H V L Use light fixtures along streets that contribute to a coordinated, attractive streetscape that works well with street trees, curb cuts, signage, street furniture, and other site amenities.

H V L Use fully-shielded lighting fixtures in all parking areas, service and delivery areas, and residential areas.

H V L Emphasize the safety and location of pedestrian areas by using pedestrian-scale lighting. Choose pedestrian-scale lighting that promotes the architectural character of the project and community.

H V L Use a greater number of lower fixtures instead of fewer tall fixtures.

H V L In parking lots use lighting that complements the lighting of adjacent streets and properties. Ensure that parking lot lighting does not overpower the quality of pedestrian-area lighting nearby.

These shielded lights are low for pedestrians and add character.

The standard or guideline is applicable for:

H Horizontal mixed-use **V** Vertical mixed-use **L** Large-scale mixed-use

ENVIRONMENT

Noise and Odor

Context

Noise presents a greater concern in mixed-use developments than in other types of development. Traditional zoning, with its clear division of uses, came from the idea that people did not want to live near uses that produced nuisances like noise, odor, and pollution. By placing two different use types next to each other, there is a potential to recreate the nuisance problems that separated them in the first place. Guidelines for mixed-use development need to identify ways to mitigate any noise nuisance.

Some commercial uses generate odors residents in a mixed-use development may find unpleasant. Successful mixed-use projects should minimize odors from non-residential uses to ensure the comfort of residents.

Standards

H V L Refer to Section 17.37 – Noise Standards for noise standards.

Guidelines

H L Construct common walls between residential and non-residential uses to minimize the transmission of noise and vibration.

H V L Locate mechanical equipment and other sources of noise away from building areas and exterior spaces designed for use by residents.

H V L Ventilate non-residential spaces (e.g., dining establishments) to prevent odors from spreading to residential uses.

H V L Locate trash receptacles far from residential uses to minimize the nuisance of refuse odor to residents.

This trash receptacle is screened and located far from residential buildings to minimize unpleasant odors.

The standard or guideline is applicable for:

H Horizontal mixed-use **V** Vertical mixed-use **L** Large-scale mixed-use

Windows

Context

The correct amount and location of windows in a building can improve public safety and pedestrian activity. Windows in a facade allow occupants to look out on to the public space, enhancing safety. Windows along the ground floor of a building create a pedestrian-friendly experience by encouraging strolling and window shopping. These standards and guidelines ensure that mixed-use projects have the correct ratio of windows to solid wall.

Standards

H V L Mixed-use buildings shall avoid tinted, mirrored or textured glass windows for non-residential uses. Such windows obscure views into and out of a building.

H V L Mixed-use buildings shall be designed with windows comprising 60 percent of the street-facing building facade between two feet and eight feet in height.

H V L Mixed-use buildings shall be designed with ground floor windows so their bottom edge is located no more than three feet above the adjacent sidewalk.

Guidelines

H V L Internally light display windows to enhance transparency and visual interest.

H V L Design upper story windows to complement the historic character of the communities (e.g., use smaller windows and divided lites).

H V L Use deep-set windows to create shadow lines and add visual interest to the facade.

H V L Avoid the use of low-quality window and door trim, such as anodized aluminum. Trim materials should complement the historic character of the community.

H V L To meet energy standards, specify the use of projecting covers, awnings, or other similar devices or building features, not mirrored, reflective, or tinted glass.

Design upper story windows to complement the historic character of the communities.

The standard or guideline is applicable for:

H Horizontal mixed-use **V** Vertical mixed-use **L** Large-scale mixed-use

Entrances

Context

Building entrances in El Dorado County follow the same placement pattern as buildings anywhere. Historic buildings, or buildings in a more urban location, have at least one entrance on an internal or perimeter street with pedestrian access. Newer buildings with large parking lots typically have their main entrance facing the parking lot.

Standards

H V L Provide a commercial entrance along the facade that is parallel to the primary street. When located on the corner of a block, mixed-use buildings shall either locate the main entry at the corresponding corner of the structure or provide an entrance that faces each street.

H V L Separate entrances shall be provided for residential and commercial uses in a single building.

H V L When parking is provided at the rear of a building, a rear entrance may be provided. The rear entrance shall reflect the design and architectural character of the street-facing entrance. If parking is provided and a rear entrance is not provided, the site shall include a pedestrian walkway to the front entrance at a minimum of five feet wide.

Guidelines

H V L Make the primary public entry to the building visually obvious through the use of architectural treatments such as differing colors or materials, arches or arcades, covered walks, arbors, signs, or protecting canopies.

H V L Create safe entrances for residential uses by providing adequate lighting and sturdy doors with locks. Avoid creating shadows near the entrance or providing other places for assailants to hide.

This corner-lot building faces its entrance at the corner and the turret above the entrance signals its location. A side entrance (circled) offers separate access for residential uses.

The standard or guideline is applicable for:

H Horizontal mixed-use **V** Vertical mixed-use **L** Large-scale mixed-use

Facades

Context

Facades are the exterior faces of buildings and are often the principal contributors to a community's character. Facades in many of El Dorado County's historic communities reflect its heyday in the mid-to-late 19th century. The facades of new buildings should respect the historic context while contributing to the establishment of walkable, mixed-use communities.

Guidelines

H **V** Design new infill buildings to reflect traditional design patterns of adjacent buildings. Creative interpretations of traditional elements are encouraged.

H **V** **L** Include rustic materials (e.g., wood or composites, corrugated metal, rusted or antiqued steel, random stone, brick or similar materials) in the facade.

H **V** **L** Stain or texture (board-formed, streaked, or washed) any visible concrete.

H **V** **L** Use horizontal elements such as porches, balconies, and coursing to break up the vertical mass of the facade wall.

H **V** **L** If a building is to be wider than those traditionally seen in the area, divide the building into modules that express the typical dimensions of the area.

H **V** **L** Design facades to have a solid-to-void ratio that appears similar to the established community context.

H **V** **L** On corner lots wrap facade elements around the building.

This new mixed-use building uses facade materials similar to those used in historic buildings. The different facade treatments help break up the long building.

The standard or guideline is applicable for:

H Horizontal mixed-use **V** Vertical mixed-use **L** Large-scale mixed-use

BUILDING DESIGN

Ceiling Height

Context

Commercial tenants typically prefer tall ceilings, and without tall ceilings developers will have a difficult time attracting quality commercial tenants. Vacancies can severely harm the viability of a mixed-use district, so significant effort should be made to accommodate commercial uses. Older buildings that do not meet this standard could be allowed to be retrofitted, upgraded, or remodeled to maintain a variety of building stock and a range of lease and ownership costs that support the County's broad demographics.

Standards

H **V** **L** Mixed-use buildings shall be designed with commercial ground floors to be 14 feet tall as measured from the finished floor to the finished ceiling and 12 feet tall for ground floor residential uses to accommodate future conversion or adaptation for non-residential use.

Guidelines

H **V** **L** Design buildings with floor-to-floor heights similar to those in nearby historic buildings.

Retail stores and restaurants prefer high ground-floor ceilings.

The standard or guideline is applicable for:

H Horizontal mixed-use **V** Vertical mixed-use **L** Large-scale mixed-use

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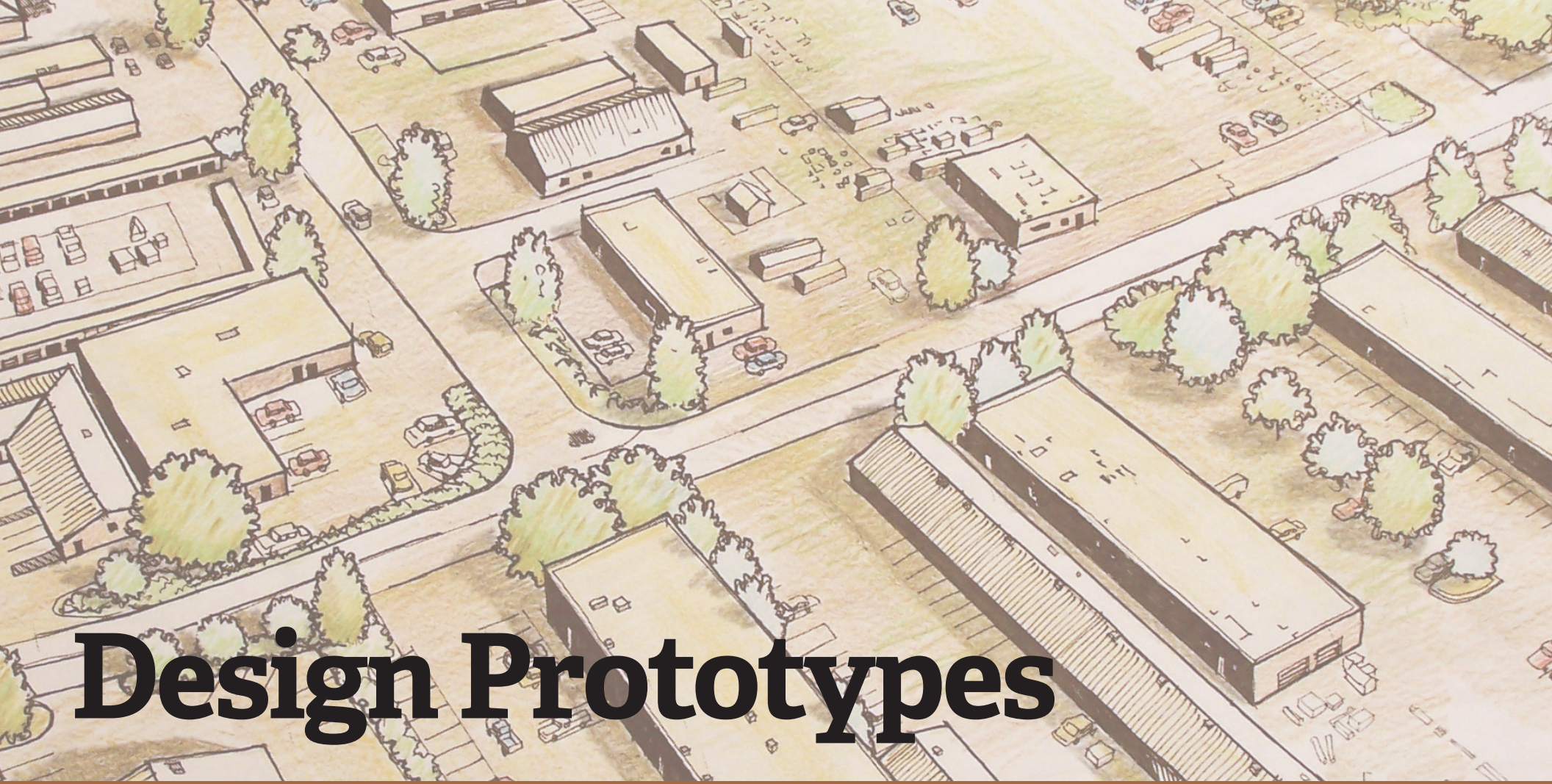


Design Prototypes

Introduction

Design prototypes provide another layer of guidance for developing successful mixed-use projects. The standards in the previous chapter set the legally-required standards for mixed-use development in El Dorado County. If a project fails to conform to those standards, it will not be built. The guidelines, while not required for development approval, present the County's expectations for the design of mixed-use projects. Projects that follow the design guidelines will respect the historic character of El Dorado County's communities and build on the county's assets. The design prototypes take those standards and guidelines and apply them to a range of potential mixed-use development scenarios. The scenarios represent distinct opportunities for mixed-use development at a variety of scales and locations within a community. The design prototypes primarily use graphics to show what the standards and guidelines look like applied to each scenario.

The aerial photo above is the example community. It is composed of a collage of other communities in the Sierra Foothills region. It was created for this guide to illustrate a range of developments that could occur for mixed use in El Dorado County's communities.

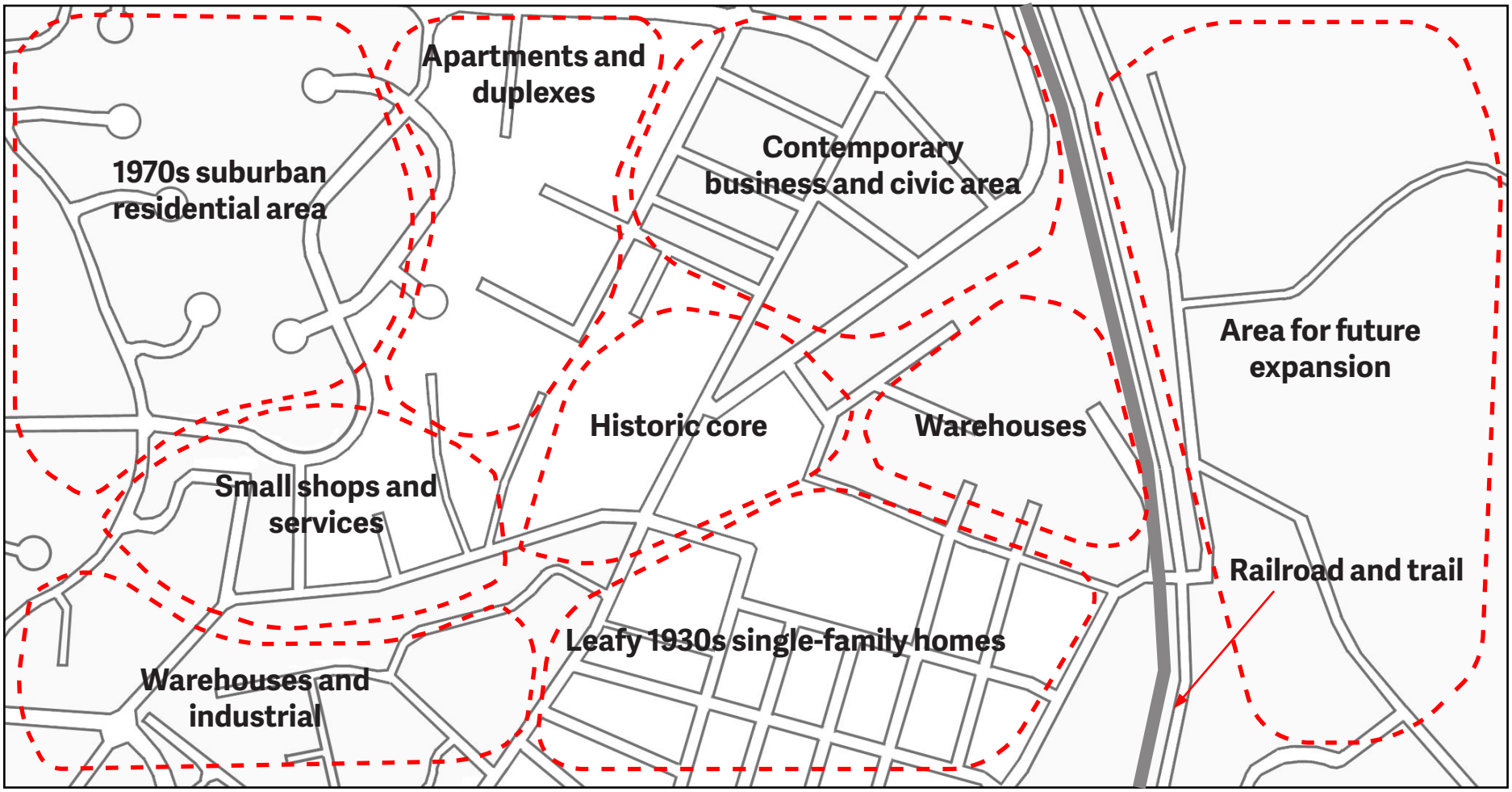
The Example Community

Successful mixed-use projects, more than other types of development, need to respond to the surrounding context. Many of the standards and guidelines in this manual refer to neighboring buildings and the local context. The design prototypes follow this context-sensitive approach.

In order to give each prototype context, the development of this guide included the creation of an example town. Each of the five prototypes exists in the same example community. This community is a composite that does not exist in the real world, but contains many of the characteristics found in El Dorado County's communities.

The example community was carefully designed to reflect the historic evolution of towns with gold rush roots. Just like El Dorado County's communities, the example community reflects an ad hoc development pattern influenced by many eras of history. The origins of the example community are in the stagecoach era, with its downtown at the intersection of two old roads. Later development incorporated a loose grid pattern common of community planning in the 1920s. The example community grew further in the prosperous post-war era from 1950 to 1970, and growth slowed after 1970.

The example community is designed to be familiar and representative of as many of the unique attributes of El Dorado County's communities as possible. At the same time, no part of the example community is drawn from El Dorado



Neighborhoods and districts within the example community.

County. This ensures that the example community is representative without prescribing mixed-use development on a real El Dorado County parcel.

The Setting

The example community is surrounded by rolling topography, but the community sits on relatively flat ground. The nearby habitat consists of native oak woodlands, savannah grasslands with scrub oaks, and riparian areas. Land outside the community is divided into undeveloped lots, large farm or ranch plots, paved parking lots without landscaping, and gravel and/or compacted soil storage yards and parking lots.

Lot Patterns

Within the community lots are based on several patterns and influences that include smaller, odd shaped lots (i.e., gridiron plat extensions), composite lots from historical mergers, modern master-planned lots, and railroad tract and section lots.

