

**DRAFT**

**EL DORADO HILLS**

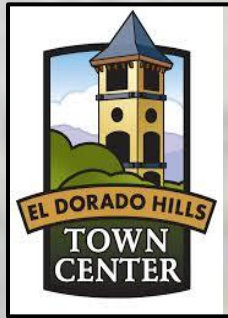
**TOWN CENTER EAST**

**Urban Infill Residential Area**

**RESIDENTIAL DESIGN GUIDELINES**

and

**DEVELOPMENT STANDARDS**



**Revised June 21, 2017**

# 1. INTRODUCTION AND PURPOSE

In adopting the nearly 4,000 acre El Dorado Hills Specific Plan, the County of El Dorado approved a site along US Highway 50 at the El Dorado Hills Boulevard/Latrobe interchange to be designated in the Specific Plan as Villages T and U. Known as El Dorado Hills Town Center, these villages were “intended to provide for commercial uses of greater variety and at a higher intensity than provided elsewhere in the Specific Plan area or in the greater El Dorado Hills/Cameron Park area.” The site is currently zoned General Commercial/Planned Development (GC/PD) and is secured by a Development Agreement between the property owner and the County of El Dorado. The Town Center ultimately is expected to be the “hub of economic development in western El Dorado County” and “a major mode of economic and retail activity on the eastern side of the Sacramento Metropolitan region.”

Government Code section 65890.1 and the El Dorado General Plan Housing Element encourage land use patterns that balance the location of employment generating uses with residential uses in order to reduce commuting. The construction of a high density residential component in close proximity of the retail commercial uses developed at the Town Center would substantially improve the jobs-housing balance, stated in Table HO-13 of the Housing Element to be well below the minimums suggested in the State General Plan Guidelines.

Neither the existing El Dorado Hills Specific Plan nor the El Dorado Hills Town Center East Development Plan currently include high density residential development to (1) complement the commercial development, (2) provide housing for employees, and (3) reduce traffic impacts by providing proximity of residential to shopping and employment opportunities. This condition prompts the need for amendments to the County documents, and within these amendments it is necessary to include standards, design guidelines, and other design policies that will enable residential uses within Planning Area 2 to conform to the level of quality and content shown in other Planning Areas within Town Center East.

## 1.1 Purpose

The purpose of these Design Guidelines and Standards is to direct the orderly development of a 4.6-acre parcel at the northwest corner of Town Center Boulevard and Vine Street in El Dorado Hills Town Center East (TCE), designated in the General Plan as an urban infill residential area. These guidelines and standards are prepared in coordination with the goals and policies of the El Dorado Hills Specific Plan to serve as part of the El Dorado Hills Town Center East Development Plan. The guidelines and standards set forth here are meant to provide direction for modifications to Planning Area 2 of the Town Center East PD Plan to include multifamily residential use for the urban infill residential area located between Town Center Boulevard and Mercedes Lane in the Town Center East Development within the project area is intended to conform to the overall theme and standard of quality in the TCE. The standards to be applied are expressed by the El Dorado County Zoning Ordinance, as implemented in the Planned Development Overlay Zone and amplified by these Residential Development Guidelines and Standards.

These Development Standards and Guidelines shall (1) provide information regarding design for potential developers within this Plan Area within Town Center East and (2)

provide Planning Staff with a reference document for use in reviewing high density residential project proposals within the urban infill residential area.

