

Sustainability Guidelines for Developers

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Introduction

The purpose of this document is to help neighborhood councils (NCs) foster sustainable development in their neighborhoods. These guidelines provide recommendations for features of building projects that promote sustainability that neighborhood councils can ask for. They also provide suggestions for how to engage developers.

The best way to use this document is probably to identify the characteristics of your neighborhood setting (e.g., density, terrain, community needs, any challenges) and specific development project, and then decide what is most relevant or important. Following the *Engaging Developers* section, this document is worded as requests the PLUM committee would make to a developer.

We aspire to use an integrative (holistic) design approach to sustainability, engaging various professionals (e.g., architects, contractors, city planners, environmental consultants, landscape architects/designers, maintenance teams, arborists, and traffic engineers, in addition, of course, to members of the community, which results in a better and more sustainable project.

With changes in building codes, technology and understanding of sustainability, we will continue to update this document. We welcome your feedback and contributions.

A number of people worked to create this document. We would like to particularly acknowledge the efforts of David Dahlke of the P.I.C.O. NC Land-Use Committee, Philip Ganchev of the West Los Angeles NC Environmental Committee, Lisa Hart of the Silver Lake NC Green Committee, Stacy Shure of the Mar Vista Community Council, and Ryan Snyder of the Hollywood United NC. We also want to thank Holly Harper of Los Angeles City Planning's Urban Design Studio, who verified for us what is and what is not already mandated by law, the Wildlife Pilot Study group in Los Angeles City Planning, Andrew Kratzer of The Afriat Group, Stacey Brenner of The Brenner Group, and Neil Kritizinger of Kritizinger+Rao Design, Inc. We also cite the previous work of some neighborhood councils that have been leaders in this effort, in addition to other sources.

There is significant overlap among the categories we selected, as we are talking about ecosystems. Everything is connected, and one action will often yield multiple benefits. We chose the category that seemed most relevant.

Engaging developers

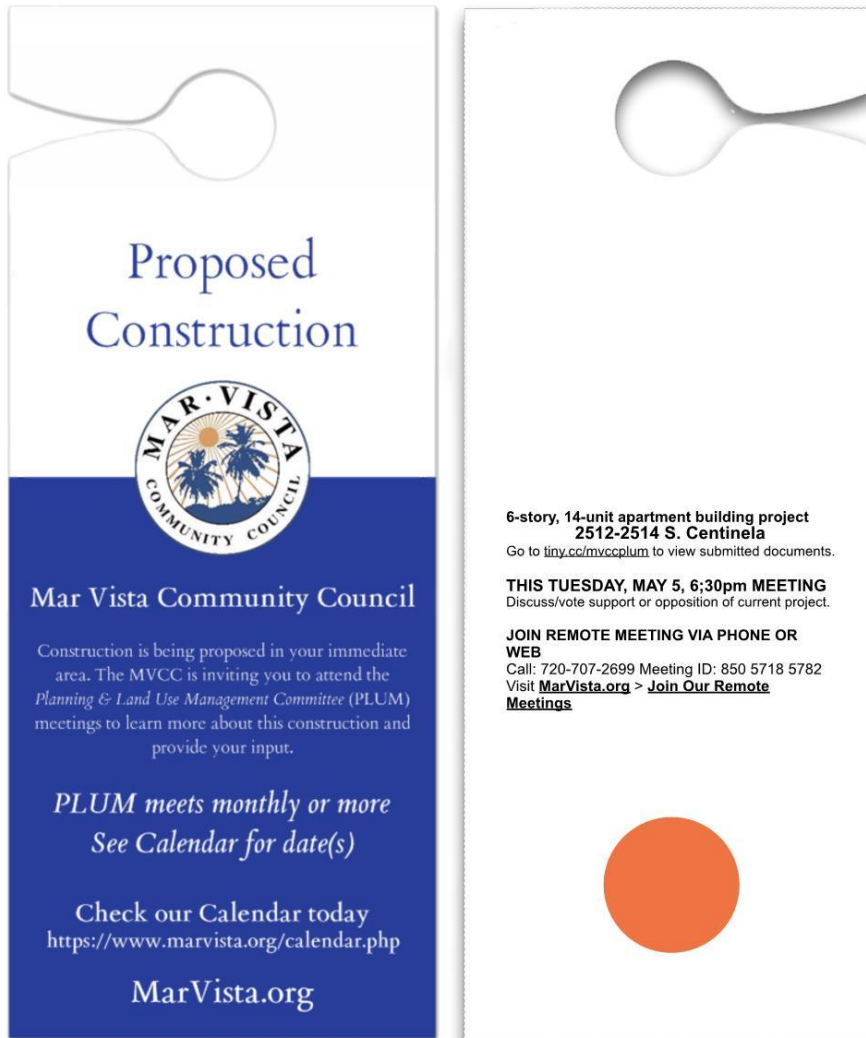
General

- Publish a set of standard guidelines on the NC website.
- Email the guidelines to the developer upon receiving notice of a building request.

Before PLUM meeting

- Look for the developer's name in the NCSA's list of non-complying developers.
- Designate a committee member to speak with the developer's representative before their presentation to the NC. This is compliant with the Brown Act if no decisions are made and the conversation is about the committee's process and the needs of the community.
- Consider approaching the developer with the attitude that they are a potential partner in meeting the community's needs.
- Ask the developer to notify owners and/or tenants of properties in the community surrounding the proposed development in at least 2 ways: options include mail, email, and fliers. Including the permit information filed with the Department of City Planning (DCP). For larger developments, ask the developer to go door to door with the plans to notify the surrounding community and solicit their initial feedback. Use this to educate neighbors, e.g., about car-sharing programs and water conservation. Consider using door hangers. (The required radius varies depending on the development.)

PLUM DOOR HANGER



Door Hangers for Mar Vista Neighborhood Council. Source: Stacy Shure

- For mixed-use developments, ask the neighbors what amenities they would like in the retail portion of the development, encouraging small businesses and being mindful of the diversity of the surrounding area.
- Train several people to canvas in case a committee member is not available.
- Download all planning documents online at the Department of Planning and provide a link to the documents on your agenda.
- Review these guidelines and select items appropriate for the project.
- Share data on the [economic value and benefits to](#)
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- Put the building in abeyance
- If the developer does not fulfill the agreement made with the community, notify your council office, do not support their future projects, and email suchandsuch for addition to the NCSA list of non-complying developers.