Buildings

The buildings in the example community have diverse characters and ages. All buildings are two stories or smaller. Recent buildings are suburban-style franchise character buildings: gas stations, fast food restaurants, and strip

shopping centers. Recent housing is suburban 1970/80s single-family homes in developer-planned cul-de-sac neighborhoods. Closer in to the community core, gridded, tree-covered streets are lined with pre-World War II single-family homes. The example community also includes a few apartment buildings and duplexes. Commercial and industrial buildings include aged warehouses and shops; aged retail, office, and professional buildings; service buildings including fire stations, banks, library, and gas stations; and several abandoned or underutilized buildings.

Transportation

Many of the roads in the example community are gravel and older asphalt local streets with intermittent sidewalks and limited drainage. In the newer suburban-style areas, streets have an isolated curb and gutter with concrete sidewalks. The pre-1900 historic parts of town have streets with intermittent wooden boardwalks and raised paved areas. The community is located at the junction of two rural routes that provide residents with access to a local expressway. A railroad line cuts through the community.

Using the Prototypes

El Dorado County residents live in their own unique communities and have experienced and created their own histories, stories, and culture. The mixed-use guidelines and standards have been specifically drafted to guide, encourage, and inform future community growth in real-world projects that when added together over time, will enrich neighborhoods and amplify quality growth for both the current and next generation of residents.

Each prototype includes a mixed-use development story that shares the background and process of the unique owners and their partners, their visions, development strategies, and the challenges to overcome and successfully build the projects. It provides a behind-the-scene insight to each step in developing a mixed-use project.

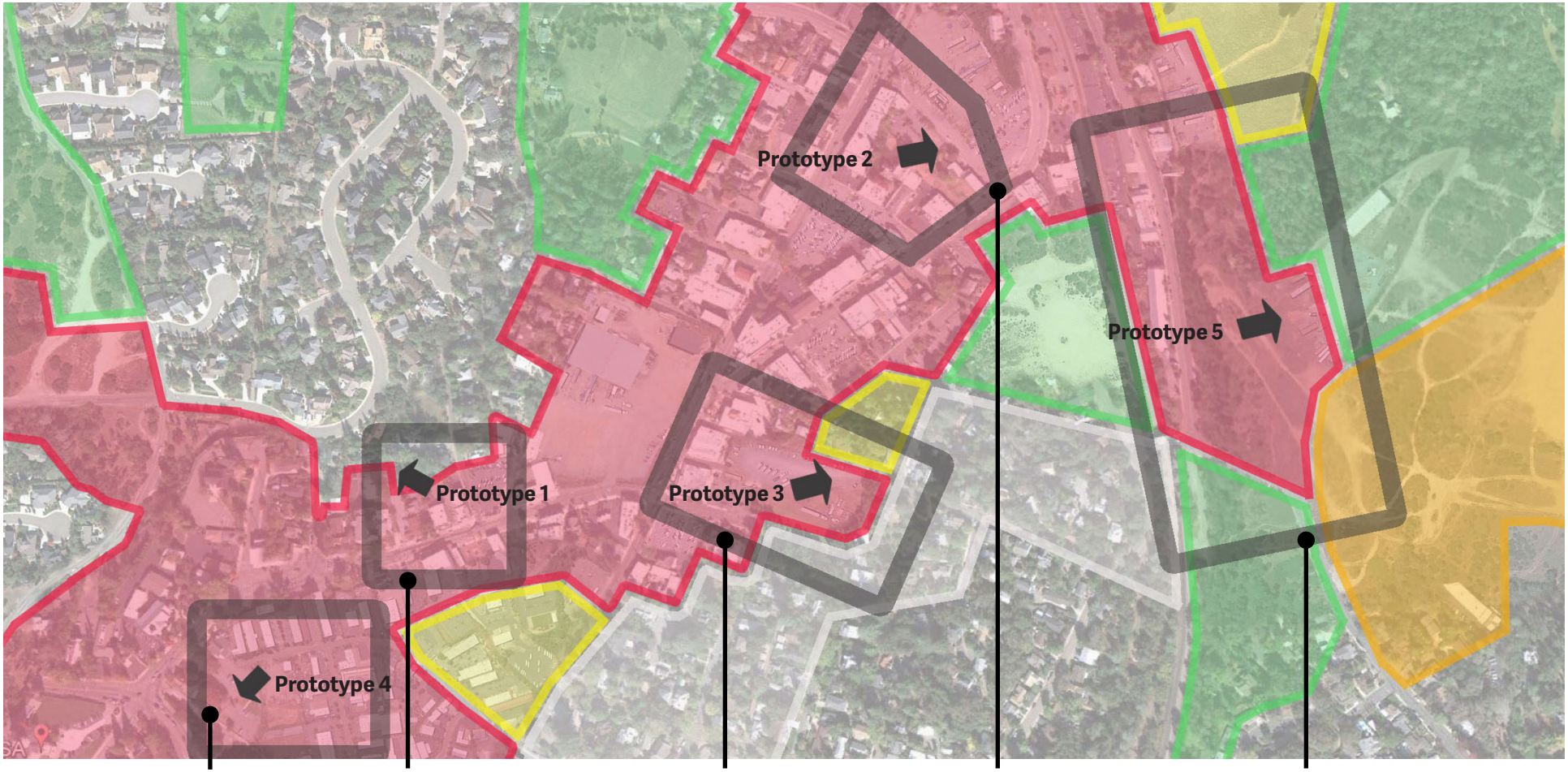
Key to a Successful Mixed-use Project

The path to a successful mixed-use project requires a creative and experienced team. Unlike single-use projects, mixed-use developments require that property owners, project developers, and project designers and architects be resourceful, inventive, and innovative. At the same time they must acknowledge and build upon the character and charm of the surrounding neighborhood and community. While the planning and design of mixed-use developments can be a challenge, equally difficult can be the complex project financing and ownership structures that come with multiple-uses. Finding willing lenders and amenable project partners is a critical element of any project before it can begin to take shape. Finally, due to the nature of mixed-use developments, the completed project can face challenges. Leasing the finished space or units to prospective tenants and residents requires creativity and savvy marketing. And, how the ongoing operational management of the project is carried out is critical to its long-term success.

Successful projects also rely on strong political and government agency partnership and support structures. Without a positive endorsement of a mixed-use development from the Board of Supervisors, Planning Commission, and County officials and staff already, difficult projects can be made that much more challenging. County officials and representatives should provide constructive feedback and assistance to mixed-use developers to help navigate planning, design, entitlements, and permitting processes. Likewise, the County should be a partner in facilitating a dialogue with existing community members about the benefits and changes that come with mixed-use developments.

As described in the "development story" accompanying each prototype in these Guidelines, successfully carrying out each project requires unique skill sets, circumstances, and individuals. Most importantly, all the characters in these stories, from the property owners to project developer to public officials, maintained an open mind and a creative "can-do" attitude.

The Prototypes



Small-scale Phased Development. This prototype provides a mixed-use project example that requires assembling several smaller parcels into a small-scale development. The current pace of development in El Dorado County suggests that a project of this size would be phased.

Historic Main Street Infill. This prototype demonstrates how small vacant or underused parcels within a historic town can be developed to support the existing historic character of the community.

Cottage or Multi-family Addition. Many larger parcels in El Dorado County could support the addition of residential units. This prototype presents one way to add a residential building to an unused portion of a developed parcel.

Historic Main Street Conversion. This prototype demonstrates how mixed-use development could work on parcels that have an existing structure.

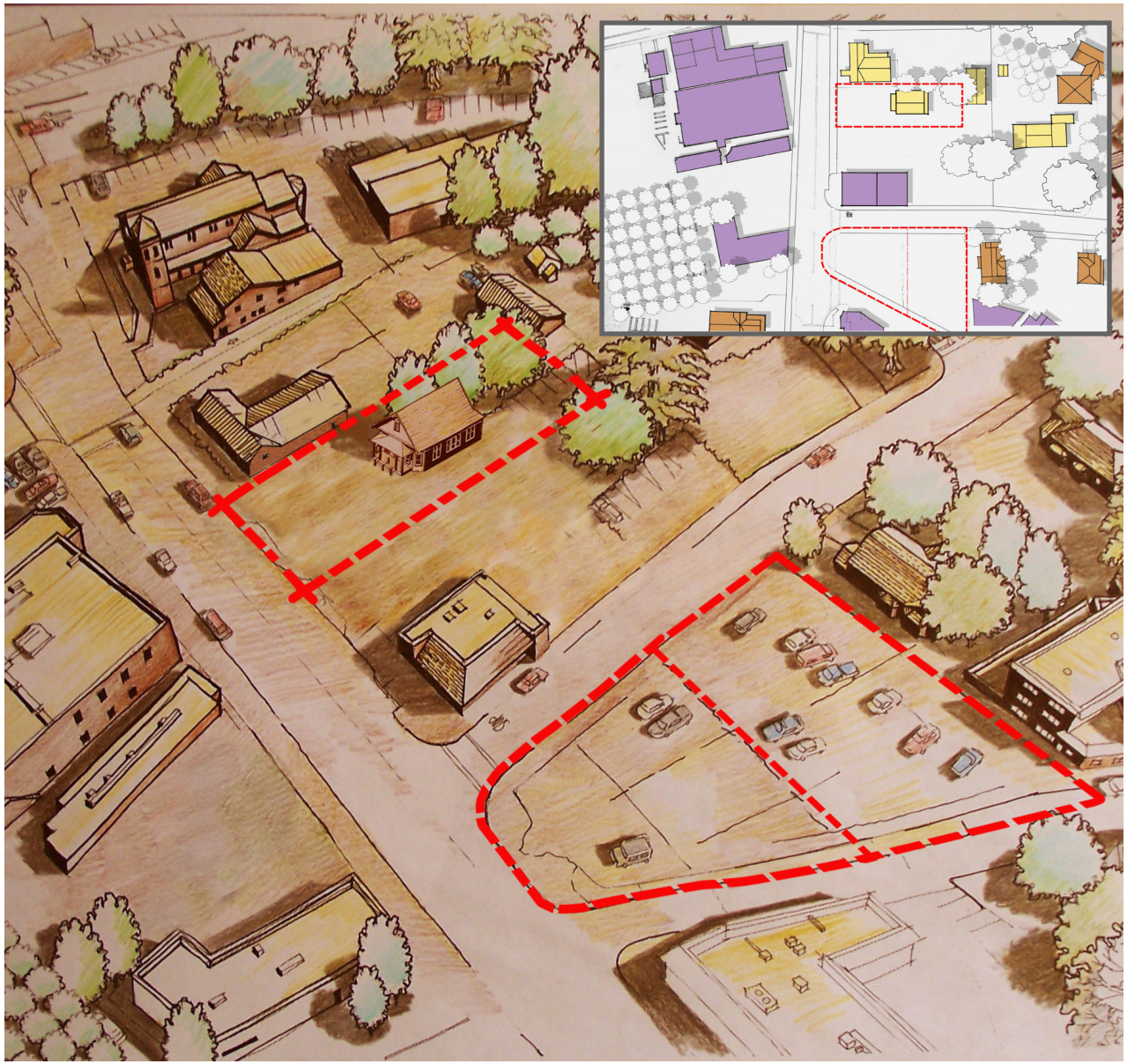
Large-scale Phased Development. This prototype provides a mixed-use project example for greenfield sites or projects that assemble larger or multiple parcels into one large site. This prototype would likely be phased.

PROTOTYPE 1

Historic Main Street Infill

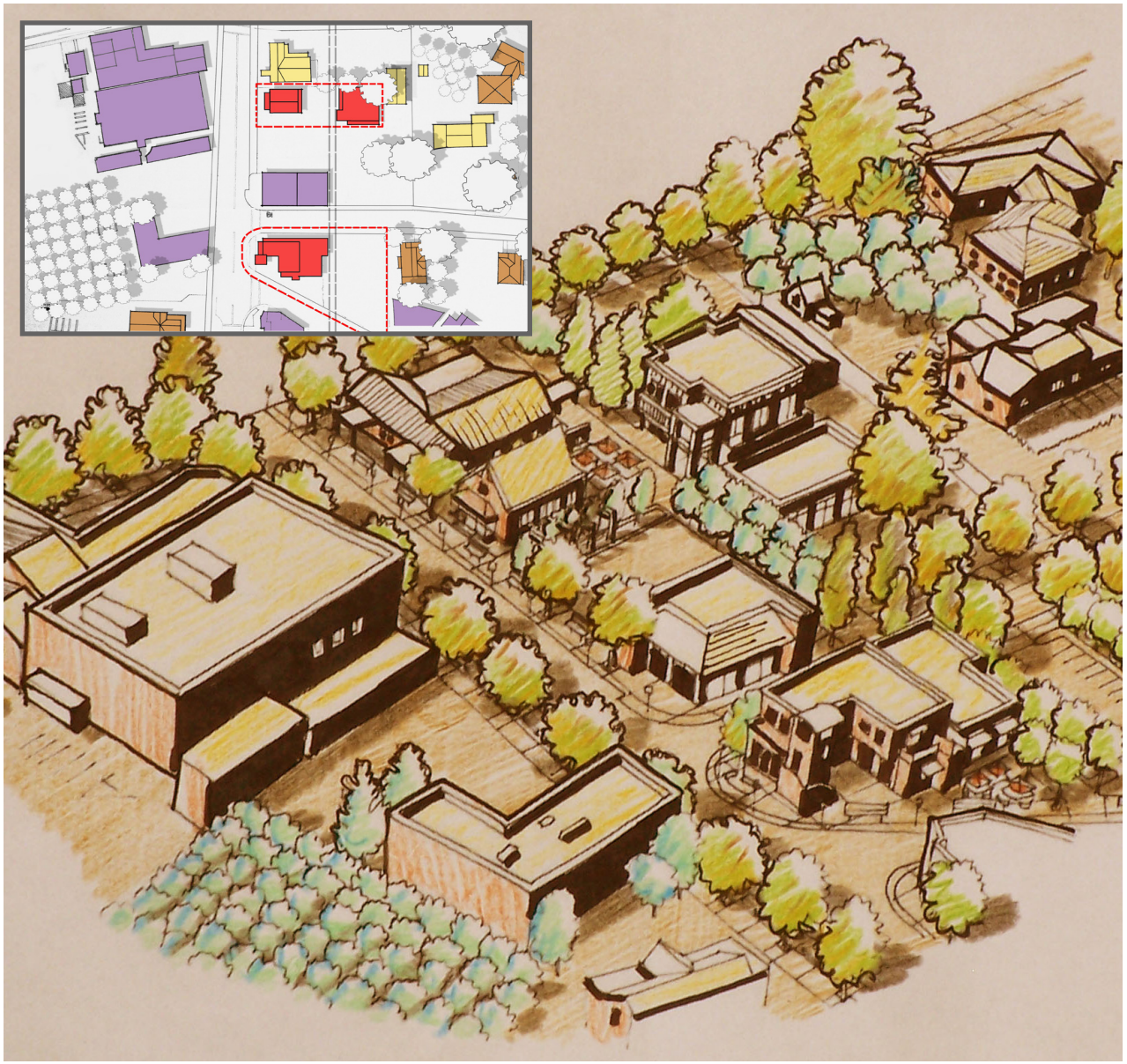
Introduction

This prototype is located in downtown or main street areas of the example community and involves the development of an underutilized parcel containing an existing structure(s). The development includes an additional separate one- to two-story small structure(s) or accessory dwelling units (known as "granny flats" or "carriage houses"). This prototype includes on-site parking.



About the Neighborhood

This prototype illustrates mixed-use infill projects in the historic commercial center of the example community. This part of the community has a mixture of older historic buildings that date back to the late 1870s, including Victorian row houses now used for retail shops and some housing; converted to barn structures and sheds for retail and auto repairs; storefront buildings for small office and retail tenants; and several 1960/70s-era small commercial buildings for retailers, bars, and local restaurants. This area is located at the convergence of several streets and small blocks with parking lots, developed walkways, old-style sidewalks, boardwalks, and memorials of the town's historic gold-rush era roots. This commercial neighborhood lacks architectural cohesion and distinction due the mix of building types and styles, incomplete infrastructure, and decades of limited private and public investment. Parking requirements of conventional zoning codes have further inhibited development. Yet, this neighborhood has potential due to the authentic charms of its remaining historic buildings and its rustic character.



Development Story

This prototype has two separate projects that together represent how the right projects can bring momentum back to a neighborhood and jump-start neighborhood transformation.

The first project includes one mid-block parcel with a small Victorian row house with a rear yard garden and picket fence. It was set back from the main street in the center of the narrow parcel with a reasonable amount of available land behind the structure. That land was inaccessible from the main street and of no functional use to the occupant of the house. The existing structure had been a rental home or shop for over 30 years and showed decades of neglect. It also endured several destructive additions with no regard to its Victorian heritage. The house was purchased by a small builder from the area as an investment.

The other project is located at the end of the block down the street on a high-visibility vacant corner lot. This parcel was owned by an out-of-state family trust that had inherited it 20 years ago. Neglected and left unused, the parcel was used by roadside marketers as a parking lot and occasionally as a staging area for local community events. Periodic efforts to sell the parcel had failed for years. The parcel was finally sold to a local realtor that had a vision to transform the neighborhood and build a building for his office and a place for a coffee shop and few upstairs apartments or additional offices.

The builder of the first project had not contemplated the full opportunity of his Victorian

house when the realtor from the corner lot approached him and asked for his input on the development of the corner parcel. The result was a vision to use both of their projects to significantly transform the neighborhood and inspire other building owners from their success.

