D. Material Palette

This guideline establishes the color and material palette for the Medical Center. This palette is used to tie the medical campus together as the main principle of Connectivity, and establish a visual connection to the Context of the University.

Color and materials play a significant role in creating a cohesive image for the campus. A base color and materials palette for medical campus has been derived from the existing context of the university. This base palette shall be extended to cover the new projects of the medical center to include more contemporary materials such as glass curtain wall, metal panel, exposed concrete, and even terracotta rain screen cladding.

Building materials and colors fall into three basic categories of “Primary”, “Secondary”, and “Accent” to coordinate and enhance building compositions. In general, the lighter more transparent materials form the upper portions of a building as secondary materials, whereas primary materials -- such as stone or expressed concrete -- shall be reserved for the richer, more natural materials to articulate the importance of the pedestrian zone. Accent materials such as metal panel or louvers shall be used to highlight areas of visual interest.

The application of materials and colors shall continue the spirit of interpretive design carried forward more recently in such buildings as the Clark Center for example, where wall cladding materials are evocative of the original limestone. The red roof canopies make reference to the terracotta tile roofs, and large expanses of glass wall are counterbalanced against more solid walls, and the symbolic use of landscaping.

Materials

Primary
- natural stone
- precast stone
- precast concrete
- cast-in-place concrete
- GFRC panels
- Glass Curtainwall

Secondary
- metal panel
- terracotta tile
- glass
- wood
- specially cast stone
- stucco

Colors
- beige
- bronze
- brownish red (terracotta)
- grey
- light sand
- silver
D. Material Palette

Medical Campus Palette

The proposed new buildings of the SUMC shall use a variety of materials to extend the existing palette: Walls that are substantially solid shall be clad in stone, tile, or expressed as exposed concrete -- that has a color and texture compatible with existing buildings to create a cohesive base condition. More open areas such as the office floors, in-patient, or research floors, are configured to be highly responsive to natural light, and solar control. The lighter more open areas of the buildings might be composed with glass, GFRC, metal panel, and/or ceramic tile. These new materials can be composed to express the high-performance, technologically advanced nature of the medical buildings. The guidelines are founded on the principle that the building shall express its program and function. This value is increasingly apparent as it moves further away from the Main Quad where more technology-driven programs cannot be represented in a common building language. Instead, the new buildings derive their character from the rich campus palette of materials and color, and modern interpretations of the campus vernacular.
D. Material Palette

In the School of Medicine and the SUMC, the campus vernacular undergoes significant modernization and interpretation. At Clark Center for example, a limestone cladding is used at the body and base of the building to relate to the campus palette. At the top, a hovering roof canopy — which screens an abundance of mechanical equipment — is finished terracotta red in color to relate to the clay tile roofs of the campus palette. And for the body, in lieu of punched openings, a combination of glass curtain wall and wrap-around exterior balconies articulate the body of the building and provide human scale.

Strategies of building articulation within SUMC are intended to enhance or reinforce building massing strategies and tune formal expression of the architectural composition and expression. The combination of articulation features shall serve to further break down massing, clarify or express internal building programs.
### D. Material Palette

<table>
<thead>
<tr>
<th></th>
<th>SHC</th>
<th>LPCH</th>
<th>FIM’s</th>
<th>Hoover</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary</strong></td>
<td>Glass Curtain Wall</td>
<td>Stone, GFRC, or Precast Concrete</td>
<td>Stone, GFRC, or Precast Concrete</td>
<td>Stone, GFRC, or Precast Concrete</td>
</tr>
<tr>
<td><strong>Secondary</strong></td>
<td>Stone, GFRC, or Precast Concrete</td>
<td>Glass Curtain Wall</td>
<td>Glass Curtain Wall</td>
<td>Glass Curtain Wall</td>
</tr>
<tr>
<td><strong>Accent</strong></td>
<td>Metal Panel</td>
<td>Metal Panel</td>
<td>Metal Panel</td>
<td><strong>Teracotta</strong></td>
</tr>
</tbody>
</table>

possible material usage for the proposed projects on campus
D. Material Palette

Pasteur Mall District
The modular planning scheme for the new Replacement Hospital will be articulated to enhance the building’s overall massing objectives and to further break down overall scale. Differentiated base material and modulation will emphasize human scale at the ground level. Glass wall and shading components are used to express human scale and sensitivity to environmental control for the body of the inpatient and medical office modules. The building's massing is further articulated by the vertical juxtaposition of circulation towers to the base and body of the building modules -- these elements will be constructed of primary materials. Mechanical equipment screening is gathered within a setback penthouse to create a clear top to the architectural composition of the building modules. Where feasible, roof terraces and green roofs shall be employed to further differentiate high and low volumes and optimize integration of building, landscape, and sustainable goals.

possible material usage at proposed SHC Replacement Hospital
D. Material Palette

**LPCH District**

The massing of LPCH will be articulated to enhance its dynamic visual presence on the corner and reinforce the focal point for the main entry facing Welch Road. Differentiated base material shall be used to harmonize with the entry podium for the facility. Where feasible, base and body articulation shall be combined to create large solid areas to contrast with more open, glass wall elements and grouped openings to register human scale and/or create a sense of welcome at the main entry. Glass curtainwall system shall be used to enhance expression of LPCH’s internal organization in contrast with discrete nursing wings and an internal circulation spine. At the top of the LPCH building wings, a roof eave will be composed to screen mechanical equipment and harmonize with the facades and terracing of the architecture. Building articulation in the form of façade treatments such as grouped fenestration, shading devices, roof eaves, and material changes shall give the massing depth, richness, and texture.