Site planning and building design

Air quality

- Install indoor air filtration, especially if the building is near a freeway or busy road. *The 2021 code now requires MERV-13 filtration, which the City of LA previously requested in buildings within 1,000 feet of a freeway, at least for residential uses.* ([LAMC Section 99.04.504.6](#))
- For developments near freeways, use sound walls and thick groves of trees and plants extending above them to block some of the pollution. ([Freeway pollution travels farther than we thought. Here's how to protect yourself](#)).



Diagram of berming to reduce exposure to noise and air pollution.

- Use building materials, carpets and flooring, paints, and wall coverings that are low in volatile organic compounds (VOCs) (adapted from [Plan for a Healthy Los Angeles](#))
- Avoid gas stoves, which worsen indoor air quality.

Energy

- Leverage passive building design:
 - Situate buildings to maximize cross-ventilation and daylight and to minimize heat gain, especially from south and west exposures ([Citywide Design Guidelines](#)).

The San Francisco Federal Building is naturally ventilated.

Credit: Arup



CASE STUDY: THE SAN FRANCISCO FEDERAL BUILDING CAN OPERATE WITHOUT POWER

The United States Federal Building in San Francisco is one of the first major US office buildings to be naturally ventilated for more than 70 years. The 18-story tower's open office floors are effectively ventilated throughout the year with automatically operable windows. In the event of a loss of power, permanently-open louvers integrated into the building façade guarantee code-minimum ventilation rates to building occupants. Operable windows modulate from closed to open to control interior comfort conditions. Unlike conventional office buildings in California, the Federal Building can support occupancy through extended periods of power loss.

Example of a building that is naturally ventilated. Source: Building Resilience Los Angeles - A Primer for Facilities - A Project of USGBC-LA

- Consider carving out building mass with courtyards, lightwells, terraces, etc. whenever floor plates exceed 40 feet in depth.
- Orient large windows to avoid heat gain in summer and to gain heat in the winter.
- At entrances and windows, include south-facing window shading (cantilevers--movable shade screens) to provide shading and reduce daytime heat gain ([Citywide Design Guidelines](#)).
- Ease natural ventilation and daylight: incorporate operable windows and light wells ([Citywide Design Guidelines](#)).
- Ensure shading (such as trees, overhangs, balconies, awnings, or shades) that is appropriate to solar orientation ([Citywide Design Guidelines](#)).
- Use vegetation to increase energy efficiency, (for example, deciduous trees to provide summer shade while allowing low-angle winter sunlight to provide heat during winter ([Use Vegetation to Increase Energy Efficiency](#))).
- Install double-paned windows ([Plan for a Healthy Los Angeles](#)) and glazed windows.
- Avoid over-shading of adjacent buildings by the new construction and allow space for nearby buildings to use solar panels.
- For buildings taller than 40 feet, get a shading study by a City-approved vendor before meeting with the NC (Palms

Neighborhood Council Planning & Land-Use Guidelines for Neighborhood Appropriate Developments, 10/11/2017).

- Use white or reflective paint on rooftops and light paving materials to reflect heat away from buildings and reduce the need for mechanical cooling ([Citywide Design Guidelines](#)). *The Los Angeles Green Building Code requires cool roofs for some new buildings? and also has a cool surface requirement.*
- Ensure natural light and ventilation for parking while maintaining architectural cohesion ([Citywide Design Guidelines](#)).
- Install insulation inside the walls and ceiling. *Current insulation requirements can be found in the [California Energy Commission's Building Energy Efficiency Standards](#).*
- If a roof deck is planned, use soft or green surfaces to reduce noise and the urban heat island effect (Silver Lake Neighborhood Council Sustainable Questions to Project Applicants).
- If a roof deck is planned, ensure there is adequate area to accommodate solar panels.
- Use light colors or reflective surfaces on rooftops and walls and light-colored paving materials to reflect heat away from buildings and reduce the need for mechanical cooling (adapted from [Citywide Design Guidelines](#)), or consider incorporating a [brise-soleil](#) or [double \(second\)-skin facade](#) to facilitate either passive cooling or heating, depending on the need. Read [this](#) for an example of a paint.
 - Consider [roof gardens](#) for insulation and greening.



Example of a roof garden including food production

- Consider [green walls](#) for insulation and greening, especially of courtyards and on building walls with a public view and enjoyment. ([Use Vegetation to Increase Energy Efficiency](#)).



Green Wall example in Beverly Hills. Source: Darren Bradley

- Use materials that require less energy throughout their life cycle:
 - Consider using the [Embodied Carbon in Construction Calculator \(EC3\) tool](#), which can help you assess and select materials.
 - Use durable materials that are regionally sourced within 500 miles.
 - Use sustainably extracted materials that protect ecosystems, respect cultural and community values, and improve land use ([SITES](#)).
 - Consider using urbanite or recycled concrete, e.g., for retaining walls, stairs, and patios.



- Consider rammed earth for building or free-standing walls.



- Design for adaptability and disassembly (e.g., segmented retaining walls, and pavers) ([SITES](#)).
- Avoid cement and concrete (e.g., cinder blocks) due to CO₂ release during cement manufacture, unless the products entrain (a form of sequestering) CO₂ or otherwise significantly reduce these emissions. Use durable wood from sustainably managed forests, certified for example by the Forest Stewardship Council's [Chain of Custody Certification](#), instead of concrete for roof top decks, wall systems, etc.
- Consider using [mass timber](#) instead of steel and/or concrete for framing of large buildings.
- Use fly ash additives in concrete to reduce the amount of cement in the concrete.
- Use materials that have either a [life-cycle assessment](#) (LCA) or an [environmental product declaration](#) (EPD) from manufacturers whose practices increase energy efficiency, reduce material consumption and waste, and minimize negative effects on human health and the environment ([SITES](#)).
- Consider using a tool such as the [Embodied Carbon Calculator](#) to calculate the carbon embodied in your materials.
- Use soils, compost, and mulch sourced within 50 miles of the project. This limits the energy used and pollution created by transporting the materials.
- Leverage technology to move us toward clean, renewable energy:
 - Install only electric heating, stoves, and clothes dryers (no gas pipes), or install electrical circuit lines and breakers for electrical

stoves and dryers. (See [2019 local energy ordinances](#) and [a housing electrification study commissioned by LADWP](#).)