The Victorian row house was a historic resource and required that all appropriate renovations be approved by the local historical board. The resulting plan raised and moved the house forward on the lot, and then renovated and restored it to an appropriate standard. The rear of the lot was developed as a two-story building with a lower floor for retail or a restaurant and the second floor for residential ownership flats. The site area between the front and rear buildings was landscaped as an intimate dining patio with water features and planter boxes.

The mixed-use code allowed the builder of the corner lot to develop the site with an 0.85 floor-to-area ratio without any on-site parking requirements if off-site parking was available nearby. The corner lot was developed as a stepped two-story building with tower feature, balconies, and a landscaped street-corner outdoor café patio sitting area. The building's design was developed to bridge the basic styles, materials, and details found on the older historic buildings as well as some of the materials of the 1960/70s neighborhood buildings. Both the realtor's and builder's parcels were connected with a cross block rear access corridor of a landscaped path that crossed the two adjacent parcels to spur the creation of the first phase of a future pedestrian mid-block passage. The adjacent building owners were supportive of the walkway corridor on their parcels when County Planning officials outlined the benefits of the mixed-use zoning possibilities on their own parcels. The new cross-block corridor terminates at this building and provides access to a new landscaped and modern parking area for the use of both the Victorian and new corner lot users. The parking lot has extra spaces that are rented to local business owners nearby that help to provide more on-street spaces in the area for their customers.

Ownership Structure

Individual ownerships, common project builder, historic grant funding, bank lender funding. County Planning Department negotiated reciprocal parking agreements and cross-block pedestrian access corridor coordination.

Key Standards and Guidelines

1. **Setbacks:** Where a front setback is necessary, hardscape and landscape the area to accommodate uses that keep the public realm active, such as outdoor dining or seating.

2. **Parking:** On-street parking spaces located within 400 feet of the project may be credited to meet up to 50 percent of the minimum required off-street parking spaces. On-street parking allowed by this provision shall not be counted toward the maximum amount of parking allowed.

3. **Mobility and Access:** Mixed-use developments shall provide pedestrian access by connecting internal pedestrian circulation to any sidewalks or walkways on adjacent properties or in the public right-of-way. Locate these access points to make building entryways directly visible from the public right-of-way.

4. **Site Amenities:** Design patios, plazas, mini-parks, squares, and greens to be a proportional size to the project.

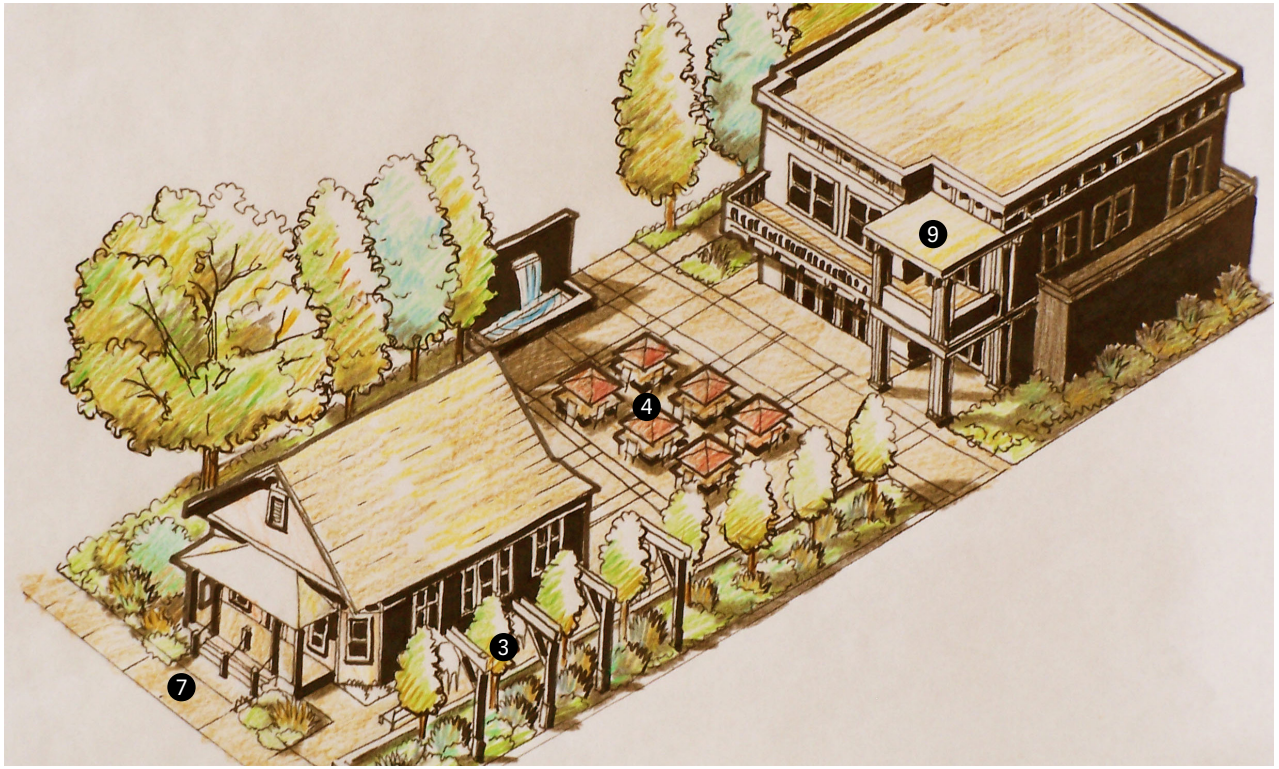
5. **Lighting:** Use light fixtures along streets that contribute to a coordinated, attractive streetscape that works well with street trees, curb cuts, signage, street furniture, and other site amenities.

6. **Windows:** To meet energy standards, specify the use of projecting covers, awnings, or other similar devices or building features, not mirrored, reflective, or tinted glass.

7. **Entrances:** Provide a commercial entrance along the facade that is parallel to the primary street. When located on the corner of a block, mixed-use buildings shall either locate the main entry at the corresponding corner of the structure or provide an entrance that faces each street.

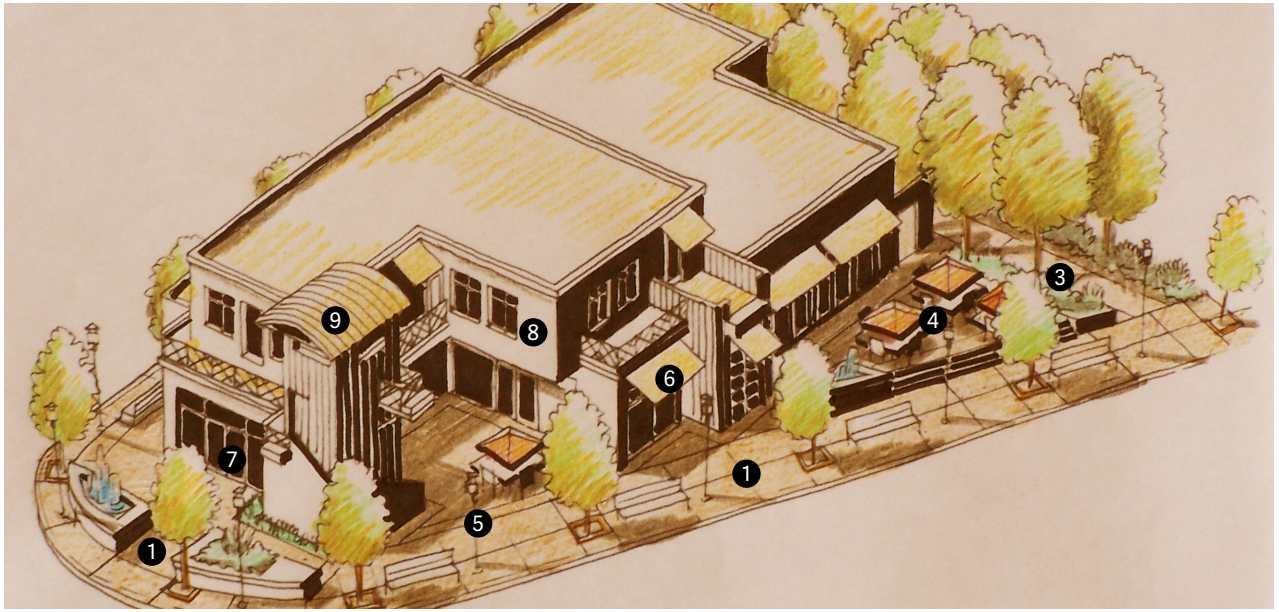
8. **Facades:** On corner lots, wrap facade elements around the building.

9. **Facades:** Use horizontal elements such as porches, balconies, and coursing to break up the vertical mass of the facade wall.



Mid-block Project Summary

- Renovated, historically remodeled, and relocated an existing 1870s Victorian house as open interior structure suitable for a commercial rental function.
- Newly constructed two-story "Victorian-complementary" designed rear zero lot line retail/condo building and courtyard landscape.
- Constructed a mid-block pedestrian corridor linking parcels to an off-site parking lot and public roads.
- Upgraded existing streets with new curbs, sidewalks, lighting, and on-street parking spaces.

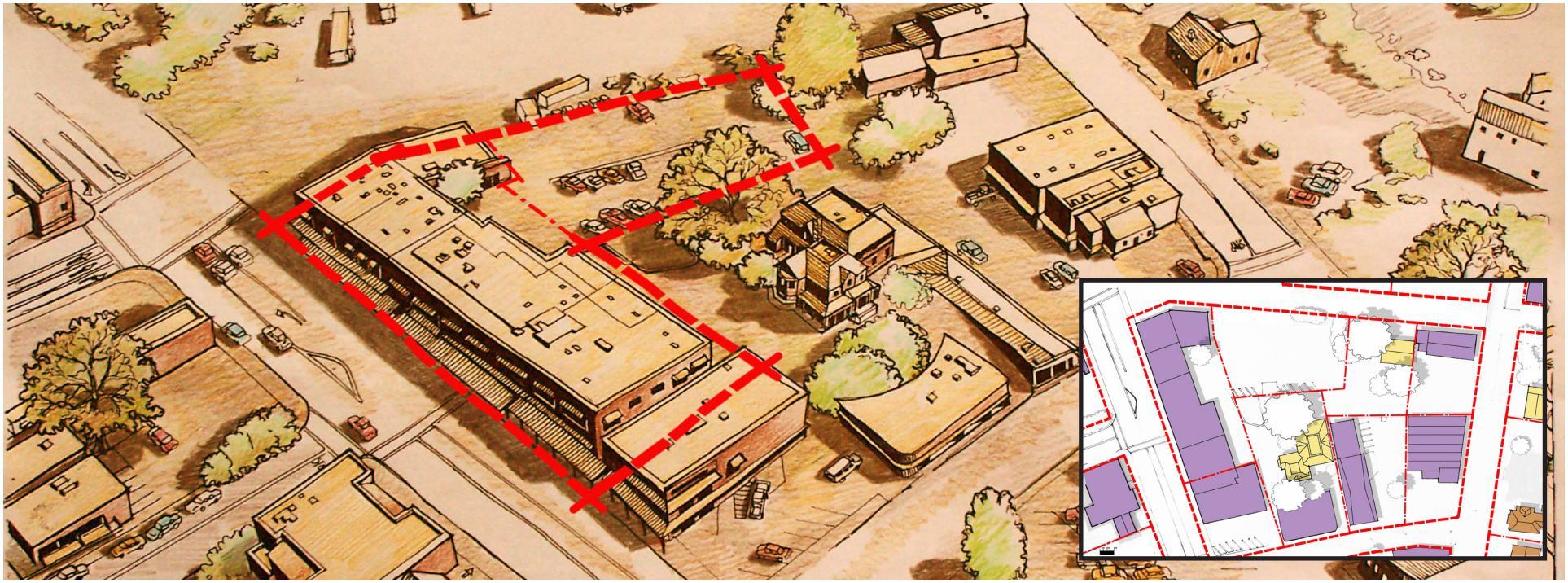


Corner Lot Project Summary

- Removed old parking lot and replaced with upgraded and landscaped lot.
- Constructed a mid-block pedestrian corridor linking parking lot to other parcels in neighborhood.
- Upgraded existing street corner with new curbs, sidewalks, lighting and on-street parking spaces.
- Constructed two-story café/office and apartment building with outdoor landscaped patios.

PROTOTYPE 2

Historic Main Street Conversion

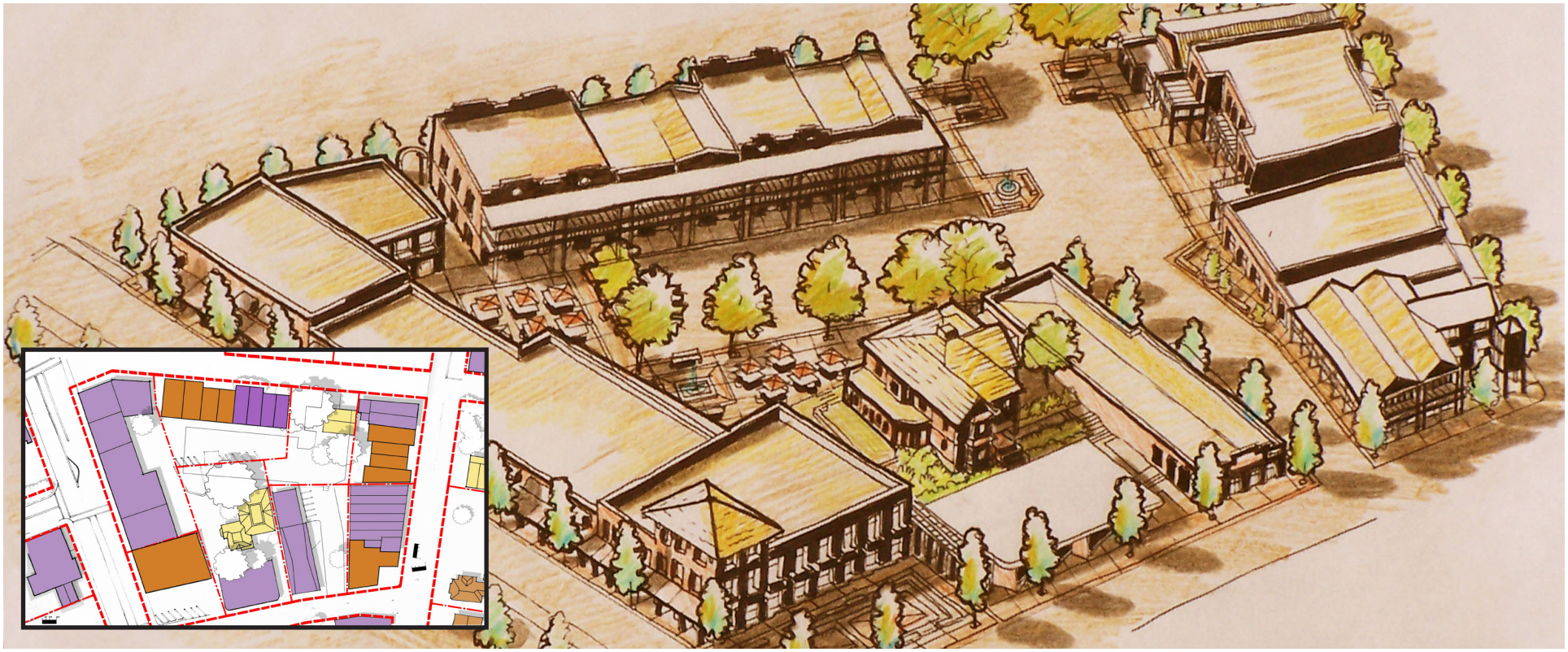


Introduction

This prototype applies to areas typically located near downtown or main street areas and involves the conversion of existing structure(s) to accommodate both residential and commercial uses in a vertical mixed-use format. This prototype includes on-site parking.

About the Neighborhood

This neighborhood is located in a newer area of the example community; most buildings were built from 1950 to 1990. This part of the community is unique as the main commercial street splits into two commercial blocks of buildings used for retail shops, civic structures, fire station/post office, banks and small offices. Unique to this area are small storefront parcels, second story older apartments, alleys with parking lots, and several vacant parcels that offer opportunities for development. Several fragments of older buildings exist alongside repurposed 1980s spare and basic buildings that create an ad-hoc neighborhood without the charm of the historic buildings. Yet, this neighborhood is home to a thriving and active business establishment. Parking is fiercely guarded by each business for their parcel's tenants and customers.