---

**possible material usage at proposed LPCH**

- GFRC or Precast Concrete
- Glass Curtain Wall
- Metal Panel
D. Material Palette

School of Medicine District

The building articulation for the FiM buildings reinforce massing objectives which serve to define the edge of the SoM along Pasteur Drive, and also serve as gateways to the SUMC. Differentiated base and body treatments are used to break down the length of their facades, and reinforce more intimate-scaled open space for entry expression. The modulation of grouped openings and glass walled areas reinforce the massing for the FiMs to further define areas of the façade to express the building internal organization, lend human scale, and create protected areas around the building fronting exterior open space. Sculptural canopies further develop the main entries and play a signifying role on the School of Medicine campus. Mechanical screening shall use setback penthouse to become another component in the massing of each building — set back from the cornice at the roof.

possible material usage at FiMs

- Stone, GFRC, or Precast Concrete
- Metal Panel
- Glass Curtain Wall
D. Material Palette

Quarry Corridor District / Hoover Site

The articulation of new MOB and the Parking Garage at the Hoover Site shall be designed to preserve and enhance the relationship of Hoover Pavilion with its campus context. The deployment of grouped openings in the boundary walls with glass wall areas will be used to reinforce the massing and be composed to signify areas of entry, while providing pedestrian scale at the edges of new open spaces. The massing of the new buildings will be configured to service the concept of articulated boundary walls with more transparent walls facing the interior of campus. Ground floor modulations -- such as the “drawer pull-out” on the parking garage and setbacks of the exterior walls of the MOB -- create human scale and protected walks' linking the buildings to the open spaces. Additionally building articulation such as entry canopies, clerestory windows, and setback mechanical screening at the roof will further serve to break down the vertical mass of the buildings.

possible material usage at Hoover MOB

Glass Curtain Wall
Metal Panel
Stone, GFRC, or Precast Concrete
E. Entry Expression

This Guideline section presents basic strategies for each of the new buildings within the SUMC to establish *entrances* that are identifiable, reflect the “*brand*” of the individual institutions, and offer a *warm welcome* to its users.

Concepts of entry expression are scaled to the role they serve within each institution and within the campus structure as a whole, and they involve a specific attitude about the open space leading to it. “Campus Gateways” are formed by the relationship of building density and formal open space to provide visual clarity, establish hierarchy between primary and secondary entries, and present various circulation paths. “Primary Entrances” to the different institutions shall affront Formal Open Space, while “Secondary Entrances” affront Axial and/or more Intimate Open Space. “Primary Entrances” to the FiM Buildings on the SoM shall reinforce axial connections to the SUMC.
E. Entry Expression

Entry Expressions in the SUMC fall into several main categories: “Campus Gateways” are the main entry points into campus – such as the Pasteur Drive approach or the Quarry / Welch Corner; “Primary Entrances” anchor main buildings to their District -- such as the Porte Cochere at SHC, or the proposed “entry egg” of LPCH; “Secondary Entrances” reinforce more internal connections; “Tertiary” and “Service Entrances” are less visible to the public, but still require clear connection to the public way.

Entry expressions of the medical campus are necessarily different from those of the academic side of campus in that they must be especially responsive to public interface. Appropriately, the main entry points of the SUMC are identifiable gestures that face outward to present themselves to the main public thoroughfares along Welch and Quarry roads. The entry expressions in the medical campus shall all be designed with the understanding that the hospital is a “24/7 facility” that must be extraordinarily responsive to issues of accessibility, visibility, life-safety, security, and emergency access. They must also be welcoming, and express something fundamental about the organization they serve.
**E. Entry Expression**

**Entry Canopy**
This entry strategy uses a large sheltering canopy applied to the upper reaches of the building’s base to create a protected area for drop-off and pick-up. This element works much like the existing canopy at the formal entry of the existing E.D. Stone hospital. This strategy shall be used in conjunction with Formal Open Space.

- Canopy diagram
- Existing medical complex showing canopy over formal entry
- CCSR showing louvered canopy over entry courtyard
- Proposed LPCH showing canopy at main entry
E. Entry Expression

Recessed Volume

This secondary entry condition makes use of a subtractive massing strategy to carve out a large entry volume – extending at least two stories in height. This strategy shall be used where secondary entry is situated adjacent Axial Open Space.
**E. Entry Expression**

**Sculptural Volume**

This primary entry strategy posits a three-dimensional sculptural volume in front or flanking the building it serves. The shape and materiality of this space shall be atrium-like, exhibiting warmth, transparency, and orientation.

*Electrical Engineering building showing sculptural atrium at entry*

*Proposed LPCH showing sculptural entry*
E. Entry Expression

Pasteur Mall District
Recognizing the need for a revitalized grand entry to service the new hospital, the design of the SHC shall position its primary entrance adjacent the formal open space of Pasteur Mall. This important site planning concept has a number of benefits: 1) ensure the utmost in terms of visibility; 2) provide an opportunity to redesign the open space image of Pasteur Drive; 3) move drop-off and pick-up closer to the primary public access point on Pasteur Drive.

The SHC Replacement Hospital building shall utilize the Entry Canopy approach to delineate a vast area for the shelter and protection of patient arrival. This element works much like the canopy at the formal entry of the existing medical complex -- but on an even grander scale -- and preserves the existing entry court and fountain for a more intimate secondary expression.

proposed SHC Replacement Hospital showing possible recessed volume at main entry
E. Entry Expression

LPCH District
The new primary entry for the LPCH expansion will feature a new drop-off / pick-up area along Welch Road. The glassy entry to the LPCH design shall utilize the Sculptural Volume approach to portray an openness (glass) and warmth (wood interior) that invites visitors inside. The glass entry volume is beneficial for the following reasons:

- natural light – sustainability
- clarity of entry massing vs. nursing towers
- open environment which organizes multiple functions, building levels, and a large volume of people

proposed LPCH showing possible sculptural volume at main entry
E. Entry Expression

School of Medicine District

The FIMs shall utilize a combination of entry canopies and the recessed volume approach to signifying entries. Entry points to the FIMs are typically oriented perpendicular to the main circulation avenues within the district.

Taking cues from the CCSR, entry elements for the FIMs provide some shelter and protection for its users, and clearly define an outdoor space with the building’s boundaries. This may be a space used for informal gathering, interacting of users, and perhaps public amenity such as cafes and/or coffee shops.
E. Entry Expression

Quarry District / Hoover Site
The new buildings at the Hoover site use a combination of Recessed Volumes and Entry Canopies to signify entry points. The new entry points are positioned flanking the existing Primary Entry to Hoover Pavilion. The new MOBs shall express entry intuitively through the architectural design. The juxtaposition of boundary wall and more transparent walls reinforce the “porousness” along edges facing the common open space.

proposed Hoover MOB showing possible canopy and overhang at main entry
IV. Connective Elements

Physical and visual linkages between buildings and open space form the connective fabric that creates a cohesive campus environment. The following Connective Elements form a palette of standard parts from which cohesive design may be initiated.
A. Paving

The consistent use of specific paving materials and colors for walkways and open space patterns can provide a strong sense of cohesiveness to the campus environment. There are essentially five different types of paving proposed for the SUMC campus: Plaza Paving is used to cover large open spaces and main circulatory areas; Pathway Paving is used to highlight and enhance axial paving patterns; Specialty Paving is used around main entry areas and special use areas; Courtyard Paving is used around the porous edges of specific open spaces; and Green Paving is used as a decorative and/or driveable paving system across formal lawns and gardens.