### 1.2 “Main Street” Character and the Natural Setting



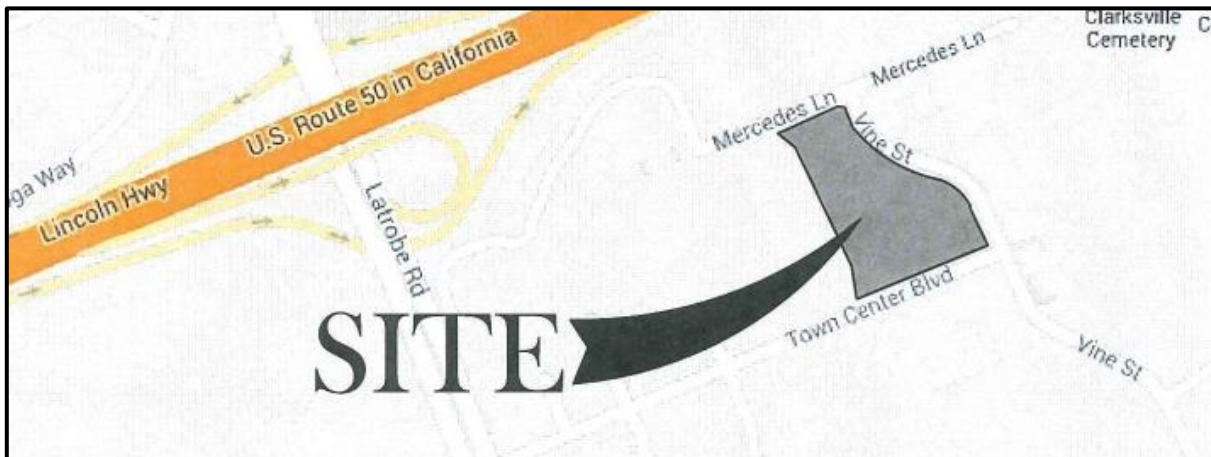
The subject site lies at the heart of Town Center East, overlooking the Central Creek Corridor and comprising critical segment of Town Center Boulevard as it approaches the intersection at Vine Street at the movie theater. The “main street” character that is embodied in the existing Town Center Boulevard must be continued consistently across the Central Creek Corridor bridge and across the new multi-family



project streetscape. It is the intent of these Guidelines to maintain and specify an architectural, landscape architectural, lighting, and signage program that ensures consistency along this corridor at the heart of the community. In this way, residential uses will be effectively integrated into the existing commercial and open space feel of El Dorado Hills.

### 1.3 Site Location

The urban infill residential area described in the following guidelines is located in the Planning Area 2 of Town Center East, from north to south between Mercedes Lane and Town Center Boulevard, and from east to west between Vine Street and the Central Creek Corridor.





## Site Location



Site Aerial



Site as seen across Central Creek Corridor

### 1.4 Exceptions

These Guidelines and Standards are specifically intended to pertain specifically to multifamily residential use within the urban infill residential area. Any and all other existing uses (i.e., Commercial uses) shall remain under the existing Town Center East Development Plan Standards and Guidelines as approved by the Board of Supervisors on August 15, 1995 and applicable revisions thereafter.

Furthermore, any design standards or elements not specifically addressed in this document shall revert to regulations and standards in the County Zoning Ordinance, the El Dorado Hills Specific Plan, and/or the Town Center East Development Plan. Project reviews and approvals shall follow procedures described in the existing Town Center East Development Plan Standards.

## 2. RESIDENTIAL DESIGN GUIDELINES

### Residential Architectural Guidelines

**2.1 Architectural Goals and Objectives** - The Town Center East Development Plan architectural design constitutes a critical component of the project area that frames and determines the overall character and feel of both the project area and the surrounding neighborhood. To reinforce the Vision and guiding principles of Town Center East, the architecture should be designed to meet the needs of its residents and visitors and serve to attract the kinds of residents that will help maintain the high quality of living in the Town Center.

Following are the key goals and objectives of the architectural and site design of the Specific Plan:

2.1.1 **Sustainable Design**: Buildings should be designed to minimize energy use and provide a healthy, desirable living environment (see Section 3.4 for specific requirements).

2.1.2 **Quality and Character**: Architecture should be consistent and compatible with the context of the existing community and neighborhood. The buildings should be compatible with the existing buildings within both Town Center East and Town Center West. Elements of the buildings should incorporate the use of high quality materials and create buildings that are similar in quality to the existing Town Center developments. Submittal of proposed plans are to be reviewed by the Town Center East Design Review Committee.

2.1.3 **Livability**: Building unit and space layout and design should be orchestrated to create an enjoyable living environment, reflecting present-day conveniences and lifestyles for its future inhabitants.