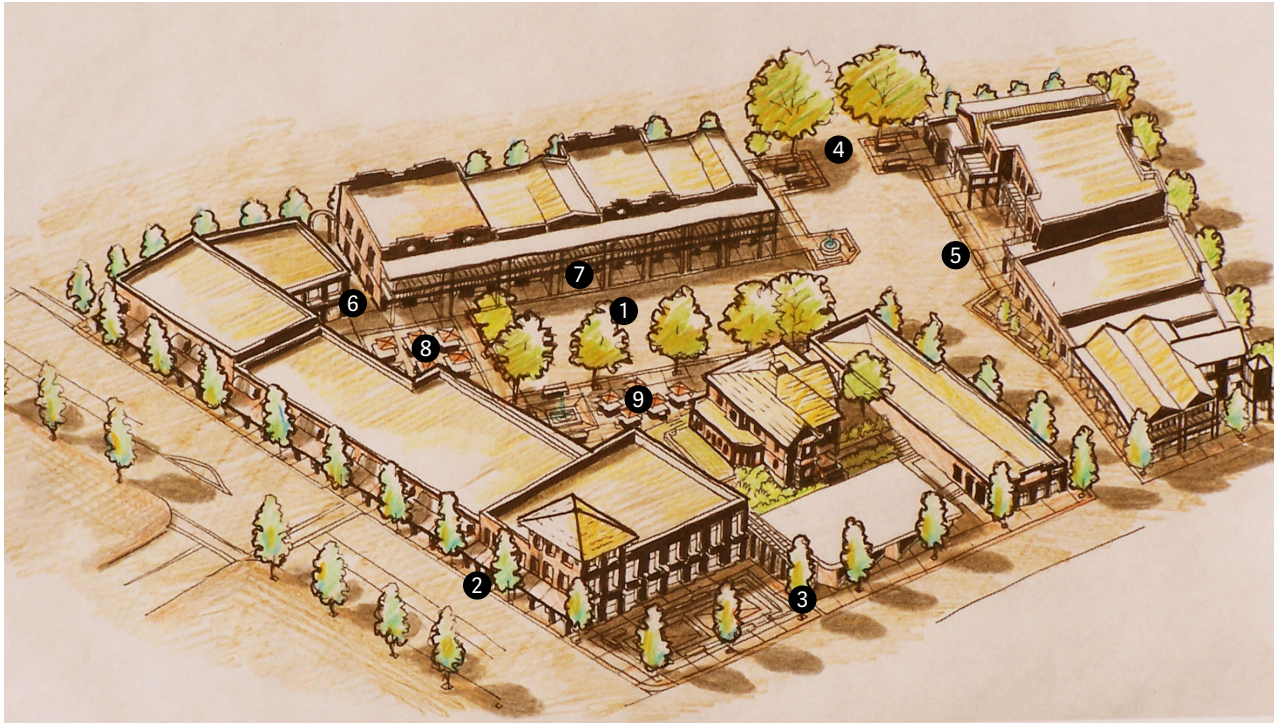


Development Story

A large commercial block in this area was organized into a single master-planned vision by majority of the block's parcel owners. They were seeking a cohesive way to transform the entire block into new uses that would appeal to new users and tenants that could afford higher market-rate rents. The 2008 recession stalled the owner group's original well-intentioned planning efforts and plans were revised to include the housing opportunities of the mixed-use zone for at least 65 percent of the block. New "town-square" apartments were constructed from converted office spaces of two of the larger buildings. Due to fire codes and other contemporary building codes, the buildings were retrofitted into two-story apartments with required separations from retail or office uses in the adjacent buildings. New infill, "active retirement" apartments are planned in the same block for active retired suburban couples that seek an authentic small-town foothill lifestyle in close proximity to services such as cafes, retail, and health care, as well as the County's outdoor recreational options. The owners converted the undeveloped land area of the block's center into parking and landscaping, and they have included "perforated" pedestrian connections to all sides of the exterior neighborhood via patios, courtyards, and gardens paths. The apartment buildings are also planned for a potential hotel use if the apartment use does not succeed in the market.

Ownership Structure

Five majority owners and 11 smaller Individual ownerships, common project builder, historic grant funding, bank lender funding. County Planning Department funding partnerships for the construction of street and utility upgrades and improvements.



Project Summary

- Reconstructed the core block exterior area for parking, landscaping, and full block connections.
- Converted two large two-story office buildings into mid-market rate apartments or hotel units.
- Upgraded existing streets with new curbs, sidewalks, lighting, and on-street parking spaces.
- Constructed one two-story apartment building with outdoor landscaped patios.
- Upgraded the exterior facades (windows, siding, details, and signage) of all sides of block perimeter.

Key Standards and Guidelines

1. **Lot Dimensions and Coverage.** Locate parking lots behind buildings, where possible, and to the side of buildings when a rear parking lot is not feasible.

2. **Setbacks:** Place buildings at the front of lots and leave room at the back of the lot for parking and other site amenities.

3. **Landscaping:** Design site landscape treatments to be attractive, with a consistent design throughout the project.

4. **Parking Lot Design:** Design parking access points to minimize conflicts with pedestrian traffic. Shared drives are encouraged and curb cuts should be located away from intersections.

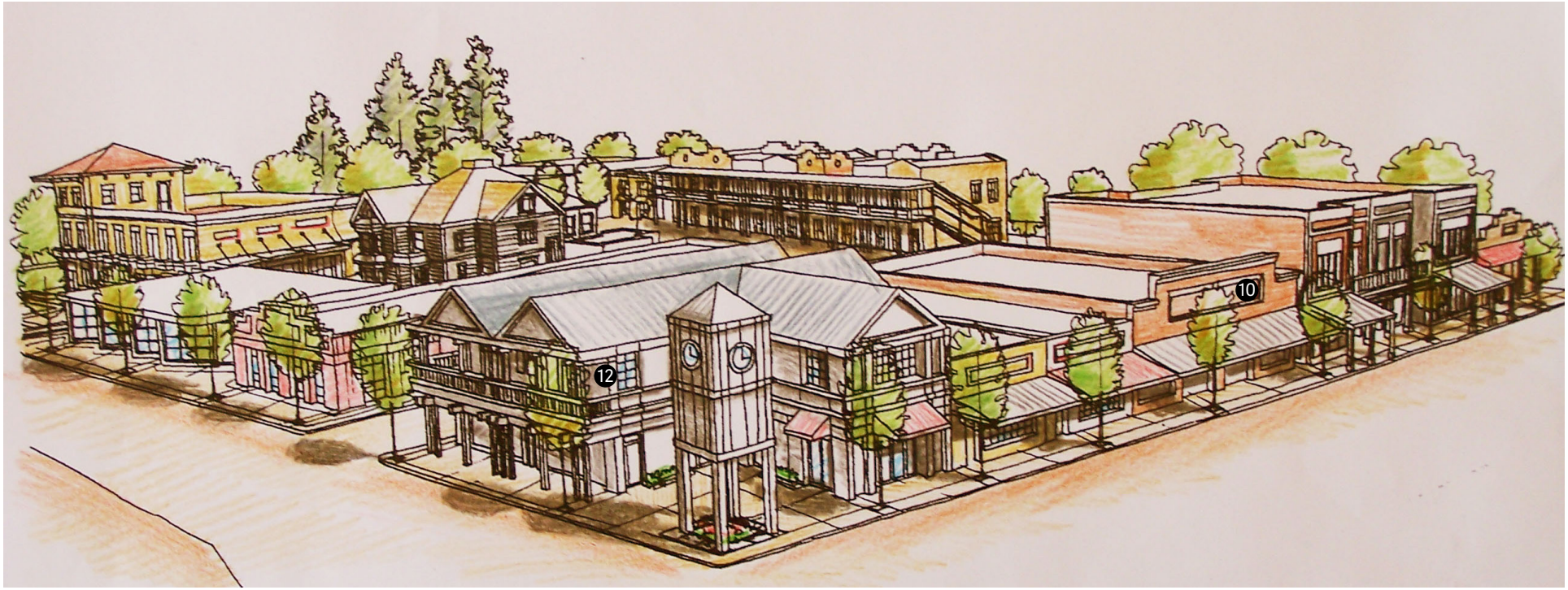
5. **Parking:** The use of shared parking may be allowed when the project is under the control of a single owner/developer; contains commercial, retail, office, institutional, or public uses with staggered peak parking demands; and the site is arranged so all uses can share a parking lot.

6. **Mobility and Access:** Mixed-use developments longer than 300 feet shall provide a mid-block pedestrian pass-through. Design the pass-through to be safe and visually interesting. Pedestrian pass-throughs shall not be enclosed or locked. Alleys and service areas shall not be considered pedestrian pass-throughs, although alleys may be designed with pedestrian walkways.

7. **Mobility and Access:** Design buildings to include arcades in areas where they are common. If a new mixed-use building is adjacent to a building with an arcade, design the building to continue the adjacent arcade.

8. **Site Amenities:** Ensure site amenities are visible and easily recognizable as an area that encourages outdoor assembly. Site amenities may be framed by a view corridor, be placed on a high point, or be visually related to a multi-use trail or other walkway.

9. **Site Amenities:** Design patios, plazas, mini-parks, squares, and greens to



be a proportional size to the project.

10. **Signage:** Integrate signs carefully within the site, landscape, and architectural design context. Make size, shape, and proportions of the signs compatible with the size and scale of the surroundings, and do not obscure other design features of the site.

11. **Windows:** Mixed-use buildings shall be designed with windows comprising 60 percent of the street-facing building facade between two feet and eight feet in height.

12. **Windows:** Design upper story windows to complement the historic character of the communities (e.g., use smaller windows and divided lites).

PROTOTYPE 3

Cottage or Multi-family Addition

Introduction

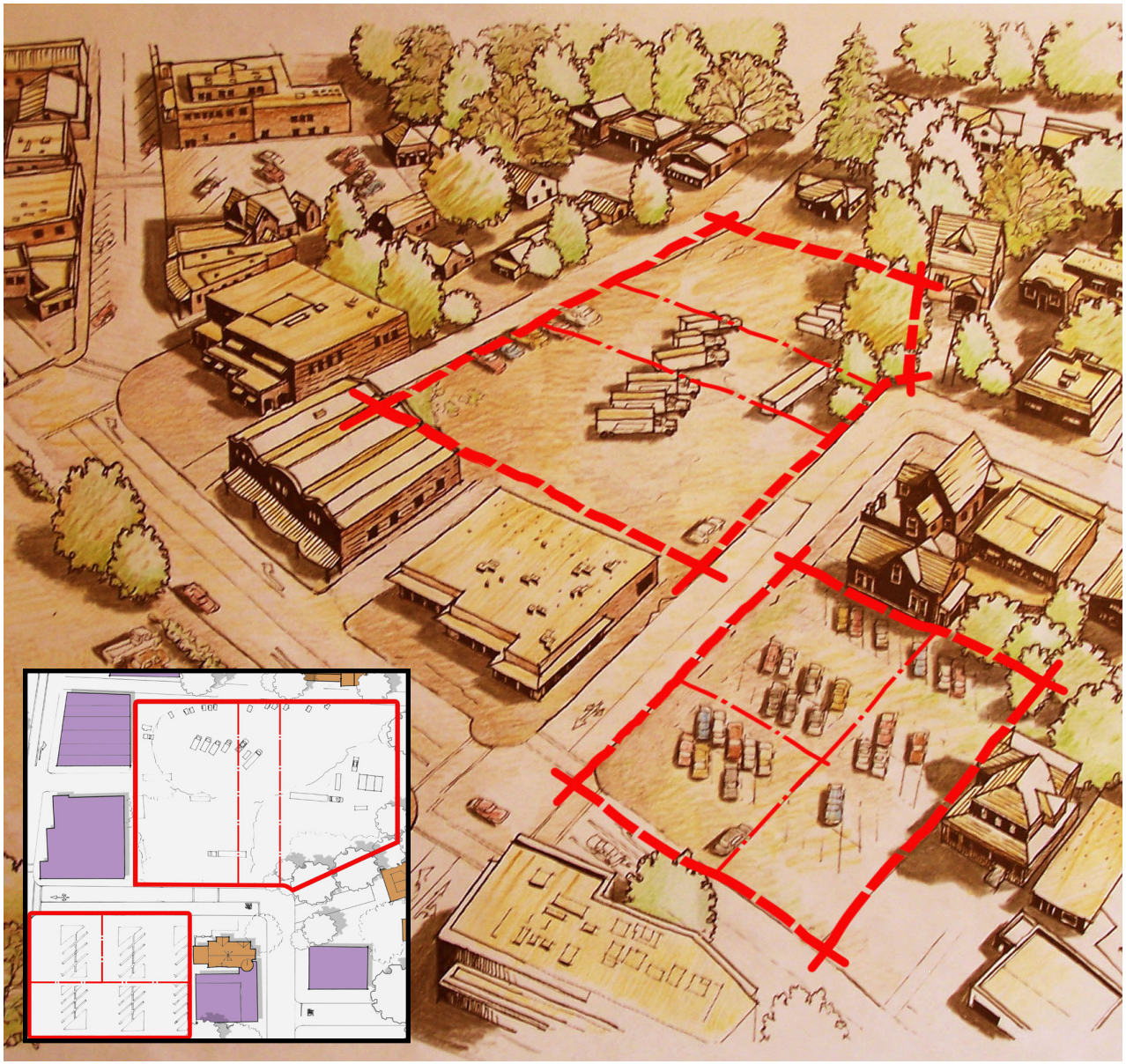
This prototype applies to a village, downtown, or main street area and includes the development of small groupings (4 to 12) of attached or detached residential structures (700 to 1,200 square feet), fronted by a commercial use or a horizontal mixed-use structure. This prototype includes reciprocal and/or flex parking, either on- or off-site.

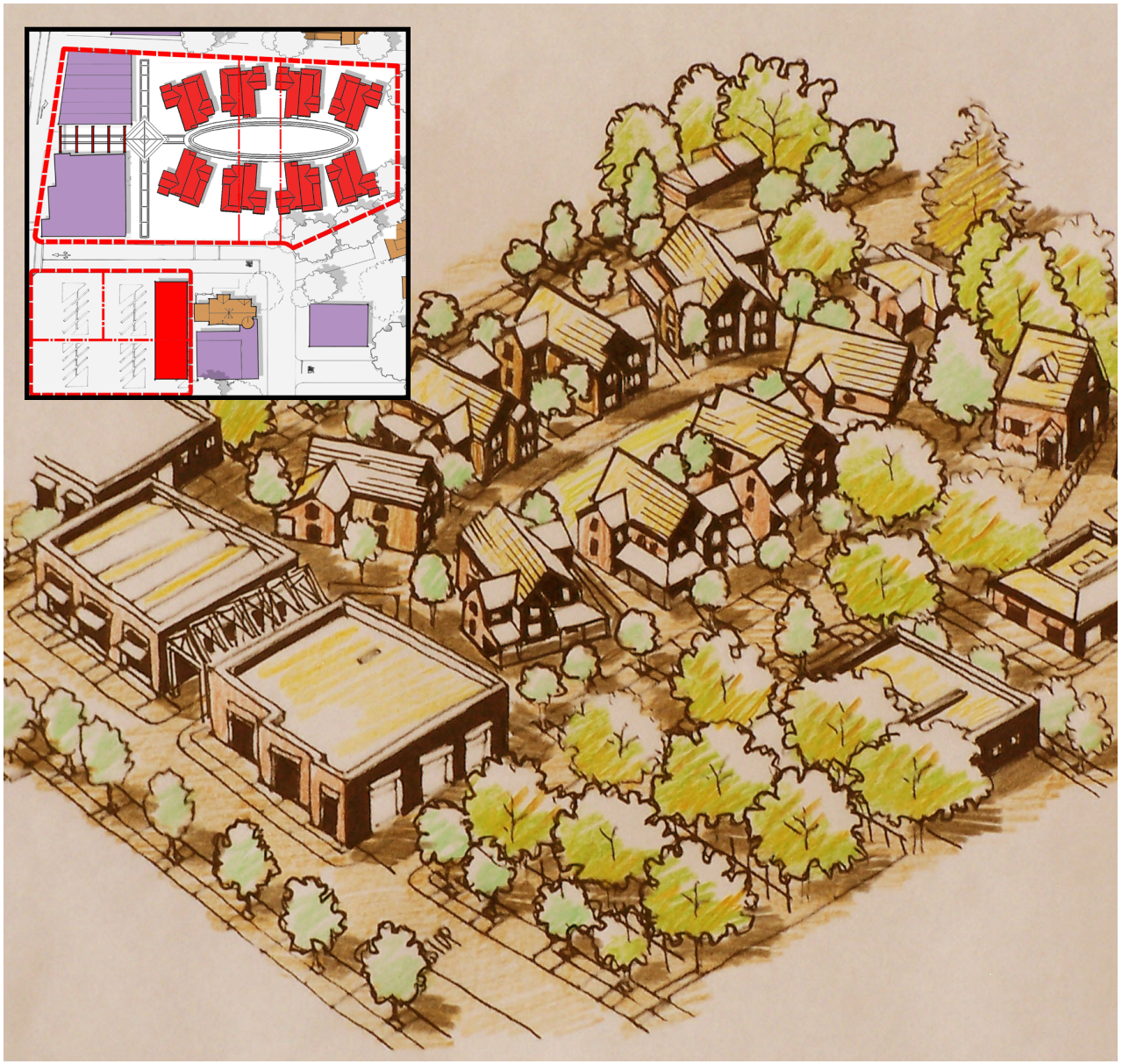
About the Neighborhood

This neighborhood is on a small commercial street that is directly adjacent to a well-tended, leafy, 1930s neighborhood of small single family bungalows and front yard homes. A popular neighborhood, the area supports a range of family types. This residential area has direct walkable linkages to a commercial street with a range of smaller buildings. The commercial street has a variety of empty or underutilized land plots that effectively have constrained development for decades due to their odd shapes, sizes, or locations. Parking requirements of conventional zoning codes have further inhibited development.

Development Story

Two local land owners came together with a vision for the development of their adjacent underutilized land. One was the owner of a long established small business on the commercial street who owns two buildings side-by-side and one vacant parcel of land





in back that is rented for a truck storage yard and a parking place for his customers and staff. The other owner was a small local developer that purchased two vacant parcels adjacent to the building owner's truck storage rental yard and three small vacant lots on the main commercial street next to his partner's two small commercial buildings. The combined three parcels are paved over by a poorly maintained parking lot that is day-rented and used for hourly parking by several businesses in the neighborhood.