For the Welch and Quarry Corridor, the pedestrian paving patterns and materials will utilize colors and finishes to compliment existing plazas in and around the Stanford Shopping Center. Enhanced paving will be used to provide accents and interest at important gateways and nodes.

Paving schemes shall reinforce the hierarchy and variety of open space on campus, emphasizing patterns of use and relative importance of each space. Paving choices should be made with consideration of adjacent projects, continuity of materials, and transitions.

See also the Stanford University Campus Standards and/or the Shopping Center Guidelines for additional information where applicable. Final material selections will be made on a project-by-project basis.
A. Paving

Paving schemes shall reinforce the hierarchy and variety of open space on campus, emphasizing patterns of use and relative importance of each space.

Plaza Paving
This is the primary paving material using some of the highest quality materials reserved for the main public spaces including the Promenade and adjoining plaza/courtyard areas. This paving will need to be designed to accommodate occasional vehicular traffic, suggesting the use of unit pavers such as precast concrete or granite sets.
Pathway Paving

This paving material/treatment shall be used on pedestrian pathways throughout the campus. While these pathways will be primarily pedestrian, they will also receive substantial bike traffic, and occasional vehicular traffic. The paving should relate to the plaza paving, but the color should be darker since the traffic will be less dispersed, and is thus susceptible to staining. It should also be used for interconnecting paths through passageways, leading to courtyards and gateways. Because this paving is also ubiquitous, it should be beautiful, yet practical and economical.

Specialty Paving

Specialty paving is highest quality to be used sparingly around areas of high significance such as entrances, "spill-out space" from public space, and semi-public yards adjacent thoroughfares. This pavement is for pedestrian use only.
A. Paving

Garden Paving
These paving materials shall be used ornamentally to embellish planted areas around formal and axial open spaces. Materials for these applications shall be consistent with the design intent for each garden, including a range of options such as precast pavers, river rocks or stone, decomposed granite and gravels.

Courtyard Paving
Courtyard shall be paved with material that is consistent with their specific style and/or programming. This can include some unique, natural and/or textural materials and treatments. Examples include caststone pavers, or cobblestone.

Green Paving
Green Paving is a porous paving system that allows the user to park, drive, walk, or ride across a beautiful grass surface. In areas where occasional vehicular access is required (such as service or fire trucks) green paving can be used to meet the requirement while maintaining open space objectives. Green paving can also be used decoratively to enhance pedestrian uses on formal lawns.
A. Paving

- narrow modular stone pavers
- decomposed granite
- architectural concrete
- cobblestone paving
- exposed aggregate concrete
- exposed aggregate concrete with brick paver edge trim
- enriched brick paving at planter edge
- textured stone pavers
A. Paving

- Square concrete pavers with integral color
- Concrete pavers in running bond pattern
- Modular concrete pavers with integral color
- Modular concrete pavers in herringbone pattern
- Concrete pavers in random rectangular pattern
- Gravel paving
- River rock paving
- Enhanced concrete pavers with broom finish
A. Paving

- Drivable green paving: plastic grid system filled with gravel or grass
- Permeable paving in lattice pattern
- "Greenspot" concrete pavers
- Stone unit pavers in dotted matrix pattern
A. Paving

renderings showing possible paving material usage at proposed projects on campus
A. Paving

- Plaza paving
- Specialty paving
- Pathway paving
B. Planting

This guideline category establishes the placement of new planting schemes -- using principles of Continuity, Visibility and Hierarchy. This section presents approved tree species, and their typical planting patterns that shall be used to contribute to the visual continuity, and hierarchy in the open spaces between the individual districts.

Planting schemes are an important part of the connective fabric of campus. Using specific species of trees and plants across campus serves campus cohesiveness. As established by the Olmsted Plan, the Stanford University Campus utilizes distinct types of planting to establish its identity: the naturalistic Arboretum with native oak trees; formal open space such as the Oval or Main Quad with axially arranged palm trees; lawns with highly manicured grass; interior courtyards and gardens that lend uniqueness to specific destinations; and page trees that line streets and major pathways. Additionally there are street trees on Welch and Quarry Roads.

Streetscape areas on Quarry Road from El Camino to the Quarry Extension will need to be informed by planting design of the City of Palo Alto Stanford Shopping Center and commercial corridors. The design for new plaza areas and pedestrian pathways will be a continuation of the character and quality of the existing shopping center plantings that contrast with those of the University and to a lesser extent, the medical center. That said the new Main Street entry to the Shopping Center may use Canary Island Date Palms as a way to form a connection – by way of Site Imagery -- to the history of Stanford University’s historic Palm Drive.

Please see also the Stanford University Campus Standards and/or the Shopping Center Guidelines for additional information where applicable.

---

[Diagram of planting schemes]

---

Trees

- Arborium
- Street
- Axis
- Passage
- Garden

[Photo of garden along Promenade showing existing planting strategies]
**B. Planting**

*Arboretum*

The terms “Arboretum” and/or “the Farm” are a bit of a misnomer as the character of the Stanford University’s open space is a relatively homogenous collection of just a few tree species. The tree planting pattern and species of trees in the Arboretum follow the aesthetic established by the Olmsted Plan. This historic recipe was founded on generous drifts of California live oaks, but also included eucalyptus, pines, cedars, and olive trees mixed in. Over the years the aggressive growth of the eucalyptus has threatened to take over, but the “wild nature” of the Arboretum has been preserved.

The planting pattern of the Arboretum is informal and naturalistic -- as one would find in the California hills -- with native grasses and mulch covering expanses of land under the large canopy of these majestic trees. The expanse of the Arboretum gives Stanford the impression of a rural character. Yet even on campus, where individual clumps of oaks drift through built areas, their presence impart the humble, yet majestic character of the Arboretum.