2.1.4 **Neighborhood Visual Impact**: The “living places” (i.e., places that are normally occupied) of buildings should be located around the perimeter of the site and parking located on the interior of the site to maximize visibility of architectural character and minimize the impact of parking as seen from the surrounding streets and from the Town Center East Central Creek Corridor.

2.1.5 **Promotion of Use of Outdoor Spaces**: Site design should create and promote a healthy and safe walking environment through the use of paths, landscaping, and signage. Site design, layout, and siting also should serve to create a seamless transition between the project internal open spaces and the Town Center East public open spaces.





## 2.2. Architectural Character

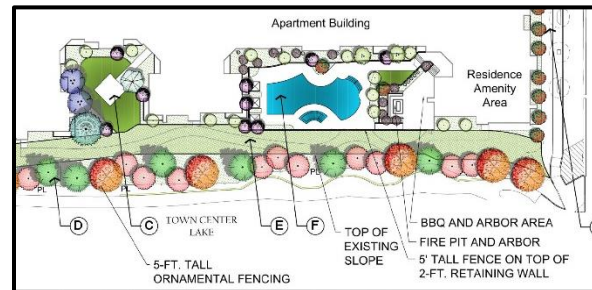


The overall architectural character of Town Center East should be derived from the simple, utilitarian form and economy of means necessary in an earlier time in El Dorado County, expressed through the use of modern materials and contemporary ideas in architecture. The same structural clarity and invention of earlier days will be encouraged at

Town Center East in today's vernacular.

- 2.2.1 Buildings shall have substance and durability in both reality and appearance. A sense of "permanence" should characterize the image projected by all structural elements on site.
- 2.2.2 Architectural massing should be simple and regular, reflecting forms and character of earlier historic buildings in the region and within the Town Center.
- 2.2.3 Layout and Placement of Building Footprints should be orchestrated to create plazas, courtyards, and/or open private areas for tenants and their guests both in site interior areas and on sides connecting with the Central Creek Corridor system.

- 2.2.4 Architecture and site design shall respond to the regional climate by providing "indoor-outdoor" transitional spaces. Covered, shaded, and protected areas create visual depth and interest while providing shelter and appropriate pedestrian-scaled outdoor spaces for the residents and visitors. Some examples might include porches, patios, verandas, courtyards, loggias, trellises or arbors that create a covered walkway or gathering area to protect pedestrians from sun and provide aesthetic value.



**2.3 Site Planning** - "Site planning shall enhance and integrate building architecture, landscape architecture, color and signage through all stages of design." (Town Center Design Guidelines)

## 2.4 Architectural Design and Materials



- 2.4.1 Design Variation--. The effect of large monolithic building forms should be avoided by changes in color, texture and materials. Changes in roof plane, recesses in the façade, varied building setbacks, distinguishing chimneys or elevators, and other architectural techniques should be used to give

the buildings interest and avoid the adverse effect of long, unchanging facades.



2.4.2 ***Building Entries***--“Individual projects shall provide a well-articulated, identifiable entry sequence from street to building.” (Town Center Design Guidelines) Entries should be enhanced by landscaping, paving, and effective signage features, be logically located and easily recognizable.

2.4.3 ***Design Materials***—Design elements should include interesting use of varied and durable materials and colors that respond to the surroundings, both natural and man-made. Classic elements such as stucco, heavy timbers, brick or stone veneer are examples that replicate the surroundings and elements common to El Dorado County. Green materials that withstand local environmental conditions are strongly encouraged.



2.4.4 ***Roof Materials*** should be consistent with historical influences commonly seen in the Northern California and should be compatible with the overall style and character of the building façade. Wood shakes, composite shingles, and metal channeled roofing materials are examples of appropriate decorative roof areas. Flat roofs screened from street view by use of parapets or other roof forms are exempt from these requirements. Red clay tiles of the Spanish influence in Southern California are not acceptable. Consideration should be given to roof colors and materials that exceed Energy Star requirements to reduce the heat island effect.