The developer and the business owner partnered to assemble the various parcels into one holding, build eight small village homes and a common central landscaped park, and redevelop the two commercial buildings into multi-tenant office and retail rental spaces. The business owner moved his shop into a more efficient space within one of the renovated buildings. The cottages and commercial buildings share pedestrian connections to the commercial street and to the older residential leafy neighborhood. The mixed-use code allowed the parking for the cottage homes and the commercial buildings to share a newly upgraded and landscaped parking lot in the place of the older rented parking lot. The back of the parking lot has garages for eight cars, one for each cottage unit. On-street parallel parking was added to the inventory of public parking spaces along the newly upgraded local streets on each side of the cottage development. Sidewalks, street lights, and crosswalks were also added.

Ownership Structure

Limited partnership that combined each owner's land and building equity, conventional bank and SBA 504 funding for commercial building renovations.

Project Summary

- Renovated and remodeled two existing 1940s commercial buildings and a landscaped forecourt.
- Removed old parking lot and replaced with upgraded and landscaped lot and eight-car garage structure.
- Upgraded existing streets with new curbs, sidewalks, lighting, and on-street parking spaces.
- Constructed eight cottage homes, common landscaped core and connection pathways.

Key Standards and Guidelines

1. **Lot Dimensions and Coverage:** Locate parking lots behind buildings, where possible, and to the side of buildings when a rear parking lot is not feasible.

2. **Setbacks:** Design buildings with commercial uses at the back edge of the public sidewalk in a "zero lot line" configuration, except as necessary to allow room for outdoor seating and service areas, outdoor sales and displays, landscaping, emphasized entryways integral to the building design, and similar pedestrian and customer amenities. If the historic context includes large setbacks, or if the site is constrained, a different setback may be considered.

3. **Setbacks:** For residential structures use the area between the property line and the front of the building to provide space for privacy, landscaping, private courtyards/open areas, emphasized entryways integral to the building design, and similar residential amenities.

4. **Parking Lot Design:** Provide parking lot trees as follows: at least 1 tree for every 8 parking spaces in lots with 48 spaces or fewer; and at least 1 tree for every 10 spaces for parking lots with 49 spaces or more.

5. **Parking Lot Design:** Distribute trees evenly throughout the parking lot to create a canopy effect in the parking lot and locate trees to divide and break up expanses of paving and long rows of parking spaces.

6. **Parking:** On-street parking spaces located within 400 feet of the project

may be credited to meet up to 50 percent of the minimum required off-street parking spaces. On-street parking allowed by this provision shall not be counted toward the maximum amount of parking allowed.

7. **Signage:** Design signs to create and enhance a rich pedestrian and interpretive experience. Design signs to de-emphasize the importance of the automobile.

8. **Signage:** Locate signage at the primary entrances of buildings and parking lots.

9. **Lighting:** Lighting of commercial uses adjacent to or within the immediate vicinity of residential uses shall be designed with fixtures and poles that illuminate commercial uses while eliminating light spillover into residential areas.

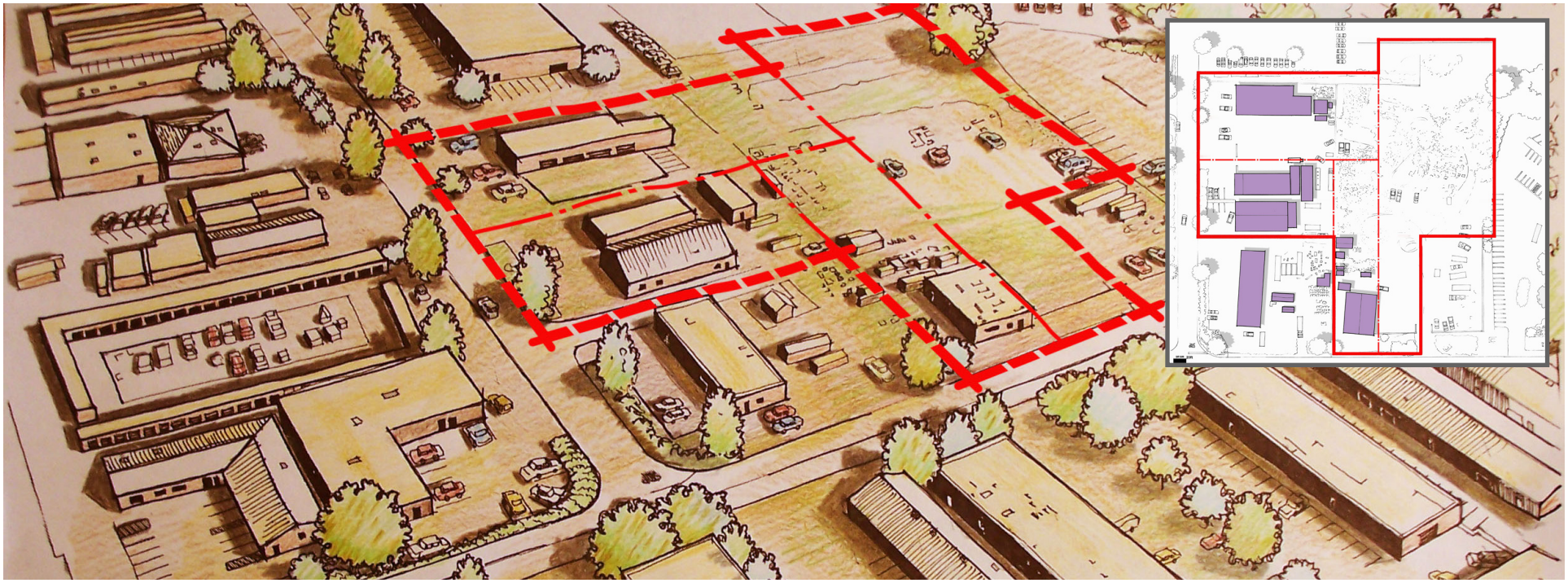
10. **Noise and Odor:** Locate trash receptacles far from residential uses to minimize the nuisance of refuse odor to residents.

11. **Windows:** To meet energy standards, specify the use of projecting covers, awnings, or other similar devices or building features, not mirrored, reflective, or tinted glass.

12. **Entrances:** Make the primary public entry to the building visually obvious through the use of architectural treatments such as differing colors or materials, arches or arcades, covered walks, arbors, signs, or protecting canopies.

PROTOTYPE 4

Small-scale Phased Development

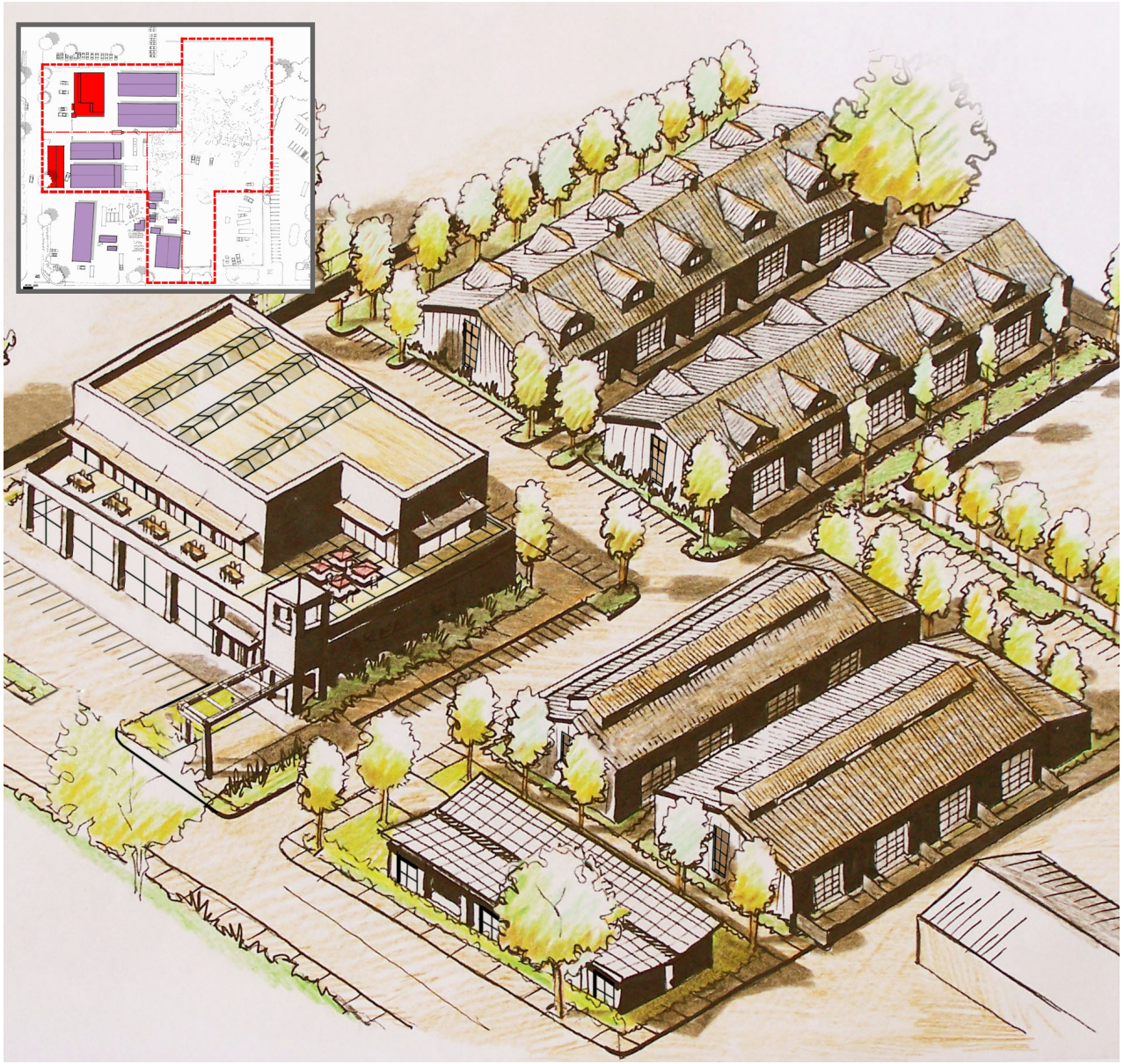


Introduction

This prototype applies to largely developed areas and involves the development of a vacant parcel in a vertical mixed-use configuration. The parcel would be developed in phases in order to reflect realities of real estate economics in the region. This prototype includes a mix of one- to three- story structures and include on-site or on-street parking.

About the Neighborhood

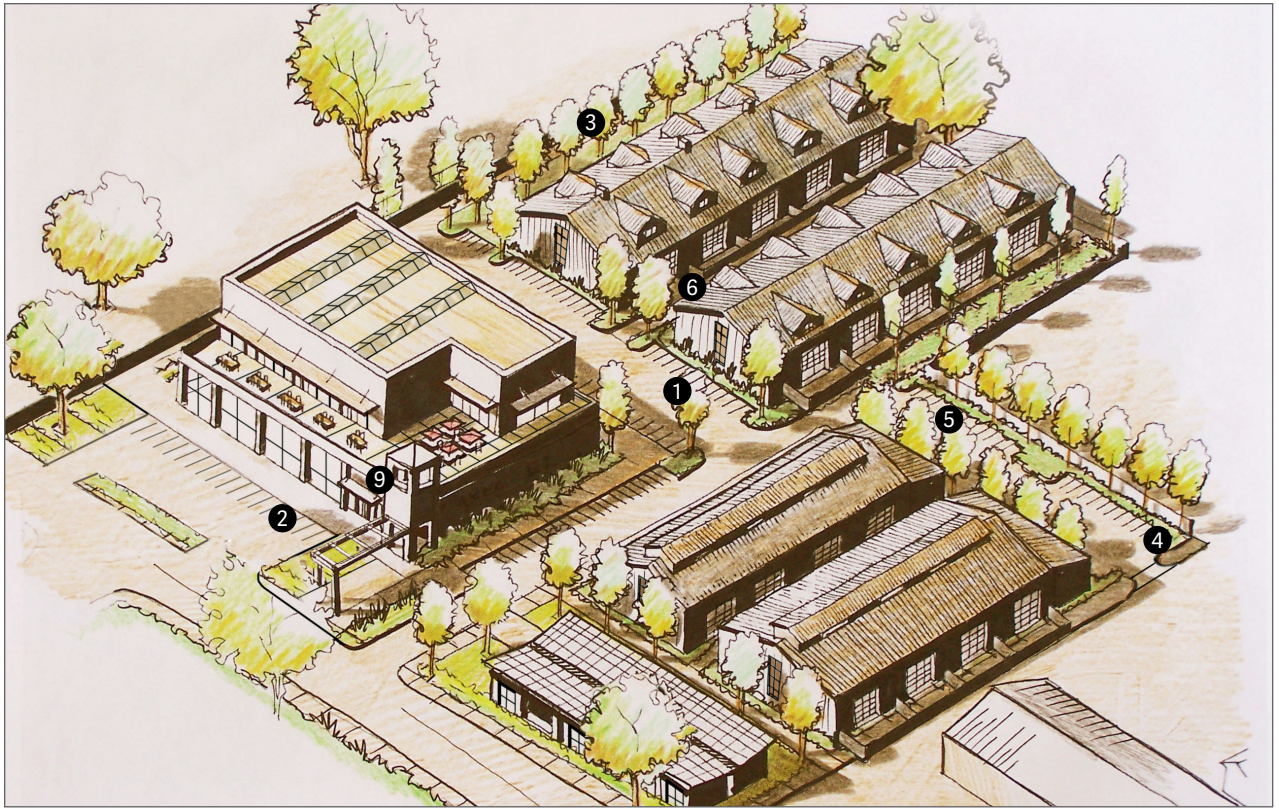
This neighborhood is the workhorse for the town – a place of 1940s to 1960s metal shop buildings, abandoned industrial forestry and milling operations, utilitarian warehouses, large underutilized gravel paved storage yards, and more recent concrete "tilt-up" type industrial buildings. The neighborhood, while being business-oriented, has become a favorite shop space for local craftspersons, artists, and specialty food makers, such as a small brewery/ distillery, and a backstage home for a few wine makers that source grapes from foothill vineyards. Increasingly, many of these shop owners have renovated the interiors of warehouses into alternative lifestyle loft-style apartments with coffee bars, bike racks, and even a rock-climbing fitness center – all behind roll-up industrial metal doors. The district topography is flat, largely undeveloped, and benefits from its edge-of-town proximity to regional roads and linkages to a freeway several miles away. Overlooked for decades, the district is in an ideal location with close proximity to the primary small commercial street and the popular leafy neighborhood of small well-tended homes.



Development Story

The long-time owner of several warehouses and parcels retired after scaling down his 40-year catalog contract furniture-making operation. He had begun to market his five warehouses as rentals when he was contacted by a Bay Area craft beer brewer that was planning to relocate his operation and staff to a less-expensive and scenic Sierra foothills community. The brewery owner was familiar with several renovated warehouse projects in the Bay Area that were transformed into innovative "industrial-artist" loft apartments and homes. After discussions the warehouse owner decided to invest his equity as a full owner of the parcels and buildings into the beer-making operation. Together, they planned a transformation of the entire site into a newly formed district named after the signature beer, "Route 49."

The mixed-use standards allowed the entire 12.5 acre multiple-parcel site to be constructed in phases as long as some housing was included as a part of the initial phase. Phase one cleared and cleaned the existing warehouses, added underground utilities, and constructed the large metal-sided brewery building with its tasting roof deck. Phase two transformed the adjacent front two warehouses into eight mezzanine-filled apartments with outdoor patios and landscaping. Phase three transformed the rear large warehouses into twenty "live-work" loft apartments with landscaping, additional parking lots, and site landscaping. Phase four constructed a new showcase building for three small craft food makers that relocated to produce and market their hand-made products in the building and on a large rear



Project Summary

- Renovated and remodeled four large metal warehouse buildings into multi-unit apartment buildings with outdoor landscaped patios.
- Upgraded existing 12.5 acre site with new utilities, parking and landscaping.
- Constructed one two-story industrial metal brewery building, offices, sandwich bar, tasting exterior deck.
- Constructed one single story industrial metal building for retail and specialty food production.

plaza and seating area. The brewmaster lives in an apartment in one of the warehouse buildings and the retired warehouse owner ended up crafting all of the project's cabinets and specialty items; he also brought in several local area tradespeople to weld custom windows, doors, and the other elements used in the warehouse-to-loft housing transformations. The project has sparked new energy to the neighborhood and several other warehouse owners are planning similar transformative projects that appeal to the community's young population and new transplants that have moved to the area from outside the county.

Ownership Structure

Limited partnership that combined each owner's land and building equity, conventional bank and SBA 504 funding for commercial building renovations. Owner cash investments.

Key Standards and Guidelines

1. **Lot Dimensions and Coverage.** Locate parking lots behind buildings, where possible, and to the side of buildings when a rear parking lot is not feasible.
2. **Setbacks:** Where a front setback is necessary, hardscape and landscape the area to accommodate uses that keep the public realm active, such as outdoor dining or seating.
3. **Setbacks:** For residential structures use the area between the property line and the front of the building to provide space for privacy, landscaping, private courtyards/open areas, emphasized entryways integral to the building design, and similar residential amenities. Landscaping: Emphasize building entrances with special architectural and landscape treatments.
4. **Parking Lot Design:** Design for continuous circulation within a parking lot

that requires drivers to back out when no spaces are available.