<table>
<thead>
<tr>
<th>Tree Species</th>
<th>Form:</th>
<th>Height:</th>
<th>Width:</th>
<th>Spacing:</th>
<th>Use:</th>
<th>Info:</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Platanus racemosa</em></td>
<td>medium to large sized tree</td>
<td>up to 75'</td>
<td></td>
<td></td>
<td>Arbiture tree near water and drainage ways; Governor's Ave</td>
<td>deciduous attracts wildlife foliage turns color in autumn</td>
</tr>
<tr>
<td><em>Quercus wislizenii</em></td>
<td>medium to large sized tree</td>
<td>up to 70'</td>
<td></td>
<td></td>
<td>Arbiture tree</td>
<td>evergreen flowering late Spring</td>
</tr>
<tr>
<td><em>Quercus agrifolia</em></td>
<td>medium to large sized tree</td>
<td>up to 80'</td>
<td></td>
<td></td>
<td></td>
<td>evergreen</td>
</tr>
</tbody>
</table>

*Quercus agrifolia* *Coast Live Oak*

*Platanus racemosa* *California Sycamore*
B. Planting

Aesculus californica
California Buckeye
Form: small sized tree
Height: 25'
Width: 15’-30’
Spacing: variable
Use: Arboretum tree
Info: deciduous
fragrant white flower spikes
attracts butterflies

Olea europaea
Olive
Form: small sized tree
Height: 20’-30’
Width: 20’-30’
Spacing: variable
Use: Arboretum tree
Info: evergreen
dark green leaf

Sequoia sempervirens
Coast Redwood
Form: medium to large sized tree
Height: 70’-90’
Width: 15’-30’
Spacing: 15’-25’
Use: Arboretum tree
Info: evergreen
up to 3” long, gray-green leaf

Cedrus deodara
Deodar Cedar
Form: large sized tree
Height: 130’-160’
Width: variable
Spacing: variable
Use: Arboretum tree
Info: evergreen needles
upright cones
B. Planting

Arbutus menziesii
Madrone

Form: medium to large sized tree
Height: 50'-75'
Width: 
Spacing: 
Use: Arboretum tree
Info: evergreen
broadleaf
spring: small flowers
autumn: red berries
B. Planting

Street Trees
Street trees for existing and new street and sidewalk widths are typically the taller and more robust species for purposes of providing scale consistent with the adjacent open spaces and a strong overall framework in which the individual buildings are sited. In general, public streets with the wider sidewalks – such as Welch and/or Quarry – will contain the more stately and spreading trees, whereas more upright trees are proposed for streets with narrower sidewalks such as those following Pasteur Drive.

- **Ulmus parvifolia Chinese Elm**
  - Form: medium to large sized tree
  - Height: 40’-60’
  - Width: 50’-70’
  - Spacing: 32’-38’
  - Use: Street tree
  - Info: semi-deciduous leaves, tall canopy

- **Fraxinus oxycarpa Raywood Ash**
  - Form: small to medium sized tree
  - Height: 40’-50’
  - Width: 25’
  - Spacing: 34’-40’
  - Use: Street tree
  - Info: deciduous, fine-textured, symmetrical canopy

- **Quercus kelloggii California Black Oak**
  - Form: medium to large sized tree
  - Height: 40’-80’
  - Width: trunk 1’ to 2.5’ dia.
  - Spacing: Use: Street tree
  - Info: deciduous, fruits 1” to 2.5” acorn, broad-leaved

Connective Elements
Stanford University Medical Center Campus Design Guidelines
B. Planting

Quercus lobata
Valley Oak

Form: medium to large sized tree
Height: 30'-35'
Width:
Spacing: 
Use: Street tree
Info: irregular branches
yellow to light orange in Fall

Acer Rubrum
Red Maple

Form: medium to large sized tree
Height: 60'-90'
Width: 
Spacing: 
Use: Street tree
Info: brilliant coloring in Fall
**B. Planting**

**Axis Trees**

Axis trees are next in line in terms of scale. Although Axis Trees may be have a more narrow and vertical canopy than Street Trees, they can also be taller and have a stronger axial presence. Such is the case with the Palms that line Palm Drive – the quintessential Axis Tree.

---

**Aesculus X carnea ‘briotii’**

- **Form:** large sized tree
- **Height:** 35’-50’
- **Width:** 30’-40’
- **Spacing:** 20’-30’
- **Use:** Passage tree
- **Info:** semi-deciduous leaves

**Jacaranda mimosifolia**

- **Form:** large sized tree
- **Height:** 30’-40’
- **Width:** 40’-45’
- **Spacing:** 25’-35’
- **Use:** Passage tree
- **Info:** semi-deciduous leaves; flowers in Spring/Summer; can be frost sensitive; may need warmer or more protected locations

**Palms variety**

- **Form:** medium to large sized tree
- **Height:** 50’-100’
- **Width:**
- **Spacing:**
- **Use:** Passage tree
- **Info:** fast growing; small canopy
Passage Trees

In keeping with the idea that the larger more robust trees are used to reinforce the larger, more formal and/or axial open spaces, similarly the smaller, more intimate open spaces, courtyards, and passages utilize smaller more complimentary flowering trees known as Ornamentals. These tree species are intended to embellish more intimate zones, and provide a memorable character -- that register seasonal change -- to these kinds of spaces.

Pistacia chinensis
Chinese Pistache
Form: medium sized tree
Height: 60’
Width: 50’
Spacing: 35’-40’
Use: Axis tree
Info: deciduous leaves round dense shape

Zelkova serrata
Japanese Zelkova
Form: medium to large sized tree
Height: 40’-70’
Width: 25’-40’
Spacing: 28’-34’
Use: Axis tree
Info: deciduous leaves orange in Autumn

Ginkgo biloba
Ginkgo
Form: small to medium sized tree
Height: 35’-50’
Width: 30’-50’
Spacing: Variable
Use: Street tree
Info: deciduous leaves yellow in Fall pyramid shape
B. Planting

**Carpinus betulus "Fastigiata"**
- **Form:** medium sized tree
- **Height:** 30'-40'
- **Width:** 20'-30'
- **Spacing:** 20'-30'
- **Use:** Passage tree
- **Info:** dense leaf arrangement, low maintenance

**Quercus robur "Fastigiata"**
- **Form:** medium sized tree
- **Height:** 50'-60'
- **Width:** 10'-18'
- **Spacing:** 20'-30'
- **Use:** Passage tree
- **Info:** deciduous, upright, columnar
Garden Trees

Garden Trees are used to embellish a focal point or destination within a garden space. These trees can be either a large canopy tree that provide a shady destination within a formal open space, or they can also be a grove of smaller trees planted in a pattern that reinforces the unique character of the garden space. Garden trees shall be used for their vibrant color or unusual shape to lend a distinctive ambiance to a specific court and/or garden, and/or anchor a destination with a garden space.