- Use heat pumps for heating and cooling, with open ventilation to allow natural cooling and prevent trapping of fumes or heat.
- Exceed California Title 24 on building efficiency (Silver Lake Neighborhood Council Sustainable Questions to Project Applicants).
- Install photovoltaic panels or a photovoltaic-panel-ready roof. *This is mandated for residential buildings of up to 3 stories starting in 2020, by the California solar mandate.*
<https://ww2.energy.ca.gov/2018publications/CEC-400-2018-020/CEC-400-2018-020-CMF.pdf>
- Install solar water-heating panels.
- Besides abiding by [CALGreen Tier 1](#), acquire additional energy efficiency certifications:
 - USGBC's Leadership in Energy and Environmental Design (LEED) (*a rating level of Silver is required by LA City code for TOC buildings*)
 - [LEED for New Buildings](#)
 - [LEED for Neighborhood Development](#)
 - [SITES](#)
 - [WELL Building Standard](#)
 - International Passive House Association's [Passive house](#)
 - International Living Future Institute's [Living Building Challenge](#)
 - Build It Green's [Greenpoint Rated](#) for residential homes
- Bury power lines where feasible ([Citywide Design Guidelines](#)).
- Consider working with a wood recycling and harvesting company to re-use any removed trees for other purposes.
- In multilevel buildings, add chutes to provide easy access to recycling and composting.

Water

- Avoid unnecessary, dramatic grades or massive retaining walls in order to reduce runoff, earthquake risk, and CO₂ release from construction. If there are retaining walls, use a water capture system (such as a drain) (adapted from [Citywide Design Guidelines](#)). Design hardscape and landscape to allow infiltration of rainwater and/or stormwater capture to reduce water use and water costs. Examples include:
 - underground capture cisterns for reuse as landscape irrigation
 - permeable pavers for driveways, courtyards and sidewalks ([Measure W](#) incentivizes this.)

- [rain gardens](#) and bioswales with plants and healthy soils to filter stormwater.



Rain garden

Source: David Dahlke

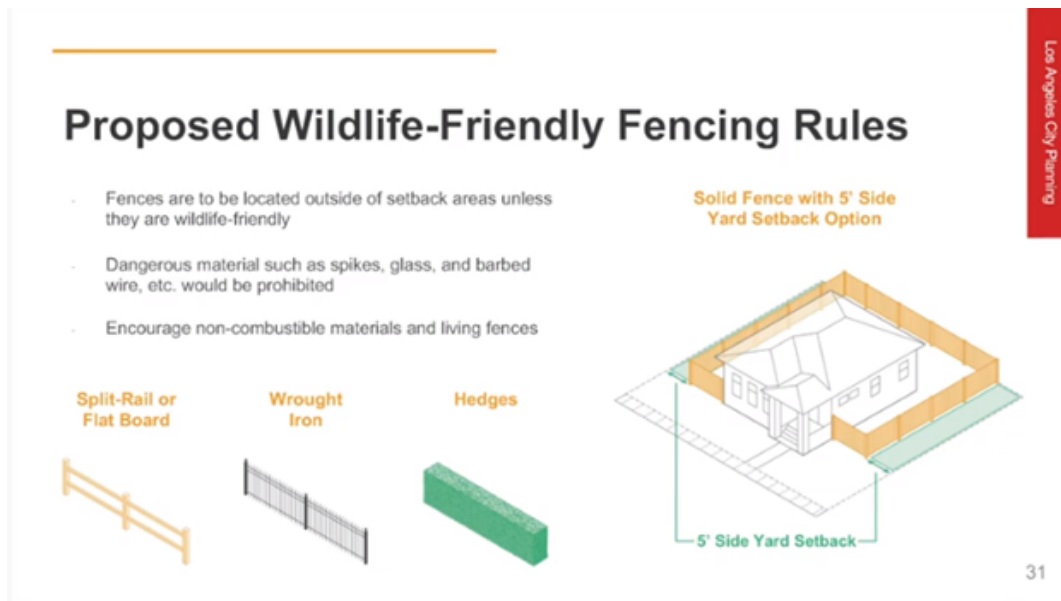
- Improve the water-retention capacity of the soil by increasing its organic matter content by adding compost or other organic amendments ([SITES](#)).
- Use porous pavers in lieu of asphalt paving for aesthetics, long term durability and on-site stormwater management.
- Avoid the use of materials used in buildings, hardscape, and landscape construction that can release pollutants in stormwater, such as:
 - copper and zinc roofs, roof gutters, downspouts, and siding
 - galvanized materials (e.g. fences, fence posts, guardrails, and signposts)
 - treated lumber, especially with chromated copper arsenate (CCA).
- Utilize stormwater as a resource ([Planning and Development Handbook for Low Impact Development \(LID\)](#)), using [low-impact development \(LID\)](#) and [green infrastructure](#) as tools.
- Design the stormwater features to be visually appealing and physically accessible to all ([SITES](#)).
- Use non-potable water (captured rainwater, reclaimed water, recycled greywater, air-conditioner condensate) for irrigation.

- Install water meters to use as a tool for maintenance teams to monitor, track, and record irrigation water usage.
- Protect existing streams including intermittent stream flows ([Citywide Design Guidelines](#)).
- Install water filters in units to reduce use of bottled water.
- Install a greywater system to collect and clean waste water, and use it for all landscaping.
- Install dual plumbing for toilets (have a stub for connection to future recycled water lines).

Nature and wildlife

- Make an effort to preserve existing mature trees whenever possible.
- Use setbacks for trees, when possible. Maintain setbacks when planning subterranean parking.
- Conserve and restore native plants and plant communities.
- Do not plant [invasive plant species](#) that may jeopardize local ecosystems, and ensure all existing invasive species are removed from the site ([SITES](#)).
- Install an irrigation system for landscaping and parkways.
- For single-family residential construction, utilize the existing curb-cut and driveway so as to preserve existing trees on the property and the parkway.
- Avoid tree removal and pruning during bird nesting season. (March-September); regulations prohibit destroying established nests with live young.
- Place trash, recycling, and green waste receptacles within the building site area, and not in setbacks ([Wildlife Pilot Study](#)).
- If animals will be permitted, provide a fenced and green area for animal exercise and waste stations including bags and trash cans.
- Design the site to minimize disruption to existing plant and animal habitats. For a database searchable by location and assessment classification (e.g., critically endangered or endangered), refer to the International Union for Conservation of Nature's (ICUN's) [Red List of Threatened Species](#) of the International Union for Conservation of Nature ([SITES](#)).
- Design to allow species connectivity (habitat corridors) through the site and to adjacent sites ([SITES](#)).
- Uncover (daylight) buried streams in order to restore them (adapted from [Citywide Design Guidelines](#)).
- Protect streams, including intermittent streams (adapted from [Citywide Design Guidelines](#)).
- In suburban, rural, and hillside areas, provide front, side, and rear setbacks to allow space for vegetation and wildlife mobility ([Wildlife Pilot Study](#)).