5. **Parking Lot Design:** Distribute trees evenly throughout the parking lot to create a canopy effect in the parking lot and locate trees to divide and break up expanses of paving and long rows of parking spaces.

6. **Mobility and Access:** Mixed-use developments shall provide pedestrian access by connecting internal pedestrian circulation to any sidewalks or walkways on adjacent properties or in the public right-of-way. Locate these access points to make building entryways directly visible from the public right-of-way.

7. **Windows:** Mixed-use buildings shall be designed with ground floor windows so their bottom edge is located no more than three feet above the adjacent sidewalk.

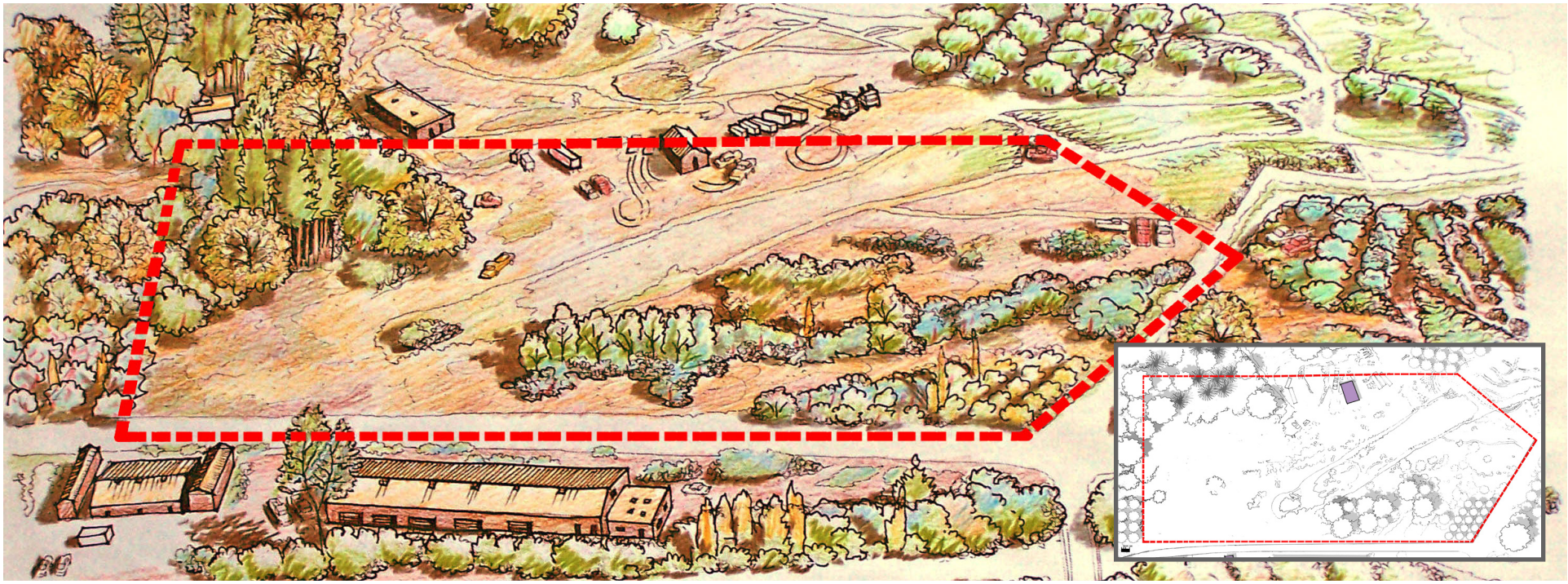
8. **Entrances:** Provide a commercial entrance along the facade that is parallel to the primary street. When located on the corner of a block, mixed-use buildings shall either locate the main entry at the corresponding corner of the structure or provide an entrance that faces each street.

9. **Entrances:** Make the primary public entry to the building visually obvious through the use of architectural treatments such as differing colors or materials, arches or arcades, covered walks, arbors, signs, or protecting canopies.

10. **Facades:** Use horizontal elements such as porches, balconies, and coursing to break up the vertical mass of the facade wall.

PROTOTYPE 5

Large-scale Phased Development

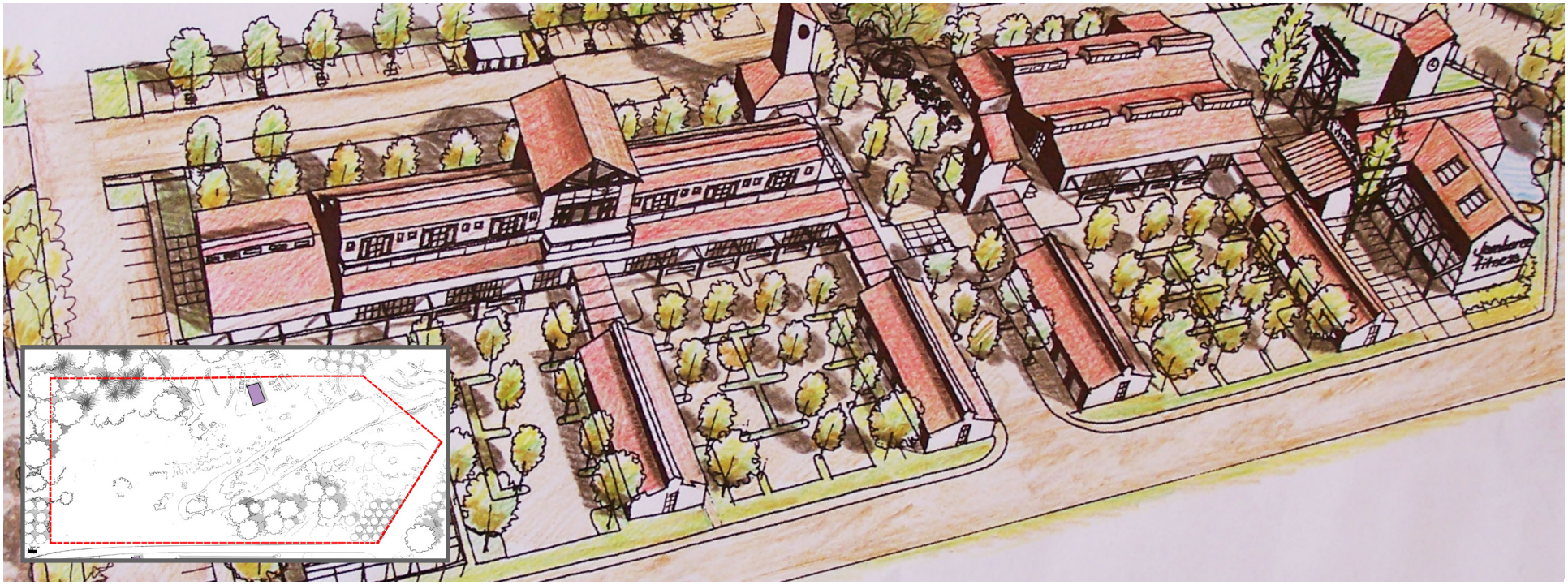


Introduction

This prototype demonstrates the development of large vacant parcels or groupings of parcels in a vertical and horizontal mixed-use configuration. The development would occur in phases in order to reflect realities of real estate economics in the region. This prototype includes a mix of one- to three- story structures, new streets/right-of-way/public spaces, and parking on streets and in lots within 300 feet of development.

About the Neighborhood

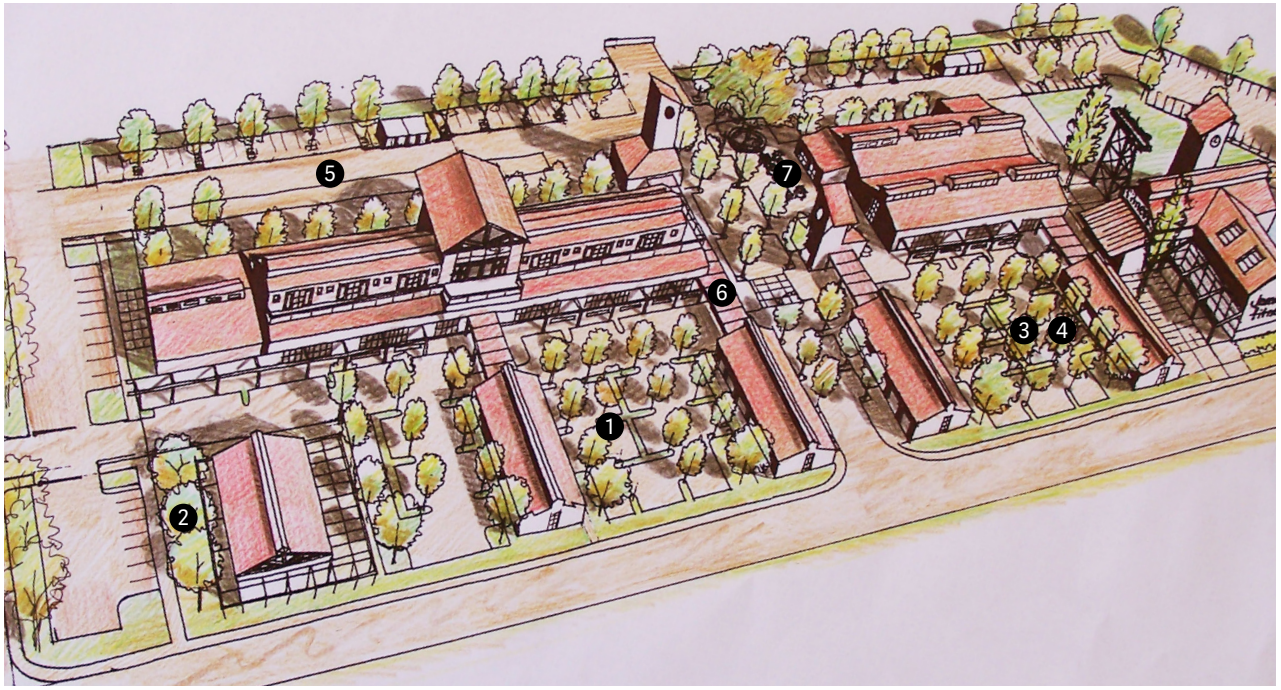
This large, "greenfield" 22-acre site is located on the other side of the Southern Pacific railroad track that for decades has acted as a barrier that has restrained the example community's growth and expansion opportunities. Owned by a local logging and forest products corporation, the parcel was the historic staging and railcar loading area for milled lumber that was brought to the site from the company's other regional locations, and then packaged and loaded onto rail cars for shipment. Changes in the marketplace for lumber ended the company's local operations and the site was cleared. The bare site was held for future investment by the company for over a decade in anticipation of future real estate development and town growth.



The geography of the site is located on a gentle slope that is visible from most of the town. Due to this visibility, suburban-type regional retail center developments have found no support in the community. The site and its adjacent areas are in the path of growth and considered an important opportunity to influence new developments in the town in ways that are unique to the region's lifestyle and character. Due to the railroad track proximity, traditional for-sale housing and similar development uses had limited the parcel to a single commercial use.

Development Story

When the new mixed-use standards were established by the County, the parcel owners saw an opportunity to start over with their development planning. They conceptualized a cost-effective, uniquely-styled, and phased development of twelve railroad shed-styled buildings on a rustic but lushly landscaped site with exterior courtyards, patios, and trellis-covered overhead patios. The design they created drew inspiration in equal parts from traditional farmer's markets, fruit-packing shed, timber-frame railroad shops, and festival marketplaces. Materials included red corrugated metal roofs, wood board and batten siding, large industrial metal windows, and sliding barn type doors and raw interiors. The project has two phases. Phase one split the parcel down the middle. This created a ten-acre site and parking area for three roadside shed-styled buildings, a corner destination restaurant building, and a main building with a large 40,000 square foot floorplate main building. This building included 24 loft apartments with private view balconies, open-beamed rustic ceilings, and interior mezzanines. The ground floor is occupied by several retailers, a café, a regional supermarket's new "micro-market" concept store, and the new



Project Summary

- Developed bare parcel with utility infrastructure, roads, and public road modifications and upgrades.
- Built phase one, a 10-acre area of the parcel, to fully improved condition.
- Constructed one 40,000 square foot, two-story apartment and commercial building with outdoor landscaped patios.
- Constructed four 12-15,000 square foot retail/restaurant buildings with outdoor landscaped patios.
- Extensively landscaped and detailed the site with a forward-thinking design character and flexible layout.

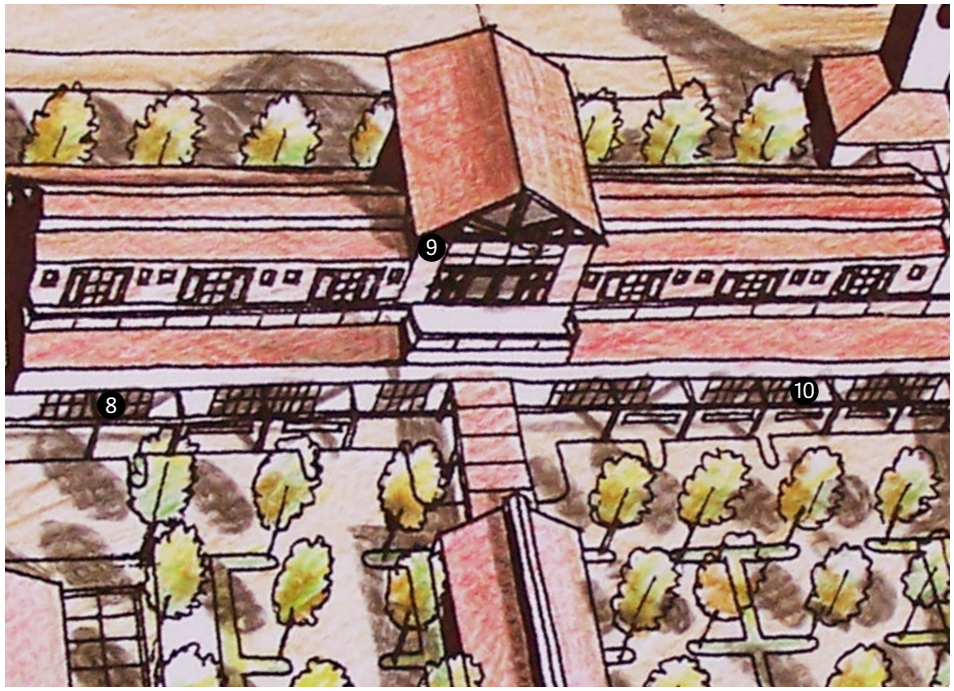
"Sierra Fitness Jamboree" – a fitness center concept that uses a jamboree-styled terrain of boulders, timber poles, rope walks, pools, and nature-inspired obstacle courses as equipment. The second 12-acre phase of seven buildings will expand the concept and allow additional uses, including up to 30 more apartments. Although railroad noise was a limiting development concern, there is generally no horn sound as the railroad does not operate their horn except in emergencies. Owners of the apartments state that the apartments have a long waiting list from the target middle-income demographic in the community who are seeking a more unique lifestyle than found in traditional garden apartments complex. Open-air parking for apartment residents is located in the rear of the site and is secured by a card-key gate specifically for tenant use. Landscaped areas include bioswale planters in the parking area, lush plantings of foothill native species, mature relocated oak trees, stained concrete paving, and reclaimed lumber for some building siding. The project earned a LEED silver ranking.

Ownership Structure

Corporate structured partnership between original forest products company and a regional development company. Institutional venture funding. Professionally managed and operated. County and Southern Pacific Railroad operational agreements.

Key Standards and Guidelines

1. **Lot Dimensions and Coverage:** Locate parking lots behind buildings, where possible, and to the side of buildings when a rear parking lot is not feasible.
2. **Landscaping:** Design site landscape treatments to be attractive, with a consistent design throughout the project.
3. **Parking Lot Design:** Distribute trees evenly throughout the parking lot to create a canopy effect in the parking lot and locate trees to divide and break up expanses of paving and long rows of parking spaces.
4. **Parking Lot Design:** Provide parking lot trees as follows: at least 1 tree for every 8 parking spaces in lots with 48 spaces or fewer; and at least 1 tree for every 10 spaces for parking lots with 49 spaces or more.
5. **Loading:** Design internal streets and driveways to accommodate vehicles commonly used for loading and unloading.
6. **Mobility and Access:** Large-scale mixed-use developments shall provide



an on-site system of pedestrian walkways, sidewalks, and bikeways that provide continuous access to all land uses within a project site and to land uses on adjacent properties.

7. **Site Amenities:** Design patios, plazas, mini-parks, squares, and greens to be a proportional size to the project.

8. **Windows:** Mixed-use buildings shall be designed with windows comprising 60 percent of the street-facing building facade between two feet and eight feet in height.

9. **Facades:** Design new infill buildings to reflect traditional design patterns of adjacent buildings. Creative interpretations of traditional elements are encouraged.

10. **Ceiling Height:** Design buildings with floor-to-floor heights similar to those in nearby historic buildings.

This prototype shows how large-scale mixed-use projects can reflect the industrial heritage of an area and create a pedestrian-oriented environment. The photo above shows project that accomplished both successfully.

Next Steps and Implementation Recommendations

Introduction

The publication of this document is an important step toward encouraging mixed-use development in the communities of El Dorado County. Taken together, they provide a nuanced framework for designing mixed-use developments. They also set the stage for further action by the County to promote mixed-use development described in "Next Steps" below. For example, the standards and guidelines in this manual are designed to be adapted in a community plan process. They can also be modified to support form-based codes if the County wishes to pursue that option for regulating development.