<table>
<thead>
<tr>
<th>Tree Type</th>
<th>Form</th>
<th>Height</th>
<th>Width</th>
<th>Spacing</th>
<th>Use</th>
<th>Info</th>
</tr>
</thead>
</table>
| Prunus subhirtella autumalis  
Higan Cherry | Small to medium sized tree | 25'-35' | 25-35' | 15'-20' | Passage tree | Semi-deciduous leaves |
| Prunus cerasifera  
Purple Leaf Plum | Small sized tree | 20' | 20' | 12'-15' | Passage tree | Semi-deciduous leaves, White flowers in Spring |
| Prunus yedoensis  
Yoshino Cherry | Medium to large sized tree | 40’ | 30’ | 15'-20’ | Passage tree | Semi-deciduous leaves |
B. Planting

**Cornus kousa**
**Dogwood**

- **Form:** Small to medium sized tree
- **Height:** 15'-20'
- **Width:** 15'-20'
- **Spacing:** 15'-20'
- **Use:** Passage tree
- **Info:** Symmetrical canopy
  - Long lasting flowers
  - Dull red to maroon in Fall

**Cercis canadensis**
**Eastern Redbud**

- **Form:** Small to medium sized tree
- **Height:** 20'-30'
- **Width:** 15'-25'
- **Spacing:** 15'-20'
- **Use:** Passage tree
- **Info:** Irregular canopy
  - Spring flowering
  - Purple-pink flowers

**Chionanthus retusus**
**Chinese Fringe Tree**

- **Form:** Small to medium sized tree
- **Height:** 15'-20'
- **Width:** 10'-15'
- **Spacing:** 15'-20'
- **Use:** Passage tree
- **Info:** Symmetrical canopy
  - White, fragrant flowers
C. Lighting

Similar to planting and paving, lighting reinforces the use and organization of the open spaces at night. There are a number of typical lighting strategies that highlight outdoor features of campus at night, and/or provide orienting features (lightstands) – even during the day. A zoning diagram of lighting types and footcandies is being developed to ensure proper light levels at specific areas of the campus plan.

Standards for lighting fixture types are organized by scale. The range of lighting fixture types goes from wall-mounted building lights, to pedestrian pole lights, up to public street lights (cobra-heads). The placement of the lighting types shall be functional as well as aesthetic. The use of specific fixture types shall be used to distinguish features of the plan both at night and during the day.

The variety of lighting types shall be used to enhance connectivity on campus and visual interest to its landscape. The lighting along the Public Streets shall reinforce connectivity of the campus to the community.

Please see also the Stanford University Campus Standards and/or the Shopping Center Guidelines for additional information where applicable.
Different lighting typologies can be grouped into categories which will be prescribed to different zones within the medical campus.

Category A - Arboretum Path
   Intimate Open Spaces
   Axial Open Spaces

Category B - Event Spaces
   Plaza Spaces

Category C - Axial Open Spaces
   Formal Open Spaces

Category D - Parking Zones

Category E - Public Streets
C. Lighting

Pathway lightpoles shall be used to delineate paths.

Exterior path lights shall be used at paths and open spaces where lighting, although required functionally, must be subdued.

Light bollards shall be used in the same manner as exterior path lights at locations where a vertical surface is not available.

Category B lights shall be used at formal open spaces and major pathways which require substantial lighting loads, and where, during daylight hours, a grouping of fixtures delineates a path and acts as an orienting device.
C. Lighting

Category C lights shall be used at major malls which require substantial lighting loads, and where, during daylight hours, a grouping of fixtures acts as an orienting device.

Category D lights shall be used in parking zones and those service areas which require substantial lighting loads.

Category D lights shall be used at public streets exterior to the campus.
C. Lighting

Pole Light 1: Holophane RSL 350

This pole light is used for linear path lighting for pedestrian and bike paths. Refractors are used to direct light downward and toward one side for a pathway application, and the horizontal direction of light can be controlled with metal shields when lights are located near windows.

Specifications:

- Material: aluminum pole, RSL-350 fixture top.
- Size: 10' height pole, 16.5” diameter top fixture. 10’ pole has a 4” diameter base, tapers to 3” at top.
- Color: Stanford standard black pole, manufacturer’s low sheen black acceptable.
- Lamp: 100 watt HPS (high pressure sodium), or special condition EV spine 150 watt MH (metal halide).
- Pole spacing at 70’ to 80’ apart is consistent with most of existing campus lighting.
- Round, spun aluminum or retrofit base cover to be specified and installed on all light poles, existing and new, within project boundary.

Model/Manufacturer:


Standard Pole Light 2

Antique Street lamps globe - SU-I

This campus-wide area light is for gathering and event spaces, and their event corridors. Height of light is generally ten feet; twelve feet tall lights are used only in selected special corridors.

Specifications:

- Material: Cast iron and steel.
- Size: 10’ or 12’ height, 16” diameter base, 16” diameter globe.
- Color: Campus standard black pole: Kelly Moore Carbon Black, Low Sheen.
- 100 watt Metal Halide lamp.
- Common campus spacing of each is at 70 feet apart.

Model/Manufacturer:

- Antique Street Lamps, Inc., Capitol series pole, available through Sixteen Five Hundred Co., Oakland, CA, 1 (510) 208-5005 (Lucia: Istarinska@16500.com).

Standard Pole Light 3

Antique Street lamps SU-II

This pole light is topped with an acorn-shaped globe and is the tallest of the standard pole lights. It is a “special” fixture, currently found on Serra Mall, to be used as linear path lighting for major pedestrian malls and select parking corridors.

Specifications:

- Material: Cast iron and steel.
- Size: Pole height 14’-6”, base diameter 19”, acorn-shaped globe 13.5” diameter.
- Color: Standard black pole.
- 150 watt MH lamp.

Model/Manufacturer:

- Antique Street Lamps, Inc., Capitol series pole, available through Sixteen Five Hundred Co., Oakland, CA, 1 (510) 208-5005 (Lucia: Istarinska@16500.com).
C. Lighting

**Standard Pole Light 4**  
Original Cast Iron Light

The cast iron light is the oldest style pole light on campus, installed by relocating from one area to another. It requires special care to relocate since it must retain most of its original parts and concrete base to remain operable. It is appropriate only in special or historic campus locations, generally around the main quad and White Plaza. Details for installation are available through the Campus Planning and Design Office.

**Specifications:**
- Material: As existing, cast iron, painted black and primed, some with lead based paint.
- Size: Unavailable.
- Color: Refurbish with standard black paint and primer.

**Model/Manufacturer:**
- No known vendor. Installed when relocated from other areas.

**Standard Pole Light 5:**
New Yorkshire series, Acom and globe top

These taller, older, existing pole lights are used mainly at special intersections on campus. This example is on Galvez Mall at the Crothers intersection, and has an acom top. Others may be found surrounding Meyer Library, and at select intersections along Santa Teresa Street.