- In suburban and rural areas, limit structures (e.g., garages and patios) in setback areas in order to limit disturbance to vegetation and habitats (adapted from the [Wildlife Pilot Study](#)).
- Retain an unobstructed 50-foot buffer from potential biological resources to preserve habitat areas, wildlife connectivity and year-round access to water sources and vegetation, and limit grading within that buffer ([Wildlife Pilot Study](#)).
- If using fencing, consider [wildlife-permeable fencing](#) to allow wildlife travel (adapted from the [Wildlife Pilot Study](#)). (See the *wildlife permeable fencing example below from the Wildlife Compatible Fencing brochure from the Arizona Game and Fish Department* Example design of wildlife permeable fencing



From the Wildlife Pilot Study

<https://www.youtube.com/watch?v=DItrCg5NJXM>

- Avoid fencing material that could be hazardous to wildlife, such as spikes, glass, razors, nets, uncapped tops or material that could pose fire hazards, such as highly combustible material ([Wildlife Pilot Study](#)).
- Install windows with low-glare glass or other ways to avoid confusing birds. Other treatments including [fritting](#) (a partial layer of ceramic on the surface of the glass), other stenciling, UV-reflective glass, and frosted or etched glass do not necessarily need to be low-glare or high-glare. (High-glare glass might help deflect heat.) There are also likely to be many different types of glass that reflect heat and have different properties in terms of glare ([Wildlife Pilot Study](#)). There are films that can both help control temperature and protect birds by reducing glare and transparency. To learn more, see [Bird-Friendly Building Design](#).

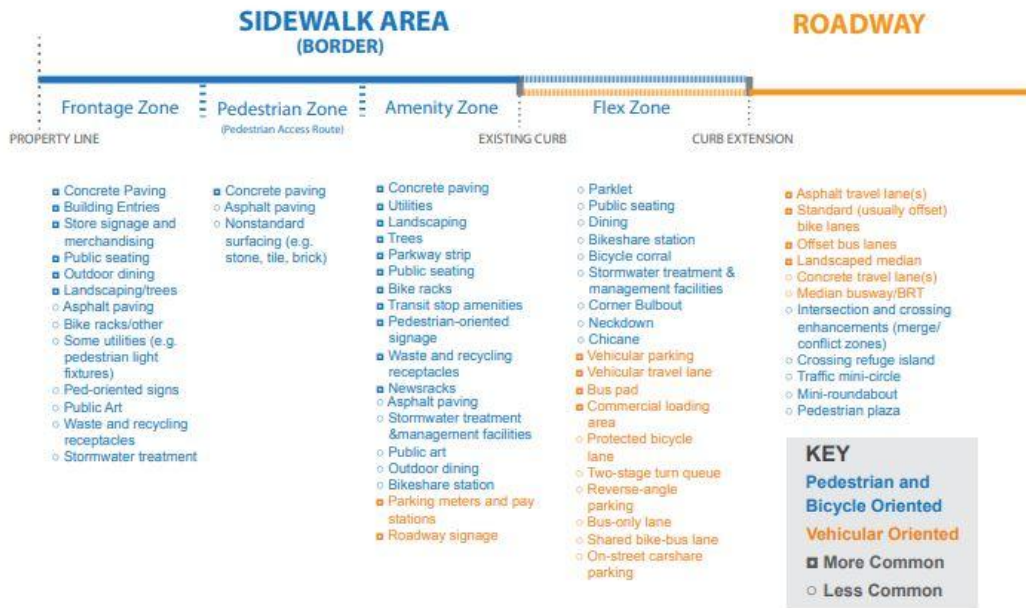
- Use fully shielded light fixtures to limit light pollution and minimize wildlife and human disruption
- Use sky-sensitive, LED (or the most energy-efficient) lighting. In most areas, prohibit the following types of outdoor lighting: drop-down lenses, mercury vapor lights, ultraviolet lights, searchlights, laser lights, or other lighting that flashes, blinks, alternates or moves ([Wildlife Pilot Study](#)). Use lights with a lower correlated color temperature, such as amber lights, to reduce the impact on wildlife (Hazard or Hope? LEDs and Wildlife by Prof. Travis Longcore, University of Southern California / School of Architecture, LED Professional Review, Nov/Dec 2018). Other lighting might be appropriate in specific non-residential settings at specified times. [CalGreen \(Title 24\) section 5.106.8](#) addresses light pollution.
- Except for certain non-residential areas, limit strength and height of outdoor lighting. Lighting installed above 15 feet should be at most 400 lumens in most areas ([Wildlife Pilot Study](#)).
- Install outdoor lighting that is “dark sky” compliant and minimizes light pollution; use hooded lights and avoid neon lighting; specific non-commercial areas might be exempted.

Walkability

- Increase green space, particularly space available to the public.
- Incorporate shaded open space such as plazas, courtyards, pocket parks, and terraces in large-scale buildings. Consider a public parklet where possible (adapted from [Citywide Design Guidelines](#)).
- Improve existing alleys with appropriate lighting and other design features (landscaping, art, etc.) to screen blank walls or parking where space is available.
- Where feasible, preserve the existing structure and add stories to increase density.
- Avoid placing long blank walls where pedestrian activity is anticipated ([Citywide Design Guidelines](#)). Add windows and/or active uses on the ground floor.
- Consider articulation (a break in the facade of the building so it's not just one large mass) in building design to allow for greening in between housing units to maximize shade, promote circulation, and provide additional room for tree canopy.
- In urban areas, consider zero-lot lines (common exterior walls, with buildings abutting one another) to promote walkability.
- Promote pedestrian activity by placing entrances at grade level or slightly above and unobstructed from view from the public right-of-way ([Citywide Design Guidelines](#)).
- Minimize shadows and unnecessary shading on surrounding buildings, park and open spaces ([Citywide Design Guidelines](#)).