This section provides recommendations for subsequent actions the County can take to improve the regulatory setting for mixed-use development.

Next Steps

Community Plans

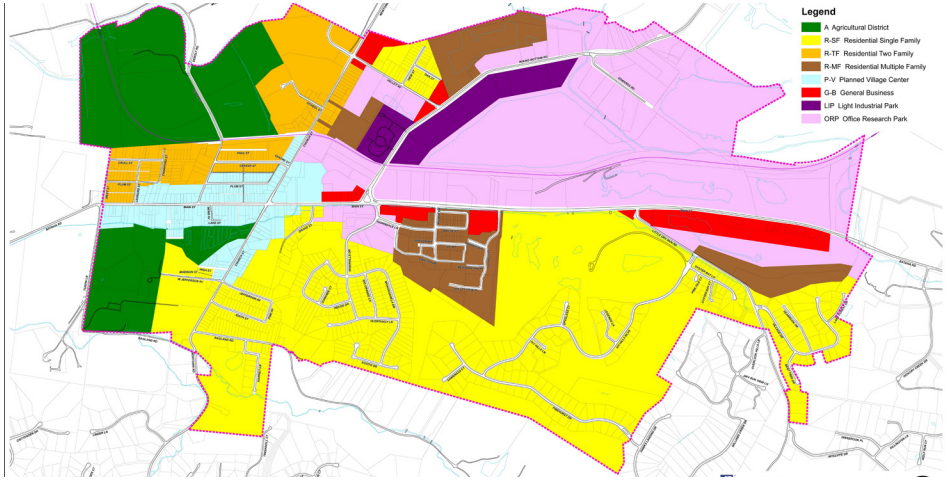
The standards and guidelines in this manual are designed to be applicable for all areas in El Dorado County zoned to allow mixed-use development, with

special attention given to areas where most of this zoning occurs. This includes the communities of Georgetown, El Dorado, Diamond Springs, Camino, Pollock Pines, and Shingle Springs. Though these standards and guidelines will work well for all of El Dorado County's communities, residents may decide they would like more input on the design and development of their individual communities.

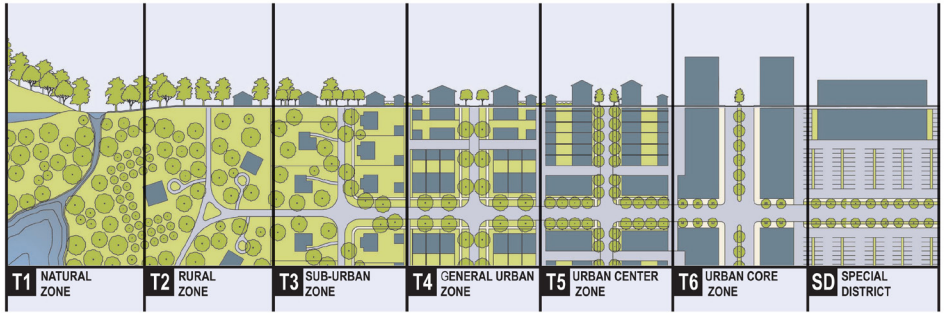
To customize the standards and guidelines and create new policies in the General Plan, residents could initiate a community planning process. Through the planning process, residents would define the boundaries of the community, establish a vision for the future, and develop general plan policies, new or revised zoning standards, and design guidelines to achieve their vision. Community members may decide to create mixed-use overlay zones that apply to entire areas, instead of using the mixed-use zoning districts in the Zoning Ordinance. Mixed-use overlay zones could allow for more clarity and flexibility in mixed-use development without the effort of future rezoning to allow for mixed-use development. The community would work in cooperation with El Dorado County planning staff on the community plans, and the County Board of Supervisors would adopt the completed community plan. The standards and guidelines in this manual are written with community plans in mind. They are clear and simple, and make an excellent starting point for community revisions, additions, and deletions.

Form-based Codes

Form-based codes use the physical form of the building, not the building's use, as the organizing principle of the development standards in the Zoning Ordinance. Form-based codes address the relationship between building facades and the public realm, the form and mass of buildings in relation to one another, and the scale and types of streets and blocks. Form-based codes work well for mixed-use development because they are not based on the idea that different uses should remain separate. As long as the mixed-use development adheres to the standards for building form, massing, and relationship, it is allowed by right. The standards and guidelines in this manual serve as a bridge between the typical Zoning Ordinance standards for mixed-use development and any future adoption of form-based codes. These standards require and guidelines recommend mixed-use developers carefully consider form, massing, and context when designing a mixed-use development, while still maintaining the traditional system of zoning. If El Dorado County decides to use form-based codes, everyone involved in the mixed-use development process will already be used to the concept and its impact on mixed-use projects.



Typical zoning ordinances divide the land in a community by use, shown in the example above. To accommodate mixed-use development, communities can create mixed-use zones, allow mixed-use development in certain districts, or create mixed-use overlay districts.



Many form-based codes use a transect like the one above. Land is zoned by intensity and building form, not use. Mixed-use development is allowed by default.

Other Recommendations

The County can use the recommendations in this section as additional tools to encourage mixed-use development. Unlike the "Next Steps," the recommendations do not need to be implemented in any particular order.

Adopt Historic Preservation Standards and Guidelines

Many of the structures in El Dorado County are historically significant and contribute to the character of the county and its communities. Developers may propose a mixed-use project on a site with a historic building. Currently, buildings on a site within a historic design review combining district would need to go through the design review process for any mixed-use project on that site. This process can slow the development process and make mixed-use development less attractive to developers. The County could adopt historic preservation standards and guidelines that would give developers a clear idea of what development is appropriate for sites with historic buildings. The County could retain the design review process, but the developer could enter the process with more confidence in their project. Alternatively, the County could eliminate the design review process if a project complied with enough of the historic preservation guidelines.

The developers of this building retained the historic facade while rebuilding the rest of the structure. New historic preservation standards could allow this modification to preserve historic character while removing barriers to mixed-use development.

Implement Performance Standards

Residents who live near commercial centers may object to any new mixed-use development. To ease their concerns, the County could adopt performance standards to measure and control noise, parking, lighting, and other development-related concerns. These standards would focus on the perceived impacts or concerns, like traffic or parking, rather than specific occupations or uses, to avoid the subtle bias that can sometimes arise.

Conduct Parking Supply and Demand Studies

Despite their small populations, parking demand in El Dorado County's communities is high. Many old buildings do not have their own parking lots, so on-street parking is often at a premium, even in districts where angled or perpendicular parking is the norm. Businesses place signs in front of on-street spaces to claim them and prohibit patrons of other businesses from using them. To sort out the parking issues in El Dorado County, the County could conduct a study of all available parking in downtown and commercial districts, and implement a parking management plan or "park once" district to encourage shared parking and to use parking more efficiently. When parking is developed at appropriate levels, uses can be more compact, and the community can add design amenities like streetscaping, which makes business locations more attractive.

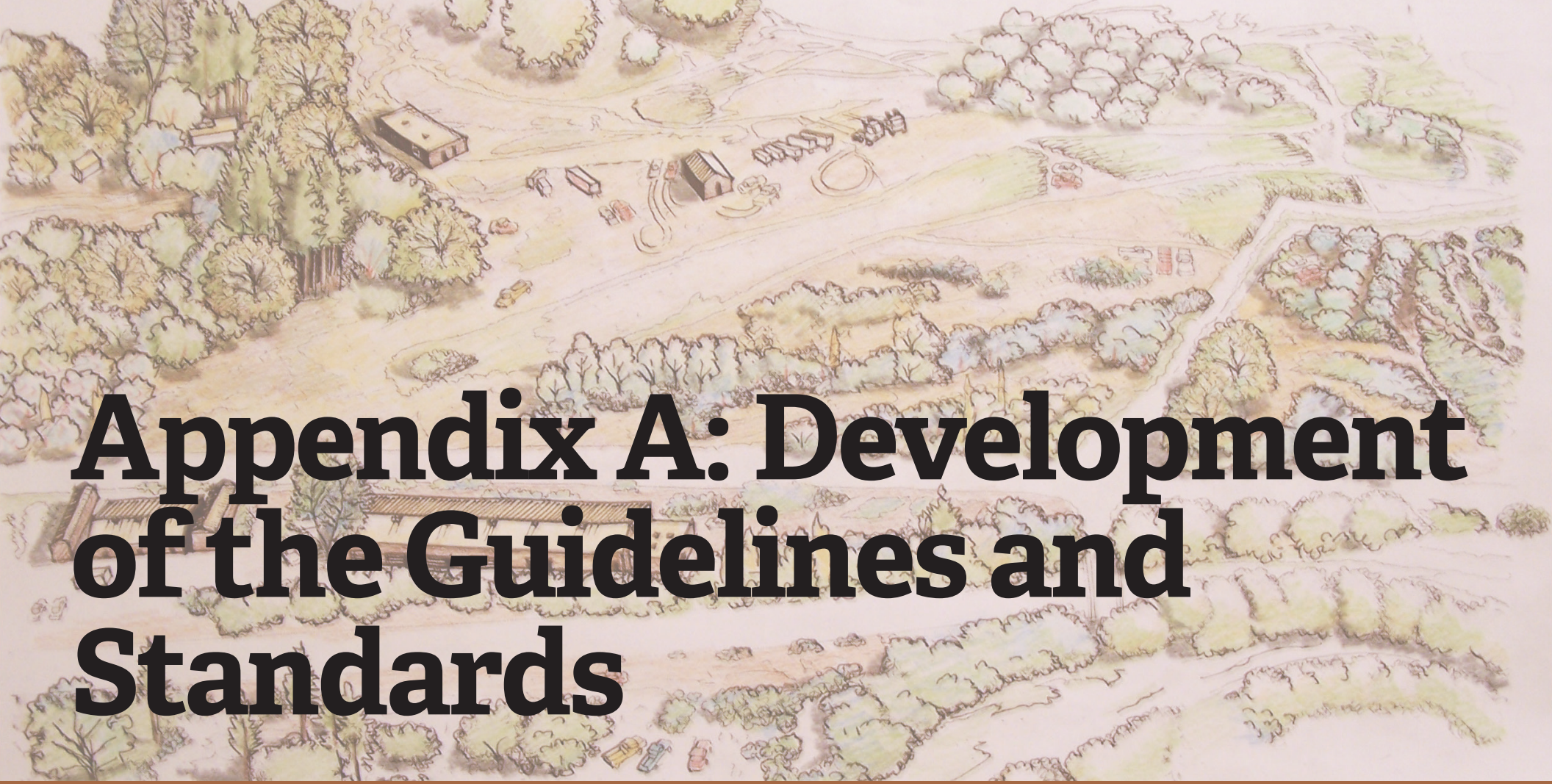
Reserved parking signs are common in El Dorado County's communities, even in parking lots.

Offer Limited Time Only Incentives

Mixed-use development, even with the aid of this manual, may not be planned and built in a timely manner. Incentives may be used to encourage and facilitate mixed-use development. Incentives could include a reduction or elimination of systems development charges, density bonuses, or parking requirement reductions. However, even incentives may not be enough to encourage a significant number of new projects. Some developers may assume that the incentives will be around forever and won't consider a project in the near future. To make incentives a catalyst for projects, the County should consider offering incentives for a limited time. The time frame could be for three to five years, and only apply to one community at a time. This time and location focus would concentrate developer interest and result in substantial, cohesive change for the targeted community.

Review the Design and Improvement Standards Manual

El Dorado County can help developers of mixed-use projects by ensuring streets, sidewalks, and related public areas provide safe and convenient access via walking and bicycling. El Dorado County's Design and Improvement Standards Manual sets the engineering standards for public property, including standards for street and road design. County staff should compare the standards for street design with the guidelines and standards in this manual to determine if the street design standards are supportive of mixed-use development. Special attention should be paid to the minimum right-of-way widths for streets, street design detail drawings, and internal subdivision street layouts. Staff may also amend the Design and Improvement Standards Manual to include standards and detail drawings for mid-block pedestrian crossings, mid-block pedestrian walkways (paseos), roadside bioswales, and alleys.



Appendix A: Development of the Guidelines and Standards

The Process

Capturing the unique character of El Dorado County's communities in the context of the mixed-use design guidelines was a challenging task, one that required a thorough process of documentation, consideration, and analysis. The project team, consisting of El Dorado County planners and planning consultants, used the following process for creating the Mixed-use Design Guide.

In order to define the character of the community, the project team started by conducting a simple, objective survey of the existing character of El Dorado County, developed an understanding of the historic character of communities in the county, and compared the historic and existing character of development. The project team surveyed the buildings and streets located in areas that allow mixed-use development and determined the degree of historical integrity of each community. The team defined the building and site development characteristics that helped to create each community and identified desirable elements that may have been lost over time. For example, the team noted that secondary structures may have been demolished, leaving lots with rear yards that are in fact perceived as being larger than they

were historically. This may suggest that the construction of new secondary structures would be in keeping with historic development patterns. The historic scale of a building and its density were also considered when establishing guidelines that would bring new structures to the area. For example, some communities now contain few early "historic" structures but instead are collections of buildings that have very little historical value and are bound together by older street layouts and groupings.

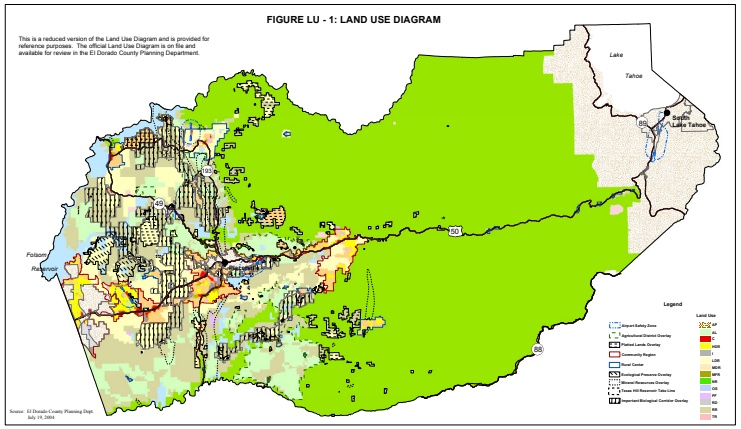
By comparing historic and present-day contexts, the project team developed some broader preservation and growth goals for the community and identified important characteristics that should be respected, enhanced, and celebrated. The degree of change between the historic character and present-day characteristic defines the degree of "integrity" of the community. This influenced standards, guidelines, and the design of future development. For example, in an area where the neighborhood is virtually intact with respect to its historic character, codes may be quite strict about the character of new construction, stipulating that they very closely match the context. In other areas where greater change has occurred, more flexibility in design may be allowed.

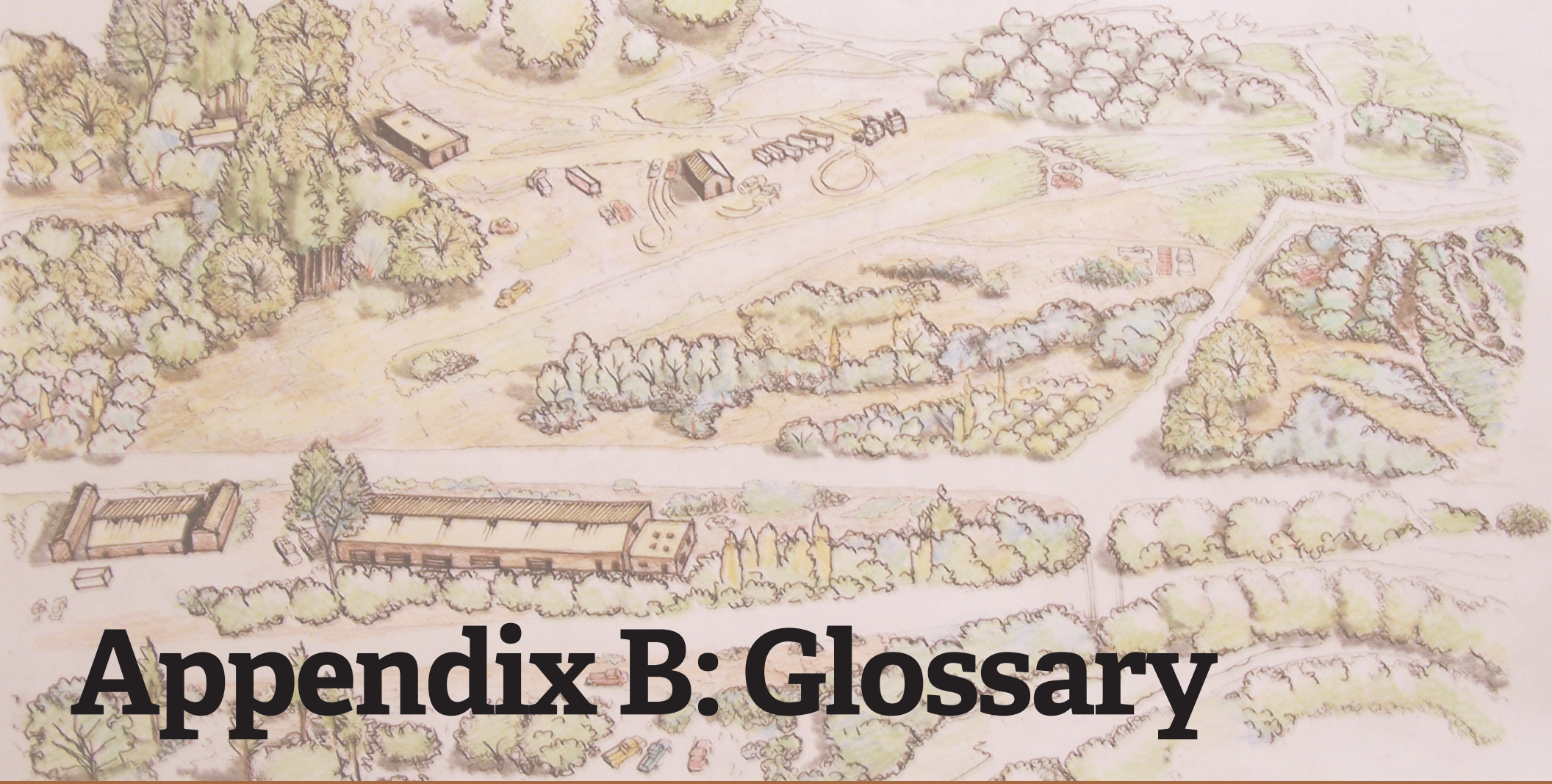
Relationship to Other Plans and Documents

This manual is one of several land use documents in El Dorado County. The County's overall land use strategy is established in the General Plan, adopted in 2004. The General Plan is the County's "blueprint" for development and addresses topics such as land use, transportation, housing, public services, public health, noise, open space, agriculture, forestry, parks, and economic development. The General Plan has a broad reach and provides direction on each topic area in its goals and policies. For mixed-use development the General Plan's Goal 2.1 states that El Dorado County should promote "mixed and balanced uses..." Several policies then get more specific, stating that "Mixed use developments... are permissible and encouraged..."