**Specifications:**
- Size: 20" diameter base, 18' height, 4.5" at top.
- Material: Cast iron and steel.
- Color: Black

**Model/Manufacturer:**

**Exterior Wall Light**
Shaper Wedge Shape Uplight

This is one of our standard options for exterior-mounted wall lights on campus. In addition to building facades, it can be used by entries or as area lighting near buildings, with approval from the Architect/Planning Office. It is also weatherproof and lies flush against the wall surface. An example of this light's use is at the Graduate School of Business. Siting shall be in accordance with the Site Furnishings Typology of Outdoor Spaces.

**Specifications:**
- Material: Natural Finish Solid Bronze.
- Size: 12" x 12" façade, 12.5" depth.
- Color: Bronze (see above for Material).

**Model/Manufacturer:**
C. Lighting

Exterior Wall Light
Shaper Wedge Shape Downlight

This is one of our standard options for exterior-mounted wall lights on campus. In addition to building facades, it can be used by entries or as area lighting near buildings, with approval from the Architect/Planning Office. It is also weatherproof and does not lay flush against wall surface like the uplight version. An example of this light’s use is at the Lyman Graduate Residence and Commons. Siting shall be in accordance with the Site Furnishings Typology of Outdoor Spaces.

Specifications:
- Material: Aluminum base metal.
- Size: 10” x 11” façade, 11-3/4” depth.
- Color: Custom Color, Semi-Gloss

Model/Manufacturer:

Uplight 1
BEGA

This is a low surface temperature lamp compatible with other metal halide lamps on campus. It has a 9000 hour life, is durable and traffic rated. It is a special condition light, used where standard path and building lights are not feasible, or for design effect. It can be seen at the Lucas Center for Imaging as an uplight for the canopy at the front entry, recessed in the pavement. This light may be used only upon approval by Stanford University Architect/Planning Office.

Specifications:
- Material: Machined stainless steel.
- Size: 9-5/8” or 13” diameter.
- Color: Custom colors supplied on special order.
- Electronic ballast; ceramic metal halide lamp.
- Lamp color is warmer than most metal halide at 81 CRI, to be more compatible with HPS.

Model/Manufacturer:

Standard Wall Light 1
Bega Classics 2812S-PD or 2987 MH

This wall light is used in academic areas. Its contemporary style complements smooth, clean architecture such as that of the Science and Engineering Quad.

Specifications:
- Material: Unavailable.
- Size: 10.25” or 13.75” diameter, 6.25” or 7.125” depth.
- Color: Unavailable.
- Spaced as needed for 1’-candle average.
- Available in MH or HPS lamps.

Model/Manufacturer:
- Bega, 2812S-PD or 2987 MH, available through Associated Lighting Representatives, Oakland, CA, 1 (510) 638-6158 (John Benson).
C. Lighting

**Standard Wall Light 2**
Kenall ‘Millennium’ MR Series

This wall mounted, full or half moon shaped lighting is used on building facades and at entries. This light has been used in many Housing area improvement projects, such as the Cowell Cluster dorms, and is known to be tough and damage resistant. All exterior lighting installations, new and retrofit, require approval from University Architect/Campus Planning and Design Office.

Specifications:
- Material: Aluminum base and polycarbonate lens.
- Size: 13” or 17.5” diameter, based on surrounding scale.
- Color: Matte Black
- Spaced as needed.
- Compact fluorescent or high pressure sodium lamps.

Model/Manufacturer:

**Eave Wall Light**
Kim Lighting, CFL1

This is a special condition fixture, suited for use under eaves where it can be hidden from view yet provide path or general lighting. Existing examples can be found in Memorial Court of the Main Quad. All Campus Standards are subject to final approval by the Stanford University Architect and Planning Office.

Specifications:
- Material: Die Cast Aluminum
- Size: 10 ½"L x 5"W x 6"H
- Color: Black
- Lamp: PL Fluorescent 42 watts, 120 volts or choose appropriate wattage for location

Model/Manufacturer:
- CFL1/42PL120-BL-P with fixed hood FH-CFL/BL-P: Kim Lighting, P.O. Box 60080 City of Industry, California 91716, Tel: (626) 968-5666, Local Representative/Distributor: Jose Garrido, Lighting Systems, 2322 6th Street, Berkeley CA 94710, JoseG@ltgsys.com Tel: (510) 982-3925 Fax: (510) 764-4560
D. Signage

Signage, like lighting, paving and other site furnishings, further serves to provide clarity, orientation and unification to aid in navigation of exterior spaces. Design Guidelines will establish a unifying theme for vehicular and pedestrian oriented directional signage based on the following principles:

- Relationship to campus signage
- Conformance with City of Palo Alto sign ordinance
- Distinctive institution identities.

Further, Medical Center Facilities staff will work with City staff to ensure that adequate signage exists in the public realm to facilitate access to these important public facilities.
D. Signage

Map Podium
Podium maps are placed at major campus pedestrian crossroads to aid campus users in finding routes to locations on campus. The Stanford University Architect/Planning Office, in collaboration with the original fabricator, designed podium cases to be durable, low maintenance, and ADA accessible. An angled top makes map reading easy for both pedestrians and wheelchair users, and allows rainwater and dirt to drain from the map surface. Each year, prior to the beginning of classes in the fall, the Facilities Operations department compares current campus conditions to those on existing maps. If changes are significant, Facilities replaces old maps with new to represent the latest physical changes to campus buildings and circulation systems.

Model/Manufacturer:
- Custom map podium, Corporate Sign Systems, San Jose, CA, 408-292-1600.

ADA Post with Steeple
Americans with Disabilities Act (ADA) signs are required for marking accessible entrances or supplying directions to accessible entrances when they are not easily seen from ADA accessible routes.

General Specifications:
- Material: extruded aluminum (permanent); wood (temporary).
- Color: all exposed surfaces of post and cap are powder coated with low sheen carbon black to match campus standard.
- ISA sign: 4” blue color band per Federal standards; ISA 3” symbol and arrow to be surface-applied with cut vinyl bright white. Band and symbol applied to all four sides; location of symbol and arrow direction to be determined in field.
- Installation: Embed post in concrete.
- Size: 42” tall (including steeple); 4” square post as base.
- Supplier: Stanford Facilities Operations Metal and Sign Shops, (650) 723-3041. If another fabricator is used, their shop drawings must be approved by University Architect/Campus Planning and Design Office.