2.4.5 ***Building Colors***--Exterior colors and materials should be used to define the building form, details and massing. For the most part, more natural earth tones for large building elements should be maintained, with the potential for use of brighter colors as small detail accents.

## 2.5 Residential Lighting Guidelines

Lighting shall include project and building entry lighting, parking lot lighting, pathway lighting, and accent lighting for landscaping and architecture. Security lighting also should be included where necessary.

2.5.1 Lighting shall be designed to be consistent with the County’s policies and Lighting provisions as found in the County Ordinance and in the Town Center East Development Plan—Appendix 4: “Specific Lighting Criteria.”

The following guidelines and standards shall also apply:

- 2.5.2 Lighting fixtures shall be designed to deflect light and glare from the viewsheds of adjacent parks and open space areas. Light from development in the Specific Plan Area shall not extend beyond the boundaries of the Plan Area. Cutoff type fixtures are preferred to minimize light spillage and glare. All lighting will comply with most recent Title 24 and Cal Green requirements.



3.1.3 Lighting levels of outdoor lighting should not draw attention to the light source. Lighting fixtures in open parking areas shall be mounted with the light source parallel to the ground.

3.1.4 Street Lighting--Any additional public and private street lighting fixtures, if required, shall be consistent with standards shown in Appendix 4 of the Town Center East Development Plan.

- 2.5.5 Exterior architectural lighting shall use indirect light sources. Typically permissible lighting includes wall washing, overhead down lighting, interior lighting that extends outside, and decorative wall-mounted lights that are integral with the building.
- 2.5.6 Wall-mounted security area lighting may be used in screened service areas when direct light and glare can be contained within these areas.
- 2.5.7 Project common areas, courtyards, arcades, swimming pool areas, and seating areas shall be adequately lighted to promote pedestrian use and safety. Special lighting effects may be created in these areas, provided it is consistent with the character and function of the area.
- 2.5.8 Pedestrian stairs or ramps shall be adequately illuminated to draw attention to elevation changes and handrails. Bollards may also be used to supplement other pedestrian area lighting.
- 2.5.9 Photometric Plans--If an Architecture and Site (A&S) application is required in the future for modifications that would affect lighting, site lighting photometric plans shall be included in the site plan application.



2.5.10 Landscape lighting shall be designed for energy efficiency. LED fixtures will be used in common areas and other appropriate locations. Lighting design is encouraged to use ENERGY STAR qualified hard-wired fixtures. All hard-wired lighting shall employ programmable photo-control or astronomical time-switch controls that automatically switch off when daylight is available.



## 2.6 Residential Landscape Guidelines

These Landscape Design Guidelines form the framework and basis for landscape design and implementation over the approximately 4.6-acre urban infill residential area. Landscaping will constitute a critical and defining component of this project in an effort to create a residential community that is compatible with the character, style, and quality of the Town Center area of El Dorado Hills. These landscape guidelines will address such issues as the appearance, nature, and sustainability measures required for the urban infill residential area. It is the intent to maintain consistency with the overall goals and principles of the Town Center East Development Plan, and to expand on them with additional standards and guidelines. It is further the intent of these landscape guidelines to outline a project that achieves the following objectives and standards:

2.6.1 Basic Objective – Landscaping will be planned, designed, and implemented to achieve results that reflect intelligent, aesthetic and sustainable practices. Prudent landscape design and implementation will result in reduced energy consumption, reduced greenhouse gas emissions, and the ability of the built landscape environment to sustain itself functionally and ecologically more successfully than landscapes designed under other “conventional” methods.

These community landscape elements include guidelines that define the character, aesthetics and functionality of the streetscape, amenity areas, open space system, walkways and other planted areas within the Plan Area. The overall quality of landscape design for the urban infill residential area as described in these Guidelines shall be guided by the implementation of landscape standards applied consistently throughout the Plan Area.