- Avoid drive-through retail.
- Mix land-use types to reduce walking distances.
- Place stairs near the building entrance and directly on the primary paths of travel (adapted from [Citywide Design Guidelines](#)); stairwells should be an attractive first choice for vertical circulation.
- Design stairways to allow viewing from outside for greater security and natural light for pleasant use
- Provide benches, lighting, shade structures, trees, lockers and other amenities to encourage an active lifestyle ([Citywide Design Guidelines](#)).
- Prioritize pedestrian circulation at street level: make it accessible, prominent, and clear (adapted from [Citywide Design Guidelines](#)). Have doors opening to the sidewalk.
- Avoid waivers of sidewalk dedication that would reduce the width and improvements of sidewalks.
- Prioritize pedestrian access over automobile access. Orient parking and driveways toward the rear or side of buildings and away from public right-of-way. On corner lots, parking should be oriented as far from the corner as possible ([Citywide Design Guidelines](#)).
- Minimize the number and width of driveway entrances ([Citywide Design Guidelines](#)).
- Use alleys and side streets for vehicle access where appropriate, instead of interrupting a primary street with driveway entrances ([Citywide Design Guidelines](#)). (*LADOT requires this; any change requires a variance.*)
- Ensure that pedestrian pathways are accessible, clear, prominent, and intuitive to navigate ([Citywide Design Guidelines](#)).
- Place driveways and loading areas away from intersections or where they create a barrier between the sidewalk and building entrances. (Design pedestrian-accessible paths and orient buildings to provide direct visual and physical connections to the surrounding neighborhood, amenities, and public transit ([Citywide Design Guidelines](#))). (*The current requirement is 100 feet from intersections.*)

- Design sidewalks to include 4 zones: frontage, sidewalk, amenity and flex with adequate widths (Complete Streets Design Guide).



Design of a sidewalk with different sections



Frontage
Zone

Pedestrian
Zone

Amenity
Zone





- Design sidewalk pedestrian zones (pathways) at least 5 feet wide on residential local streets and at least 7 feet on larger streets (collectors, avenues, and boulevards) ([Citywide Design Guidelines](#)).
- Avoid street widening in favor of new walkways, walkway widening, landscaping, amenities, and trees. City automatic street-widening requirements can be challenged to preserve trees, and has been done successfully.

- Perform a walkability audit to ensure the sidewalk is walkable and accessible to all transit stops.
- Partner with the City of Los Angeles Bureau of Street Services to get sidewalks repaired.
- Explore opportunities to improve the comfort and safety of crossing the street on foot ([Citywide Design Guidelines](#)). Examples include raised midblock crosswalks and corner bulb-outs (sidewalks protruding into the street more than the rest of the sidewalk) ([Complete Streets Design Guide](#)).



Image courtesy of NACTO



Image courtesy of NACTO

Examples of crosswalk designs to increase pedestrian safety

- For pedestrian safety and to maximize commercial space at the front of buildings, design for vehicle ingress and egress via alleys (as opposed to

driveways) if possible (adapted from Palms Neighborhood Council Planning & Land-Use Guidelines for Neighborhood Appropriate Developments, 10/11/2017).

- Parking structures should have active uses on the ground floor to avoid creating dead space along the sidewalk.
- Avoid placing parking lots between buildings and sidewalks.
- Use ornamental low-level lighting to highlight and provide security for pedestrian paths and entrances. Ensure that all parking areas and pedestrian walkways are illuminated ([Citywide Design Guidelines](#)).
- Provide shelter from the sun and rain for pedestrians along the public right-of-way where the buildings meet the street. Canopy trees provide shade for pedestrians and are preferable to ornamental trees; allow adequately-sized tree wells for bigger trees. Extend overhead covers across driveways to provide architecturally integrated awnings, arcades and canopies ([Citywide Design Guidelines](#)).
- Install lighting that will not negatively affect the quality of life for residential and commercial neighbors. Install adequate lighting on the rear of the building to promote the security of both the project and the immediate residential community (Palms Neighborhood Council Planning & Land-Use Guidelines for Neighborhood Appropriate Developments, 10/11/2017).
- Provide pedestrian-scale lighting at the sidewalk level in addition to the street lighting to enhance visibility, comfort, and safety in collaboration with the Bureau of Street Lighting and consistent with the Great Streets lighting design guidelines (to ensure uniformity of design) (adapted from [Citywide Design Guidelines](#)).

Other transportation modes

- Concentrate development, particularly affordable housing, near public transit (*See LAMC 12.22A, et. seq. or TOC Guidelines for the current law*). We suggest that developments greater than 8 units within 1/2 mile (typical walking distance) of public transit should concentrate development and make 40% to 60% of the units affordable as defined by the State of California.
- Plant a shade tree if there is a bus stop next to your property.
- Provide a transportation demand management (TDM) plan (a plan with incentives for people to commute by carpool, vanpool, bicycle, walking or to telecommute) and program that is monitored and enforced to reduce car use in commercial developments. TDM includes physical improvements and ongoing incentives to encourage employees to commute by means other than driving.
- If traffic mitigation is a concern, obtain traffic studies, showing vehicle miles traveled (VMT), conducted by a City-approved vendor before discussion

with the NC (adapted from Palms Neighborhood Council Planning & Land-Use Guidelines for Neighborhood Appropriate Developments, 10/11/2017).

- Include parkways where appropriate. Parkway design should be determined by local context and discussions with LADOT and LADWP and Urban Forestry Division (UFD) for appropriate tree well size and canopy (adapted from [Citywide Design Guidelines](#)).
- Construct parking spaces so that they can be easily converted to other long term uses (commercial, retail, storage) as parking demand is reduced (for example, due to automated vehicles).
- Seek opportunities to incorporate parking in facilities that are shared with other buildings, rather than in each building. Take advantage of the different peak demands for parking for different land uses and the economies of shared structures.
- In large housing developments, provide space for car sharing (adapted from [Citywide Design Guidelines](#)).
- For large developments and high-density areas, consider placing stops for microtransit, demand-responsive transport (trolleys or small shuttle buses, e.g., Dash or Circuit).
- Consider reserving the lane next to the curb for bus boarding, bicycle or scooter parking, passenger pick-up and drop-off, bicycle lane or parklet; work with LADOT (adapted from [Citywide Design Guidelines](#)).
- Designate an area that is well lit and near the security button for micro transit stops, bike parking, scooter parking and Uber/Lyft drop-off. This is usually determined in consultation with LADOT. Avoid drop-off/pick-up areas between principal building entrances and the adjoining sidewalks.
- Install electric vehicle charging stations. *As of 2020 (see [Ordinance No. 186485](#)), the City requirements are: the number of charging stations shall be 10% of the total number of parking spaces provided for all new multi family dwelling units, hotels, and motels. The number of charging stations shall be 10% of the total number of parking spaces provided for all new nonresidential buildings.*
- Install electric vehicle charging conduits or raceways (channels for electrical cables), to which electrical wiring can be added later, in all parking spots, which will dramatically reduce the cost of adding charging stations when they are needed. *As of 2020 (see [Ordinance No. 186485](#)), the City requirements are: for multi-family dwelling units where parking is available, 30% of the total number of parking spaces provided, but in no case less than one space, shall be electric vehicle charging spaces capable of supporting future electric vehicle supply equipment. The number of required EV spaces at newly constructed hotels and motels shall be 30% (rounding up) of the total number of parking spaces provided, but in no case less than one, for all types of parking facilities.*
- Provide bicycle storage for residents, employees and visitors—secure, covered, and easily accessed (on the ground floor) LAMC Section 12.03 requ. [Guide to the LA Bicycle Parking ordinance](#)

- Install workplace showers for employees, to encourage active transportation ([Plan for a Healthy LA](#)).