ADA Door Button

Narrow Style Door Activator Switch
This ADA Door Button is a Stanford standard sign treatment for identifying ADA access doors. When consistently used campus wide, it will provide easier recognition and use of ADA compliant entry doors. It is detailed to match ADA height standards for ease of use. The first installation can be seen at the south side of Memorial Church, where the door button and standard handicapped posts have been used together to clearly mark the Church’s ADA path and entry.

619 Series Narrow Door Activation Switch
- Material: heavy gauge stainless steel. Graphics are etched and paint filled with polyurethane enamel, satin finish.
- Color: Blue infill color matches color 15090 in Federal Standards for Accessibility.
- Model: # 619-HSS by MS Sedco; 8701 Castle Park Drive, Indianapolis, IN, 46256
- Installation: At two locations on post, 8” o.c. above ground and 37-1/2” o.c. above ground.
- Size: button - 1-11/16” x 4-1/2”, on Stanford standard ADA sign post, black metal 3’-6” high, 4x4 tube,
E. Shared Amenities

Shared Amenities is a broad category of items that includes bus shelters, utility carts, bike lockers, and public art. This category also includes recycling receptacles, and benches in public areas. Careful consideration in the location of these shared amenities ensures their continued use.
E. Shared Amenities

**Bench 1**
The Contour Bench

The Contour Bench, suited for urban surroundings, is standard at bus stops. It is generally placed with a campus standard ash and trash can to complete a standard bus stop site furnishing group. It is also used in housing areas in Escondido Village at building entry courts.

Specifications:
- 8 foot long bench with back support.
- Douglas fir wood members, no finish, with radius edge at seat front and bench back.
- Black square metal supports, embedded in concrete, in ground.
- Installed parallel or perpendicular (where appropriate) to street axis.
- Installed with seat height at 18 inches, level. When installed along walkways, front of bench is aligned vertically with back of walk.

Model/Manufacturer:
- DuMor Bench 39, model # 39-80D, embedded supports, available from Ross Recreation Equipment, Santa Rosa, CA, (707-526-4800), or equal. Price agreement: 5% discount off trade to Stanford University.

**Bench 2**
The Courtyard Bench – 6 foot

The six foot long courtyard bench complements smaller scale historic and formal landscapes and buildings. It can be seen in groves and courtyards, and along pathways. It is the bench used continuously along Lasuen and Lomita Mall.

Specifications:
- 6-foot length.
- Teak wood members, ecologically harvested.
- Attached on new concrete or existing paving surfaces with internal dowels or with anchor bolts, and anchored into decomposed granite with dowels set into poured concrete footings.

Model/Manufacturer:
- Model: Gloucester #722132 (6’)

**Bench 3**
The Courtyard Bench – 8 foot

This eight foot long courtyard bench is sized to complement large scale historic and formal landscapes and buildings, such as the Gates Computer Science Building, and the Serra Street entry to the main quad. It can also be used in plazas, when carefully placed and appropriate to architecture and site, as in Stone Pine Plaza at the SEQ.

Specifications:
- 8-foot, with legs in the center.
- Teak wood members.
- Attached to paved surface with anchor bolts or dowels, and into poured concrete footing when on decomposed granite.

Model/Manufacturer:
- Parkside Bench: #2608 (6’ L96” D20” H38.5” 109lbs) from Gardenside LTD, San Rafael, CA, (415) 455-4500. Price agreement: 5% discount off trade to Stanford University.
- Price agreement: 5% discount off trade to Stanford University.
E. Shared Amenities

Patio Table
Ronde/Pinot Combination

This furniture group is one of our campus standards, chosen for its quality, comfort, and ease of maintenance. Its simple design complements contemporary architecture and it has been used in café settings such as Bytes Café in the SEQ Plaza. The moveable seating it offers is well liked by users and encouraged on campus where practical. All outdoor furniture additions are reviewed and approved by the Stanford Architect/Campus Planning Office to assure they are durable and compatible with campus character and sense of place.

Specifications:
- Round table: Steel with 3-layer powder-coated finish, Height 30”, Width 32”, Diameter 32”.
- Armchair: Tubular steel and flattened sheet-metal mesh with powder-coat finish, Height 32.5”, Depth 25.5”, Width 22.5”.
- Round table and Armchair are Aluminum color.

Model/Manufacturer:

Carousel Tables

The carousel table arrangement is one option for campus standard outdoor seating. This design includes attached chairs with backs, four or six to a table, and is also available with moveable, unattached seating. Its durability and casual style makes it suitable for use at outdoor eateries such as Moonbean’s Café and Tresidder Student Union.

Specifications:
- Dimensions: 42” diameter tabletop, 29” floor to tabletop height, 82” outside dimension to backs of seats, 17” seat height, four or six chairs.
- Materials: powder coated metal; chairs in metal grid pattern.
- Color: Silver (gray) chairs with Grotto (black) tabletop. Tresidder only: Cranberry (red) chairs with Frost (white) tabletop. Other colors only with approval of Stanford Architect/Planning Office.
- Mounting: unit surface mounted, or freestanding with glides.

Model/Manufacturer:
- Carousel Table, chairs w/back: CR4302-BS-42, or moveable “Catena” (rolled edge) tabletop, without umbrella hole, with matching “Verona” moveable chair. Tresidder uses the “Steelhead” table (framed with 1-1/2” diameter metal tube).
- Available through Landscape Forms, Inc., 1-800-521-2546, 431 Lawndale Avenue, Kalamazoo, MI 49001. Contact Kelly Kirk at 1-800-957-4778 or kellyk@landscapeforms.com, www.landscapeforms.com.

Courtyard Table
Courtyard table for Escondido Village

This table is located in courtyards surrounding the Escondido Village Studios. It seats 6 to 8 people comfortably, and is installed to be moveable yet anchored to the site. This style was chosen for its “patio furniture” character, ideal in residential environments, and its strength and durability. In Escondido Village, it is paired with the “Monterey” dining chairs by Gardenside. (chairs not shown in this photo)

Specifications:
- Teak, natural finish
- Weight: 93 lbs
- Dimensions: 59” round x 28.75” high.

Model/Manufacturer:
E. Shared Amenities

**Courtyard Chair**

Courtyard seating for Escondido Village

These chairs are located in courtyards surrounding the Escondido Village Studios. This style was chosen for its “patio furniture” character, ideal in residential environments, and its strength and durability. In Escondido Village, it is paired with the “Rosevale” round dining table by Gardenside.