### 2.6.2 Landscape Character and Theme

*“The Center shall present a uniform landscaping, lighting, and signage treatment to ensure a desirable, attractive and safe environment,” (EDH Specific Plan)*

The landscaping component is to be designed to reflect the environment and character of this region in El Dorado County, with special attention to the natural look that gives the area its distinct identity. The landscape element of the urban infill residential area should achieve a visual balance between informal open space landscaping and more formal landscape elements— such as streetscape trees, project entry statements, and the project amenity areas—that help define and enhance the character of the residential community.

2.6.3 Low Impact Development- The landscape program should coordinate design efforts with site civil engineering design, and to the extent practical, reinforce the principles of Low Impact Development (LID) for storm drainage, runoff infiltration and groundwater recharge for the project open space areas by such measures as: (1) management of rainfall by using landscape design techniques and materials that infiltrate, filter, store, evaporate, and/or detain runoff as close to its source as feasible, (2) direction of storm water capture through small, cost- effective landscape features located at the site level, and/or (3) treatment devices as approved by the County.

2.6.4 Heat Island Mitigation - Parking areas (with the exception of parking structures), plazas, other hardscape areas and other potential “heat islands” should be mitigated by trees, vegetation, and other landscape screening/shading devices to (1) reduce heating and cooling energy use, (2) filter air pollution and greenhouse gas emissions, (3) remove air pollutants, sequester and store carbon, and (4) help lower the risk of heat-related illnesses.

2.6.5 Strategic Climate Control - Use of strategic shading techniques, plant selection, plant placement and use of deciduous tree species prudently in the landscape will reduce solar heat gain in the summer and maximize passive solar warming in winter months, especially for lower floor units of a high density, multi-story residential project. Where possible, careful and strategic planting and structure shading is encouraged around buildings and other project areas to (1) create south and west-facing shade during hot seasons and (2) allow sunlight in during cool seasons.

2.6.6 Fire Access – Planting shall be strategically located around buildings and throughout the project site such that fire vehicle and equipment access is facilitated. Landscape design and proposed tree locations shall be coordinated with the local Fire Marshal to ensure that adequate building access is provided to accommodate the Fire Department’s needs.

2.6.7 Aesthetics and Identity

The urban infill residential area’s landscaping should also emphasize design that establishes a strong identity and character of quality and distinction that typifies a high quality Town Center community. This includes

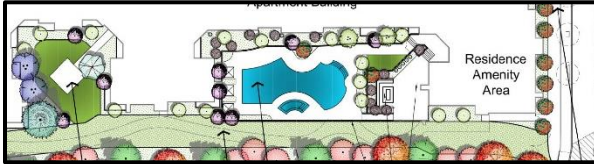
such components as outdoor furniture, fences and walls, project entry features, plant selection, distinctive focal features, thematic lighting, screening/mitigation of undesirable views, site directional and identification signage, and other elements associated with tasteful landscape aesthetics.



2.6.8 Landscape Art – “Works of art are encouraged in the development of outdoor spaces. The use of pools, sprays, fountains and sculptures and other elements of visual interest such as flags, banners, hangings, etc., are encouraged to be used where appropriate. (Town Center Design Guidelines)

2.6.9 Streetscapes - Streetscape design and implementation along Town Center Drive shall remain conformed to the existing Town Center landscape plan, guidelines and standards as established and installed along Town Center Boulevard.

2.6.10 Walls and Fences – “All walls and fences shall be of a design compatible with adjacent architecture. Height of walls and fences shall be as required for their intended use...” (Town Center Design Guidelines)



4.1.11 **Interior Courtyards, Pools and Common Areas** –

“Opportunities shall be provided for outdoor and indoor public activity areas, including space for cultural

events, organizational meetings, recreational areas, and public seating accommodations.” (EDH Specific Plan).

High density residential housing necessitates an intelligent and effective treatment and design of open space areas and common courtyards. Appropriate shading, screening, and landscape furniture should be used to create a “human scale” within these areas surrounded by buildings. Arbors, decorative retaining walls, dining areas, patios, fire pits, benches, tables, well-designed swimming pools, and other features should be used to define and create inviting spaces and encourage outdoor use within the high density community. (see Section 3.2.4 above)

2.6.12 Paving and Hardscape - Where appropriate or practical, the use of special paving materials such as, interlocking pavers, exposed aggregate, or other such materials is recommended in areas of high pedestrian activity or community gathering to create design interest and a sense of quality in these key locations. If soil conditions allow, paving areas may utilize permeable paving techniques to reduce storm water run-off.