Community

- In multi-family buildings taller than 3 stories along commercial corridors, incorporate mixed-use community retail space, with an emphasis on local businesses based on the needs of the community (adapted from Palms Neighborhood Council Planning & Land-Use Guidelines for Neighborhood Appropriate Developments, 10/11/2017).
- Create diverse and adaptable spaces that support group activities for all ages, such as fitness, play, cooking, and gardening ([Citywide Design Guidelines](#)).
- Make the ground floor and the street-facing uses habitable, such as retail shops, restaurants, offices, community space, lobby, and dwelling unit (Palms Neighborhood Council Neighborhood Appropriate Development Guidelines draft 10/21/2019). Avoid placing parking there. Place active ground floor uses along the primary street frontages ([Citywide Design Guidelines](#)).
- Install drinking fountains and public restrooms ([Plan for a Healthy Los Angeles](#)).
- Consider preserving historic buildings and/or designing consistently to complement the culture and original architecture and scale. Coordinate with LA City Planning and visit [Historic Resources Survey](#), which links to [SurveyLA](#) and [Historic Places LA](#), to learn more about the neighborhood's historic built environment (adapted from [SITES](#)).

Health and well-being

- Use landscaping or berms to buffer occupants from outside noise and pollutants ([Citywide Design Guidelines](#)).
- When building within 50 feet of an R-1 parcel, implement a (terraced) step-back of mass to minimize encroachment on R-1 residences, with transitional height and sloped roofs (i.e., 45 degrees) on the R-1 side. (*required by City code*)
- Provide visual and physical connections to nature.
- Add trees and shade structures to increase comfort and provide passive cooling. Provide canopy trees in planting areas, especially on south- and west-facing facades ([Citywide Design Guidelines](#)).
- Retain or plant perimeter trees to allow privacy and sound mitigation. Retain or plant perimeter trees to allow privacy and sound mitigation.
- Use articulation (break-ups of the mass), visual sight lines, and other architectural features to reduce the perceived mass (adapted from [Citywide Design Guidelines](#)). Avoid a boxy style that crowds occupants of other

buildings or blocks too much sunlight (adapted from Palms Neighborhood Council Planning & Land-Use Guidelines for Neighborhood Appropriate Developments, 10/11/2017).
UCLA Graduate



School Housing, Source: Mithun / Solomon - New Urbanism Database





Station Center - Union City, CA Source: Bruce Damonte / New Urbanism Project Database

- Place living and sleeping areas, outdoor amenities, and balconies as far from nuisances as possible ([Citywide Design Guidelines](#)).
- Place windows, balconies and courtyards to provide views onto sidewalks and gathering spaces (and not into residential neighborhoods private gardens) (adapted from [Citywide Design Guidelines](#)).



Station Center - Union City, CA, Sour



ce: Bruce Damonte - New Urbanism Database



- Enclose or wrap podium (multi-story) parking areas with active uses, landscaping and/or architectural elements ([Citywide Design Guidelines](#)).
- Minimize shadows and unnecessary shading on surrounding buildings, parks and open spaces ([Citywide Design Guidelines](#)).
- Design units so as to have sufficient light and space between them
- Locate, design and screen utilities, rooftop equipment, trash enclosures, storage materials and all noise, and odor generating functions such that they do not detract from the overall environment ([Citywide Design Guidelines](#)).
- Site and shape buildings to maintain public views of important structures, places, and natural landscape features. Locate windows, balconies, and courtyards to provide views of sidewalks and gathering spaces ([Citywide Design Guidelines](#)).
- Ensure existing and imported soils are healthy for food production and safe for physical contact by the general public ([SITES](#) and [CSUN Garden Resources](#)).
- Create planting beds in yards, front setbacks, or between the street and sidewalk, for residents to plant food (Palms Neighborhood Council Planning & Land-Use Guidelines for Neighborhood Appropriate Developments, 10/11/17).
- Consider increasing the ceiling height beyond code minimums to improve habitability, keeping in mind that rooms with higher ceilings can be harder to heat.

Other soil and vegetation

- Provide quality planting soils deep enough to ensure long term health and resiliency of the landscape trees and shrubs. Ensure adequate [soil depths](#) and [tree wells](#).
- Identify, map, and protect critical healthy vegetation and soils throughout the project development ([SITES](#)). Submit a landscaping plan to the local NC.
- Use low-maintenance landscaping.
- Enhance street landscaping, including parkway trees ([LA City Planning: Urban Parkways](#)).



Source: David Dahlke

- Include sidewalk setbacks and plantings.
- Preserve existing vegetation, especially mature trees using, e.g., bulb-outs, permeable sidewalks, and sidewalk modifications to circumvent tree roots. Document preservation of existing trees as part of the planting plan. (Removing protected tree species requires a city permit.) Incorporate existing trees as a design feature and a place for social gathering spaces.
- When trees are removed, replace them with native trees of an appropriate size, in coordination with the Bureau of Street Services Urban Forestry Division. (Palms Neighborhood Council Planning & Land-Use Guidelines for Neighborhood Appropriate Developments, 10/11/2017).