While the goals and policies of the General Plan provide policy direction, the Zoning Ordinance provides the detailed development standards. The Zoning Ordinance establishes zoning districts that correspond to land use designations in the General Plan. Each zoning district has design, development, and environmental standards for the uses allowed in the district. The El Dorado County Zoning Ordinance allows mixed-use development in five zoning districts: Commercial, Professional Office (CPO); Commercial, Limited (CL); Commercial, Main Street (CM); Commercial, Community (CC); and Residential, Multi-unit (RM).

This document complements the Zoning Ordinance and is intended to make the mixed-use development process easier. Zoning Ordinances are technical and dense, with few illustrations or examples. This document is intended to provide an illustrated guide that consolidates the required standards for mixed-use development, provides optional guidelines, illustrates the guidelines and standards, and presents design prototypes as examples.





Appendix B: Glossary

Glossary of Key Terms

Access: The right to cross between public and private property, allowing pedestrians and vehicles to enter and leave property.

Accessory Structures: A structure detached from a principal building, located on the same lot and incidental to the principal use.

Acre: A land area of 43,560 square feet.

Adaptive Reuse: Rehabilitation or renovation of existing building(s) or structures for any use(s) other than the present use(s).

Affordable Housing: Housing units where the occupant is paying no more than 30 percent of gross income for housing costs, including taxes and utilities.

Alley: A public or private way permanently reserved as a secondary means of access to abutting property.

Amenity: Aesthetic or other characteristics of a development that increase its desirability to a community or its marketability to the public. Amenities may differ from development to development, but may include such things as a unified building design, recreational facilities (e.g., a swimming pool or tennis courts), security systems, views, landscaping and tree preservation, or attractive site design.

Articulation: The dividing or segmenting of building elements into smaller components to create a sense of minor detailing. Articulation may be described in terms of roughness of materials, number of openings, patterns in materials, differences in materials, and massing.

Bicycle Facilities: A general term denoting improvements and provisions to accommodate or encourage bicycling, including parking facilities, maps, all bikeways, and shared roadways not specifically designated for bicycle use.

Bioswale: A landscape feature constructed of natural, water-permeable materials intended to channel and direct the flow of storm water runoff.

Block: A unit of land bounded by streets or by a combination of streets and public land, railroad rights-of-way, waterways, or any other barrier to the continuity of development.

Block Face: The portion of a block that abuts the street.

Board of Supervisors: A county's legislative body. Board members are elected by popular vote and are responsible for enacting ordinances, imposing taxes, making appropriations, and establishing county policy. The board adopts the general plan, zoning, and subdivision regulations.

Buffer Strip: A portion of a lot or a land area used to visually separate one use from another through the use of vegetation, screening, and distance; to shield or obstruct noise, illumination, visual or other incompatibilities or nuisances. A buffer is measured from the common property line of the different uses.

Building Coverage: A percentage figure referring to that portion of a lot covered only with principal and accessory buildings.

Building Footprint: The outline of the total area covered by a building's perimeter at the ground level.

Build-to Line: The line at which construction of a building facade is to occur on a lot. A build-to line runs parallel to, and is measured from, the front property line and is established to create an even (or more or less even) building facade line on a street or other defined set-back line.

Built Environment: The elements of the environment that are generally built by or made by people as contrasted with natural processes.

Business District: An urban downtown district that has design features and a diversity of uses not found in the commercial and office districts. Such uses include government buildings, cultural facilities, hotels, apartments, retail shops, and ancillary uses.

By Right: Uses requiring a permit with no public hearing required.

Commercial District: Neighborhood, community, highway/tourist, and service commercial zoning designations or their equivalent specific plan zoning designations.

Commercial Project: Projects that primarily accommodate large retail establishments, which may provide major durable goods shopping, and serve either local or regional needs of El Dorado County. Commercial projects contain a mix of supporting uses, including multi-family dwellings, office, entertainment and retail uses, medical offices and clinics, and civic uses. The mix provides viable pedestrian and bicycle access and circulation.

Community: A subarea of the city consisting of residential, institutional, and commercial uses sharing a common identity.

Compatible: Any property, use, or service that is capable of direct association with certain other uses because it is complementary, congruous, or otherwise non-detrimental.

Curb: A stone, timber, log/railroad tie, or concrete boundary usually marking the edge of a roadway or paved area.

Curb cut: The length of an opening in the curb along a roadway that allows vehicular access to an abutting project site.

Density: The number of dwelling units per unit of land.

Design Continuity: A unifying or connecting theme or physical feature for a particular setting or place, provided by one or more elements of the natural or created environment. The use of design continuity helps to avoid abrupt and/or severe differences with adjacent properties.

Design Review: The comprehensive evaluation of a development and its impact on neighboring properties and the community as a whole, from the standpoint of site and landscape design, architecture, materials, colors, lighting, and signs, in accordance with a set of adopted criteria and standards. Design review usually refers to a system set up outside of the zoning ordinance, whereby projects are reviewed against certain standards and criteria by a specially established design review board or committee.

Design Standards: A set of guidelines regarding the architectural appearance of a building, or improvement, that governs the alteration, construction, demolition, or relocation of a building or improvement.

Developer: That person who is improving a parcel of land within the city and who may or may not be the owner of that property.

Development: Any human-caused change to improved or unimproved real estate that requires a permit or approval from any agency of the city or county, including, but not limited to, buildings or other structures, mining, dredging, drilling, grading, paving, excavation, or drilling operations, and storage of materials.

Development Standards: Regulations that limit the size, bulk, or siting conditions of particular types of buildings or uses located within any designated district.

District: A section or sections of the city for which the regulations and provisions governing the use of the buildings and lands are uniform for each class of use permitted therein.

Divided Lite: Division of window glass by the use of muntin bars. Divided lite windows may be authentic, where muntin bars separate individual panes of glass, or simulated, where muntin bars are applied to each side of a single pane of glass.

Drive-up Facility (also known as "drive-in" or "drivethrough" facility): An establishment that by design encourages or permits customers to receive services, obtain goods, or be entertained while remaining in their motor vehicles.

Easement: A grant by a property owner to the use of land by the public, a corporation, or persons for specific purposes as the construction of utilities, drainage ways, and roadways.

Facade: The exterior wall of a building exposed to public view or that wall viewed by persons not within the building.

Facade Pass-through: A passage way for vehicles with appropriate dimensional clearances to allow rear or internal parking lot access from a street to a parking and utility area. The building facade would be at least 2+ stories and have usable floor space above the pass-through opening.

Flag Lot: Lots that are approved with less frontage on a road easement or right-of-way than is normally required under the development standards for the zone and where the "flag pole" portion of the lot is used as an access corridor.

Floor Area Ratio: The total floor area of all buildings or structures on a zoning lot divided by the area of said lot.

Focal Point: A visual landmark. It commonly identifies the center of a project or area for public gathering, and contributes to establishing the character of the project. The focal point may be a statue, a plaza, a pavilion, or some other structure or focused area.

General Plan: A comprehensive declaration of goals, policies, and programs for the development of the city and which has been adopted by the city council.

Ground Floor: The first floor of a building other than a cellar or basement.

Guideline: A recommended level of appropriate activity that will preserve the historic and architectural character of a structure or area.

Hardscape: Typically involves street infrastructure, including paving elements such as roads, sidewalks, fountains, shelters, and medians.

Height Limit: The vertical limit of a structure measured from the average ground level at the base.

Historic District: An area designated as a "Historic District" by ordinance and which contains within definable geographic boundaries, properties or buildings, that may or may not be landmarks, but which contribute to the overall historic character of the designated area.

Household: A family living together in a single dwelling unit with common access to, and common use of, all living and eating areas and all areas and facilities for the preparation and storage of food within the dwelling unit.

Human Scale: The relationship between the dimensions of the human body and the proportion of the spaces that people use. This is underscored by surface texture, activity patterns, colors, materials, and details. The understanding of walking distances and spatial perceptions at a human scale determines the most positive placement of buildings, and the physical layout of the community.

Infill: Development or redevelopment of land that has been bypassed, remained vacant, and/or is underused as a result of the continuing urban development process.

Internal Street: Public or private streets located internal to a project site, and which may connect at one or both ends to a perimeter public street. The internal street system is intended to provide vehicle, pedestrian, and bicycle access and circulation to all uses within a project site.

Land Use: A description of how land is occupied or used.

Land Value: The value of land as established for the tax base by the property appraiser's office.

Landscape Buffer: The use of landscaping, berms, fences, walls, or any combination of these, to buffer and screen a more intense land use from an adjacent, less intense land use.

Lighting: Any fixed source of light emanating from a man made device, including but not limited to, incandescent mercury vapor, metal halide, LED, or sodium lamps, spotlights, street lights, construction, or security lights.

Live/Work Unit: A residential use type that combines a dwelling and a commercial space under single ownership in a structure.

Lot (Parcel): An individual, legal parcel of land intended to be separately owned, developed, and otherwise used as a unit and does not include an administrative parcel used by the Assessor for tax purposes.

Lot Frontage: The horizontal distance between the side lot lines measured at the point where the side lot lines intersect the street right-of-way. All sides of a lot that abuts a street shall be considered frontage. On curvilinear streets the arc between the side lot lines shall be considered the lot frontage.

Massing: The distribution of building volumes in regard to the building's relative location on the site and the height, width, depth of the elements of a building relative to each other.

Mixed-use: Properties on which various uses, such as office, commercial, institutional, and residential are combined in a single building or on a single site in an integrated development project with significant functional interrelationships and a coherent physical design. A "single site" may include contiguous properties, and shall include separate lots created for commercial and residential components.

Mullion: A vertical divider in a window.

Noise: Any sound that is undesirable because it interferes with speech and hearing, or is intense enough to damage hearing, or is otherwise annoying. Noise, simply put, is "unwanted sound."

Nuisance: Any use or structure which is injurious to health and safety, or is indecent or offensive to the senses, or an obstruction to the free use of property so as to interfere with the comfortable enjoyment of life or property.

Odor: A distinctive smell, possibly unpleasant.

Off-street Parking: Space occupied by automobiles on premises other than streets.

On-street Parking: The storage space for an automobile that is located within the street right-of-way.

Open Space: Includes all landscaped areas, yards, patios, swimming pools, putting greens, and other recreational-leisure facilities; areas of scenic or natural beauty and habitat areas; hiking, riding, or off-street bicycle trails; and landscaped areas.

Orientation: The direction that various sides of a building face.

Parking Lot: An authorized area not within a building where motor vehicles are stored for the purposes of temporary, daily, or overnight off-street parking.

Party Wall: A wall common to but dividing contiguous buildings; such a wall contains no openings and extends from its footing below the finished ground grade to the height of the exterior surface of the roof.

Pedestrian Pass-through: A feature providing unrestricted public pedestrian access through a building or structure or between buildings or structures.

Pedestrian-oriented Development: Development designed with an emphasis primarily on the street sidewalk and on pedestrian access to the site and building, rather than on auto access and parking areas. The building is generally placed close to the street and the main entrance is oriented to the street sidewalk. There are generally windows or display cases along building facades which face the street. Typically buildings cover a large portion of the site. Although parking areas may be provided, they are generally limited in size and they are not emphasized by the design of the site.

Perimeter: The aggregate of frontage lines of the surrounding lots.

Perimeter Street: A public street that abuts the perimeter of a project site or zone. Perimeter streets provide access to the internal street system, providing access and circulation to principal uses located in the interior of the project site.

Permit (Special Use): A specific approval for a use that has been determined to be more intense or to have a potentially greater impact than a permitted or conditional use within the same zoning district.

Phasing Plan: A graphic and narrative document that displays the sequence and/or timing of intended project. Phasing is used to sequence the provision of public facilities.

Planned Development: Land under unified control to be planned and developed as a whole in a single development operation or as a programmed series of development operations or phases. A planned development is built according to general and detailed development plans that include not only streets, utilities, lots, and building locations, but also construction, use, and relationships of buildings to one another, and plans for other uses and improvements on the land, such as common or public open space areas. A planned development includes a program for the provision, operation, and maintenance of such areas, facilities, and improvements that will be provided for common use by the occupants of the planned development or for use by the general public, if applicable.

Planner: Under general supervision, performs professional duties in current or long-range planning and performs related work as required.

Planning Commission: A body, usually having five to seven members, created by a city or county in compliance with California law, which administer planning and land use regulations for the city or county and provide recommendations on a wide array of land use-and land-use policy issues.

Private Realm: The area in a community belonging to or restricted for the use or enjoyment of particular persons. The area not owned by a government agency.

Private Street: Any right of way or area set aside to provide vehicular access within a development that is not dedicated or intended to be dedicated to the city and that is not maintained by the city.

Project: A particular development on an identifiable parcel of land.

Property Line: Any line bounding a lot.

Public Facility: A use conducted by, or a facility or structure owned and managed by, the government of the United States, the State of California, or the County of El Dorado that provides a governmental function, activity, or service for public benefit.

Public Realm: The area in a community meant for public use. Parks and streets are common areas of the public realm.

Residential Density: The number of dwelling units per gross area devoted to residential development.

Right-of-way: A public or private area that allows for the passage of people or goods. Right-of-way includes passageways such as freeways, streets, bike paths, alleys, and walkways. A public right-of-way is a right-of-way that is dedicated or deeded to the public for public use and under the control of a public agency.

Rural: A sparsely developed area where the land is primarily used for farming, forestry, resource extraction, very-low density residential uses (one unit per 10 acres or less) or open space uses.

Setback: The minimum distance by which any building or structure must be separated from the street right-of-way or lot line.

Sign: A structure or device designed or intended to convey information to the public or to identify or direct attention to a business, profession, commodity, service, or entertainment in written or pictorial form.

Specific Plan: A definite statement adopted by ordinance of policies, standards, and regulations, together with a map or description defining the location where such policies, standards, and regulations are applicable pursuant to the requirements of the State.

Standard: Requirements in a zoning ordinance that govern building and development as distinguished from use restrictions (i.e., site-design such as lot area, height limit, frontage, landscaping, floor area ratio).

Street: A public thoroughfare (street, drive, avenue, boulevard) that has been or is intended to be dedicated for public use and has been accepted or is acceptable into the state system.

Streetscape: An area that may either abut or be contained within a public or private street right-of-way or access way that may contain sidewalks, street furniture, landscaping or trees, and similar features.

Subdivision: The division of land into two or more lots. A development consisting of subdivided lots.

Transitional Area: An area in the process of changing from one use to another or an area which functions as a buffer between land uses of different types or intensity.

Trash Enclosure: An accessory use of a property where trash and/or recyclable material containers, or any other type of waste or refuse container is stored.

Undergrounding: The placement of utility lines below ground, with the removal of above-ground poles, wires, and structures as applicable.

Unit (Housing): A single unit providing complete, independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking, and sanitation.

Urban: Of, relating to characteristic of, or constituting a city. Urban areas are generally characterized by moderate and higher-density residential development (i.e., three or more dwelling units per acre), commercial development, and industrial development, as well as the availability of public services required for that development, specifically central water and sewer, an extensive road network, public transit, and other such services (e.g., safety and emergency response). Development not providing such services may be "non-urban" or "rural."

Zero Lot Line: A planned unit development in which a structure is sited on two or fewer lot lines with no yard, permitting site design flexibility while increasing the quantity of usable open space on the lot.

Zoning: The division of a city or county by legislative regulations into areas, or zones, which specify allowable uses for real property and size restrictions for buildings within these areas. Also a program that implements policies of the General Plan.

Zoning District: Any section or sections of the city or county for which the regulations governing the use of land and the use, density, bulk, height, and coverage of buildings and other structures are uniform.

Zoning Ordinance/Code: An ordinance enacted by the city or county pursuant to State law that sets forth regulations and standards relating to the nature and extent of uses of land and structures, which is consistent with the comprehensive plan of the city, includes a zoning map, and complies with the provisions of State law.