Handyman

2.6.13 Landscape Furniture – “All street furniture (bus shelters, benches, trash receptacles, etc.) within the Plan Area should utilize a common design theme as provided for in the Design guidelines.” (EDH Specific Plan)



Theme Landscape Furniture





2.6.14 Landscape Plant Palette – *“The Design Guidelines provide for a plant species mix which is complementary to the native species and yet compatible with the scope and scale of the development.”* (Town Center Design Guidelines)

The proposed landscape planting schedule associated with planting plans shall be provided with landscape plans and shall include a breakdown by material type (i.e., trees, shrubs, etc.) and each plant species listed shall include the associated water use expectation (i.e., “Very Low,” “Low,” “Medium,” etc.).

### 3 RESIDENTIAL DEVELOPMENT STANDARDS

**3.1 Permitted Uses** - The following permitted use(s) is added to those uses listed in Section 6.2 of the existing Town Center East PD Plan's Development Standards and those uses shown in this area in the El Dorado Hills Specific Plan (Dec. 23, 1987).

**USE ADDED:**

High Density Residential-Multifamily apartments with densities up to a maximum of 47 dwelling units per gross acre.

**3.2 Maximum Residential Building Height--60 feet.** Buildings within the urban infill area Residential Area may be multiple stories, up to a maximum of five (5) stories in height. Building heights shall be measured, calculated, and determined according to standards set forth in the County Zoning Code ("Code") found in Section 17.54.020. Exceptions to this height requirement includes such structures as chimneys, spires, elevators, mechanical and stair housings, flag poles, towers, vents, parapets, and decorative features. These structures may exceed the 60-foot limitation by a maximum of an additional 15 feet.

**3.3 Maximum Parking Structure Height--60 feet, 5 Tiers**—The measurement of the first tier starts at the lowest level of the garage and continues 360 degrees to the immediate level above. Subsequent tiers are measured starting at the completion of the previous tier.

**3.4 Minimum Setbacks**—Minimum setback measurements shall be to *the main building line from the property line*. Projections beyond the building face, such as patios, stoops, balconies, and overhangs are permitted to have a zero setback from the property line.

**3.4.1 Minimum Setback from Town Center Boulevard— 0 feet**

**3.4.2 Minimum Setback from Vine Street (private)— 4 feet**

**3.4.3 Minimum Setback from Mercedes Lane (private)— 4 feet**

**3.4.4 Minimum Setback from Central Creek Corridor Property Line—30 feet**

**3.4.5 Maximum Building Site Coverage— 55 percent of total site**

**3.4.6 Maximum Impervious Surface—80 percent of total site**

**3.5 Provision of Common Open Space—Background--**Article 8 of the El Dorado County Zoning Code—"Glossary"—in Section 17.04.030, "Definitions", defines "Common Open Space" as follows:

**Open Space, Common.** "Common open space" means a parcel or parcels of land, or an area of water, or a combination of land and water within a site designated for a planned residential development (Section 17.54.080) and designated and intended for the use or enjoyment of all residents of the planned residential development. The use of common open space shall be consistent with the definition of "minimum open space."

**Open Space, Minimum.** "Minimum open space," within planned residential developments (Section 17.54.080), includes common areas, recreational improvements (both public and which are left as open space or recreational land.

*Does not include roads, parking areas, or area covered by any building, garage, carport, other structure (except recreational improvements approved as a part of the project), or undeveloped portions of subdivision lots.”*

**3.6 Provision of Common Open Space—Residential Standard**--Under the above definitions, a minimum of 30 percent of the total site shall be set aside for open space that is commonly owned.