- When a required dedication involving the widening of the street or the sidewalk is planned, preserving and maintaining existing trees should be a top priority.
- Consider choosing trees using [SelectTree](#) and/or [The Right Tree in the Right Place](#).
- Plant trees that can attain the largest canopy possible in the available space ([Citywide Design Guidelines](#)).
- Plant vegetation that:
 - is suitable for the site's specific soil type and volume requirements, climate, and microclimate
 - complies with [Water Use Classification of Landscape Species](#) (WUCOLS)
 - is native or adapted (see [the Theodore Payne Foundation's Native Plant Database](#) and [Landscape for Life's Use Adapted and Native Plants](#)).
 - is drought-tolerant and non-invasive
 - produces food for humans or wild animals (examples: figs, dates, lemons, oranges, plums, artichokes, peppers)
 - is non-allergenic
 - upon maturity will provide the appropriate size and structure
 - is resistant to pollutants commonly found in precipitation runoff (when selecting vegetation for wet, possibly polluted areas) ([SITES](#))
- If the project is on a street that has a median strip, put enough money into a land maintenance trust (one possibility is an account of the city council member) for maintenance of the strip until the plants are established. The money will only be used if the City does not have resources to maintain the strip in the future. (Mar Vista Community Council has done this.)
- Reduce the risk of wildfire by designing landscape to manage fuels ([Understanding the Wildfire Threat to Homes](#) and [Firescaping: Landscaping to Reduce Fire Hazard](#)).
- Do not remove native vegetation from slopes greater than 60% to prevent erosion, unless required by LA Fire Department for brush clearance. (adapted from the [Wildlife Pilot Study](#)).
Maintain and preserve protected trees. Do not remove them for brush clearance, as they act as fire deterrents. Please note that black walnut trees look dead when they are dormant.
- Do not install artificial turf as it is detrimental to the environment.

Affordable housing

- Include as many less expensive, smaller units as possible.
 - Consider [coliving developments](#) where appropriate.

- Leverage governmental funding for permanent supportive housing and low- and very low-income housing.
- Replace any [rent-subsidized](#) or [rent-stabilized](#) (protected as known by the State of California) units that are demolished on at least a one-to-one basis. *If a rent-stabilized property is removed from the rental market via the Ellis Act and replaced by rental units within 5 years of withdrawal, the replacement units are subject to the City's Rent Stabilization Ordinance. ([Ellis Act](#), [SB 330](#), [LAMC 12.95](#), et. seq.)*
- Consider placing all units under a covenant to limit rent increases during each lease, consistent with LA's Rent Stabilization Ordinance. ([Ellis Act](#), [SB 330](#), [LAMC 12.95](#), et. seq.)
- Consider affordable housing covenants that last in perpetuity.
- Consider partnering to create community land or investment trusts that will preserve affordable housing and enable residents to participate in community development and accumulate wealth.
- Consider reducing parking in housing developments where transportation options can be maximized.
- Consider tracking the number of low-income developments in the neighborhood, to share with residents of the neighborhood council area who are displaced by your development.

| Address | Developer Name | # of Units for Very Low Income | Unit Rate | Total Units | Developer Contact Name | Developer's Representative / Firm | Architect | phone number | Status |
|----------------------|----------------------|--------------------------------|-----------|-------------|------------------------|-----------------------------------|---------------|--------------|--------|
| 1000 S. Orange Grove | AAA Development Inc. | 5 | | 61 | Joe Smith | Natasha Hayden | Susan Builder | | |

Construction

- Protect air quality through low-emitting equipment/vehicles and idle-reduction policy.
- Prevent polluting the air with dust and particulate matter.
- Strive for a net-zero waste site.
- Use soils, compost, and mulch that are sourced within 50 miles.
- No equipment, building materials or port-a-potties should be placed under trees. Protect existing trees that are not slated for demolition with fences, ideally to the drip line (the area located directly under the outer circumference of the tree branches) of the tree. (City of Santa Monica - [Designing for Mandatory Tree Protection during Construction](#)).
- Contain polluted runoff and sedimentation.
- Define haul routes and review with the community for approval prior to construction (ideally at the time of the design review).
- Avoid staging (parking and waiting to access the site) on residential streets.

- Idle engines no more than 5 minutes.
- Provide sidewalk access throughout the entire construction process.
- Ensure that the contractors follow the sustainable practices in the [Good Neighbor Construction Practices](#):
 - Try to park construction vehicles on-site to prevent congestion on streets that have limited parking.
 - Provide flag persons to assist with pedestrian and vehicular traffic when portions of streets are blocked.
 - Sweep streets and sidewalks and keep them free of construction debris.

Operations and maintenance

Air quality

- Maintain all air filtration systems by changing filters following manufacturers' recommendations, and provide information on their function and care to all occupants. Certify the air filtration system annually and commit to reporting the certification to the NC and the City.
- Prohibit gas-powered leaf-blowing. *(It is already prohibited by the [LA Municipal Code Section 112.04 C](#) within 500 feet of a residence, but must be enforced on-site.)*
- Display “no idling” signs.

Energy

- Implement a site maintenance plan developed by a landscape architect and landscape maintenance team, especially for green roofs and green walls.
- Water trees for approximately 3 years after planting, 2 years for shrubs and 1 year for groundcover. Remove irrigation after drought-tolerant plants are established.
- Have a 1-year warranty for all plantings.

Water

- Train residents on water conservation and recycling.
- Install a water-bottle filling station in the lobby.
- Ensure that the site maintenance plan addresses proper maintenance activities to guarantee the long-term effectiveness of stormwater features, including water treatment activities ([SITES](#)).

Nature and wildlife

- Use integrated pest management (IPM) practices to control pests. Do not apply toxic weedkillers or neonicotinoids.
- Minimize the use of fertilizers on site, and implement practices to reduce nutrient runoff (e.g., slow-release fertilizers and optimized application timing for plant uptake) ([SITES](#)).
- Reduce the risk of catastrophic wildfire on site and adjacent landscape by maintaining sites to manage fuels ([Understanding the Wildfire Threat to Homes](#)).

Walkability

- Consider installing a security call button and/or surveillance camera outside the building entrance, for safe pedestrian ingress and egress at night (*required in public structures in Downtown LA*). (See articles: [New Haven, CT planned to install](#); [Emergency phone on college campuses reduced crime](#).)
- Install wayfinding signs at all elevator banks to encourage visitors to use the nearest stairway ([Citywide Design Guidelines](#)).

Other transportation modes

- For [Transit Oriented Communities \(TOC\)](#) developments and developments receiving density bonuses, arrange for a car-sharing company (such as Zipcar) to provide cars in the building's parking (e.g., 3 cars for a 110-unit building).
- For TOC and developments receiving density bonuses, provide transit passes for the first year of residence, transit use classes; reduced parking space.
- For commercial buildings, implement a commute management program for employees (which might include transit passes, carpooling incentives, etc.).
- Post a map of nearby transit stops in the lobby.
- Provide an on-site fleet of automobiles for hire (such as Zipcars) for the tenants. Upon rental, provide instructions on how to use them.
- Provide a location and signage for ride sharing pick-up and drop-off.