### **3.7 Specific Development Standards**

- 3.7.1 Vehicular driveway access to and from the site shall occur off of Town Center Boulevard and/or Vine Street.
- 3.7.2 Common access drives shall be sized to accommodate anticipated traffic.
- 3.7.3 Driveway Size: The dimensions of all driveways and aisles shall be adequate to serve the number and design requirements of the parking spaces provided, and shall be in conformance with County standards where no stated or depicted Town Center East Design Guideline standard is established.
- 3.7.4 Off-street parking shall be required for residents and guests within the parking garage or within the Piazza Area. Off-street parking shall be provided as specified in the County Zoning Ordinance, Section 17.18 as follows:
- Studio and one bedroom units at one space per unit
  - Two or more bedroom units at two spaces per unit
  - Guest units: One space per every four units
- 3.7.5 Buildings' main orientation shall be toward Town Center Boulevard.
- 3.7.6 Pedestrian Connections: A pedestrian promenade with continuous street trees shall be provided on Town Center Boulevard, as shown in the existing Development Plan. Pedestrian connections shall be provided to and from other areas of Town Center East along Town Center Boulevard. At least one accessible route shall connect all buildings, facilities, elements and spaces in the project area, subject to ADA standards.
- 3.7.7 The Above-grade Parking Garage shall be planted with vegetation as appropriate to accomplish an effective buffer in front of garage walls. Alternatively, parking structures may be exposed to the street when articulated with additional architectural detailing and/or when an architectural-grade concrete or decorative veneer is used. Parking spaces are to be designed and constructed according to local County standards (unless modified by this Development Plan) and level of quality.
- 3.7.8 Walls and Fences shall be designed to be compatible with surrounding and adjacent architecture. Heights of walls and fences shall be as required for their intended use and shall not exceed 8 feet unless approved by the Design Review Committee.

### **3.8 Green Building Standards**

- 3.8.1 Buildings shall comply with all mandatory measure of the 2016 California Green Building Standards Code and all subsequent amendments.
- 3.8.2 Project planning and design shall address and conform to the goals of California Assembly Bill 32 and California Senate Bill 375.
- 3.8.3 At later phases of project design development, the applicant shall include a full listing of specific green elements that would be incorporated into the project.



### 3.9 Signage

3.9.1 General--Signage is an important feature that contributes to the neighborhood and community character. Signage design within the Plan Area shall be designed to be complementary in character, materials, and style to other buildings within the Town Center East area. Signage, which may be lighted, should be of high quality materials and be only of sufficient number to adequately (1) define, (2) direct, or (3) identify.



3.9.2 References--Because residential uses are being introduced to Town Center East for this Plan Area, signage shall conform to the appropriate measures of the El Dorado Hills Town Center “Master Signage Program” as described in Appendix 5—Section 2.0 (“Signage Concept”), Section 3.0 (“General Design Requirements”), Section 6.1.2 (“Lot/Pad User Identification Monument Signs”), and Section 6.1.3 (“Lot/Pad User On-Building Identification Sign”) of the Town Center East Development Plan. Signage shall also conform, where relevant, to the County Zoning Ordinance and the El Dorado Hills Specific Plan.

3.9.3 Building Signage—Building ID signage is permitted to be 2-sided, illuminated vertical blade type. Project Applicant shall stipulate design and quantity and be submitted for Design Review Committee and agency review.

### 3.10 Screening

3.10.1 *Building utilities, HVAC equipment, transmission devices, transformers, backflow preventers, trash areas (excluding solar panels), large satellite dishes, ground-mounted mechanical equipment, and other similar mechanical or utility equipment, shall be screened with fences, walls, dense planting, or decorative architectural features. Roof top equipment is to be screened with either parapets or other roof forms.*

3.10.2 *Line of site drawings indicating screening of equipment from the right-of-way on the opposite side from all streets and topography from the buildings are to be provided with project site plan review submittal.*

3.10.3 *Utility service areas, such as electrical panels, shall be placed within enclosures that are architecturally, integrated into the building design.*