Waste

- Maintain the surrounding area free of litter (Palms Neighborhood Council Planning & Land-Use Guidelines for Neighborhood Appropriate Developments, 10/11/17).

- Install a stocked dispenser of pet waste bags (and consider “[pooch paper](#),” which is paper designed to hold pet waste, and is better than plastic bags and likely better than bioplastic “biodegradable” bags, which likely will not biodegrade in a landfill, but which are not derived from fossil fuels) (adapted from Palms Neighborhood Council Planning & Land-Use Guidelines for Neighborhood Appropriate Developments, 10/11/17). See [Better Alternatives Now](#).
- Install composting and recycling receptacles maintained by management; compost should be used on site where possible.
- For larger developments, install a drop-off location for hard-to-recycle items. A company that recycles such items is [Terracycle](#).
- Use trash receptacles enclosed with doors that can be secured, that can latch or cover. Have covered openings and/or doors with minimal gaps to prevent access by large animals ([Wildlife Pilot Study](#)).
- Provide signage to warn residents to not place hazardous waste in the trash receptacles and the [type of recycling allowed in the recycling bins](#).

Affordable housing

- Limit Airbnb and similar short-term rental on the property. (*required by the City’s [Home Sharing Ordinance 14-1635-S2 of 2018](#)*)
- Report regularly to the NC about affordable units; prioritize housing for residents being displaced by developments.
- Notify the NC annually that those who are housed in affordable housing have been verified to income-qualify to remain in the low-cost units.

Community

- Integrate programming and features that will appeal to different generations in order to engage community members (adapted from [Citywide Design Guidelines](#)).
- Collaborate with the Department of Cultural Affairs to identify opportunities to support art and culture in the project area ([Citywide Design Guidelines](#)).
 - [How to do Creative Placemaking - National Endowment for the Arts \(NEA\)](#)
- Provide publicly available on-site events, facilities, amenities, and programming ([SITES](#)).

Resources and related documents

A number of documents inspired and provided referenced content for this document:

State of California

- California Polytechnic State University, San Luis Obispo—Urban Forest Ecosystems Institute (UFEI)
 - [Select Tree](#)
 - [Right Tree Right Place](#)
- California State University, Northridge (CSUN), Sustainability
 - [Garden Resources](#)
- Department of General Services (DGS)—California Building Standards Commission
 - [California Green Building Standards Code \(CALGreen\), Title 24](#) is a green-building code mandated by the State of California.
- University of California-Davis—Center for Urban Horticulture
 - [Water Use Classification of Landscape Species \(Wucols IV\) database](#)
- University of California Division of Agriculture and Natural Resources
 - [Water Use Classification of Landscape Species](#)
- California Senate
 - [SB 330](#)
 - [Ellis Act](#)
- East Bay Municipal Utility District
 - [Firescape, Landscaping to Reduce Fire Hazard, \(1993\)](#)

City of Los Angeles

- Los Angeles Municipal Code [Chapter 11: Noise Regulation](#)
- Los Angeles City Planning—Urban Design Studio Resources
 - [Citywide Design Guidelines](#)
 - [Above-Grade Parking Advisory](#)
 - [Design Resource 1: Living Streets](#)
 - [Design Resource 2: Soil Depths](#)
 - [Design Resource 3: Tree Wells](#)
 - [Design Resource 4: Urban Parkways](#)
 - [Urban Design Standards](#)
 - [Small Lot Design Standards](#)
 - [Mobility Hubs](#)
- Los Angeles City Planning
 - [Plan for a Healthy Los Angeles](#)
 - [West Los Angeles Transportation Improvement and Mitigation Specific Plan \(WLA TIMP\)](#)
 - [Wildlife Pilot Study](#)

- [Historic Resources Survey](#), including SurveyLA and Historic Places LA
- [Complete Streets Design Guide](#)
- [Home Sharing Ordinance 14-1635-S2](#)
- Bureau of Engineering
 - [S-485-O Standard Plan for Green Alleys](#)
- Los Angeles Department of Water & Power (LADWP)
 - [Meeting California Climate Change Goals through Building Electrification](#)
- Los Angeles Department of Transportation
 - [Guide to the LA Bicycle Parking ordinance](#)
- LA Sanitation & Environment (LASAN)
 - [Low Impact Development \(LID\)](#)
 - [Green Infrastructure](#)

City of Santa Monica

- Community Maintenance Department
 - [Tree Protection Guidelines](#)

Non-governmental organizations

- Alliance for Community Transit – Los Angeles (ACT-LA) and Public Counsel
 - [Planning for an Equitable Los Angeles: A Guide to Shaping LA's New Community Plans](#)
- American Bird Conservancy & New York City Audubon
 - [Bird-Friendly Building Design](#)
- American Institute of Architects - California (AIA-CA)
 - [Checklist](#) to help architects navigate the key measures of CALGreen for residential and nonresidential developments.
- Build It Green
 - [Greenpoint Rated](#) for residential homes
- California Native Plant Society
 - [Native Plant Database](#)
- California Stormwater Quality Association (CASQUA)
 - [Low Impact Development Manual for Southern California](#)
 - [California Stormwater Best Management Practices Handbooks](#)
- Congress for a New Urbanism (CNU)
 - [Charter for New Urbanism](#)
 - [New Urbanism Project Database](#)
- Forest Stewardship Council (FSC)
 - [Chain of Custody Certification](#)

- International Union for Conservation of Nature (ICUN)
 - [Red List of Threatened Species](#)
- International Living Future Institute
 - [Living Building Challenge](#)
- International Passive House Association
 - [Passive House Certification](#)
- Lady Bird Johnson Wildlife Center and United States Botanical Garden
 - [Use Adapted and Native Plants](#)
 - [Use Integrated Pest Management](#)
 - [Use Vegetation to Increase Energy Efficiency](#)
- National Endowment for the Arts (NEA)
 - [How to do Creative Placemaking](#)
- National Fire Protection Association
 - [Understanding the Wildfire Threat to Homes](#)
- Theodore Payne Foundation
 - [Native Plant Database](#)
- United States Green Building Council (USGBC)
 - [LEED for New Buildings](#)
 - [LEED for Neighborhood Development](#)
 - [SITES](#)
 - [WELL Building Standard](#)
- United States Green Building Council, Los Angeles Chapter (USGBC-LA)
 - [Building Resilience-LA: A Primer for Facilities](#)