### 3.11 Water-Conserving Landscape Measures

3.11.1 Plant materials planned for the area shall conform to State and regional water conservation standards and also shall be based on the Department of Water Resources (DWR) “Water Use Classification of Landscape Species” (WUCOLS) guide. “Low” to “very low” water demand plant materials are encouraged to constitute the majority of



plant materials incorporated into the project. However, hardiness, functionality, micro-climates, maximum allowed water use (see 6.3.4) and aesthetics all should be considered when selecting a palette of plant materials. Natives and non-natives may be mixed together in an effort to balance sustainability and the aesthetic vision of the designer. (see sections following for further information)

3.11.2 Lawn and Turf Area Reductions--While it is acknowledged that lawn and turf areas are necessary for certain active recreational and aesthetic purposes, use of turf areas will be restricted to a maximum of 50% of the landscape in order to reduce irrigation water and energy usage. If an area is intended for active pedestrian use (i.e., formal or informal play, recreation, etc.), then lawn and turf may be used

3.11.3 Automatic Irrigation—All irrigated landscaped areas will be maintained with an automatic irrigation system. All irrigation valves shall be connected to an automatic “smart” irrigation control system.

3.11.4 Water-Conserving Irrigation --Irrigation methods and water budgets will follow the State Water Conservation Maximum Applied Water Allowance (MAWA) and Estimated Total Water Use (ETWU) guidelines, together with guidelines from Assembly Bill 1881, in order to create a framework for landscape water conservation. Irrigation designs and practices will employ low-flow, water-efficient spray heads and emitters wherever feasible.

3.11.5 Calculations Basis: Annual rainfall used to calculate Maximum Applied Water Allowance shall be based on location specific data for the Hydrologic Region provided by the California State Climatologist, Department of Water Resources. The formula, from the California Department of Water Resources “Water Budget Workbook” for calculating a project’s MAWA is:

**MAWA**= (ET<sub>o</sub>) x 0.62 x [(0.7xLA)+(0.3xSLA)] in which:

**ET<sub>o</sub>** = Evapotranspiration rate for El Dorado Hills area (47.3 per State Model Water Efficient Landscape Ordinance Camino Station)

**0.7**= ET adjustment factor;

**LA** = Landscape area (in square feet) requiring irrigation;

**0.62**= conversion factor for MAWA in gallons/yr.

**SLA** = A Special Landscape Area of the landscape dedicated solely to edible plants , areas irrigated with recycled water, water features using recycled water and areas dedicated to active play such as parks, sports fields, golf courses, and where turf provides a playing surface.

3.11.6 Submittal of Water Conservation Plan—Landscape improvement plans shall include a water conservation budget that conforms to the local and State water conservation programs, including calculations to demonstrate the project’s Maximum Applied Water Allowance (MAWA) and Estimated Total Water Use (ETWU), shall be submitted to the County at time of the project Improvement Plans Review.

### **3.12 General Planting Provisions**

3.12.1 Minimum Plant Sizes at Installation:

Trees: --Minimum 15-gallon size; Street Trees—Minimum 24-inch box;

Shrubs: Overall--Minimum 2-gallon size. In prominent areas (project entries, Amenity Center, courtyards, etc.), minimum 5-gallon size.

Perennials, Ornamental Grasses and Ground Cover: Minimum 1-gallon size, spaced to attain full coverage within 3 years.

3.12.2 Hydrozones--Plants with similar water use needs shall be grouped together in distinct hydrozones, and where irrigation is required, the distinct hydrozones shall be irrigated with separate valves. Low and moderate water use plants can be mixed, but that overall hydrozone should be classified as “moderate” water use if the moderate use plants exceed 25% of that zone. High water use plants should be limited in use, and, where use is necessary or desired as a part of the design, shall not be mixed with low or moderate water use plants.

3.12.3 Slope Planting—Areas to be planted with turf shall not be used in slopes in excess of 4:1. All planter areas in excess of 3:1 slopes shall be treated with erosion control geotextile materials and plant materials appropriate to steep slope conditions. All planting areas shall be graded to drain at a 2% minimum gradient.

3.12.4 Invasive Plants-- Known invasive plants are prohibited in the Plan Area.