Specifications:
- Teak, natural finish
- Weight: 25 lbs (chair)
- Dimensions: W23.5” x D17” x H36”

Model/Manufacturer:

**Table**

First Cabin series

This 54” table may be used to complement large scale contemporary and historic landscapes and buildings, and has been used at the Schwab Residential Center. It can be used in Groves, Courtyards, and in Plazas, when appropriate to architecture and site.

Specifications:
- 54” double-post table w/ deck top.
- Umbrella holes not available w/ this table.
- Teak wood members (plantation grown wood).
- All made of tenon & mortis construction.

Model/Manufacturer:
- Summit Furniture, Inc., First Cabin: FC236 (Dia54" H29” 100lbs), available through Summit Furniture, Inc., (415) 621-1638

**Umbrella**

This is the standard umbrella used for outdoor spaces on campus. The umbrella has been used in the Main Quad, at the Cantor Arts Museum, and in the Manzanita Dining complex in outdoor dining areas. Umbrellas may also be approved for certain lower level or private patio spaces.

Specifications:
- Natural-colored canopy, or equal with approval from Architect/Planning Office.
- Simple and flat base, or equal with approval from Architect/Planning Office.
- Average canopy size (around 8’ - 9’ diameter).
- Wooden pole.

Model/Manufacturer:
- Best-of-Market Umbrella: Medium Octagon canopy (#621508) Rolling Umbrella Base (#758490) – for 1-1/2” diameter pole-hole
- These are suggested vendors. The Architect/Planning Office must approve other choices.
Landscape Chair *
First Cabin series

This 34” chair is used to complement the First Cabin 54” table. It can be used in Courtyards and in Plazas, when appropriate to architecture and site.

Specifications:
- 34” grip-back chair.
- Teak wood members (plantation grown wood).
- All made of tenon & mortise construction.

Model/Manufacturer:
- Summit Furniture, Inc., First Cabin: FC273 (W28” H34” D28” 22lbs), available through Summit Furniture, Inc., (415) 621-1638

Arm Chair *
Sources series

This 35” chair is used to complement the First Cabin 54” table (seen at the Schwab Residential Center). It can be used in courtyards, in accordance with the Site Furnishings Typology of Outdoor Spaces. It can also be used in plazas, when appropriate to architecture and site.

Specifications:
- 35” grip-back chair.
- Teak wood members (plantation grown wood).
- All made of tenon & mortise construction.

Model/Manufacturer:
- Summit Furniture, Inc., Model #SR214 (W22” H35” D23” 22lbs), available through Summit Furniture, Inc., (415) 621-1638

Side Chair *
Sources series

This 35” chair complements the First Cabin 54” table at the Schwab Residential Center. It can be used in Courtyards and in Plazas, when appropriate to architecture and site. It is functional where tables and chairs must be anchored in place, to allow access to chair. For moveable furniture applications, the ‘First Cabin’ series landscape chair is also a seating option.

Specifications:
- 35” grip-back side chair.
- Teak wood members (plantation grown wood).
- All made of tenon & mortise construction.

Model/Manufacturer:
- Sources: SR215 (W19” H35” D24” 18lbs) From: Summit Furniture, Inc., San Francisco, CA, (415) 621-1638
E. Shared Amenities

Picnic Table 1
The Wood and Metal Table

The wood and metal ‘moveable’ table is the primary standard for picnic tables on campus. It shall be used wherever picnic tables are needed, unless the site requires the rustic standard picnic table or metal table.

Specifications:
- All wood members are 8 foot length (except where site requires 6 foot).
- Douglas Fir wood members: 8” width, 3” nominal thickness.
- 30” height table surface; 18” height bench surface.
- (4) Black Metal ‘J’-shape Supports, 2 3/8” outside diam., round steel pipe, 5” radius 90 degree bends at ground. Supports attached 2 feet from table ends to provide for accessibility. Embed mount also available, as at Moore building courtyard.

Model/Manufacturer:

Picnic Table
Metal

Where the site calls for a clean, simple table, as in the Rodin Sculpture Garden, this metal table may be used. The black metal is compatible with the other standard metal and wood furnishings.

Specifications:
- 6 foot length table
- All metal shall be black.
- 2-3/8” diameter powder-coated galvanized steel tubing.
- Configuration as shown.

Model/Manufacturer:
- Steelcraft Tender Tuff-Coated model # 100099.

Picnic Table
Rustic

The rustic table is a less “urban” table and seating option for sites with rural type landscapes, not associated with buildings courtyards or spaces. The oak groves along the Oval, called the “Ears of the Oval”, contain these picnic tables.

Specifications:
- 8 foot length table
- Douglas Fir wood members: 3” nominal thickness.
- 30” height table surface; 18” height bench surface
- Vertical legs, not sloped.

Model/Manufacturer:
- Timberform Site Furniture, 1 (800) 547-1940, Model #2244-8, or equal. www.timberform.com Available through Tom O’Keefe at (800) 368-1366.
E. Shared Amenities

Emergency Supply Box

These cache boxes are located close by buildings in case of a disaster, such as an earthquake. Durand, Terman, Mechanical Engineering, Chemical Engineering and Computer Science each have two boxes associated with them. The number of boxes per building depends on the size of the community that needs to be supported. Boxes are located out of the way, mostly concealed from public yet close enough to be accessible. The items contained in the box depend on the building community, but they generally include tarps, flashlights and batteries, shovels, hard hats, paper towels and other toiletries, drinking water, simple first-aid supplies such as gauze and tape, gloves, and tool boxes. The boxes need to be monitored periodically to make sure that the supplies are still in good shape.

Specifications:
- Material: Metal
- Size: H: 46" W: 30" L: 60"
- Color: Painted black (the model does not actually come in black). Emergency safety office number painted in white on front, as shown in the photographs.
- Attachment: Boxes will be mounted either directly on the ground or on a concrete pad with 6" clear maximum.

Model/Manufacturer:

Blue Light Telephones

An image for the campus-wide standard for emergency blue light telephones is shown below. Proper siting is crucial for the system to function properly. See Stanford UA/CPD details for installation and concrete pad dimension standards.

Specifications:
- Non Rusting, Non Magnetic Stainless Steel - .125” Thick
- Dimensions: 9’ height, 11” square
- Phone Recessed 2”, top cover vented
- Mounting: (4) 5/8” x 16” “J” Bolts
- Powder coated “Cobalt Blue” with silver grey reflective letters
- Lettering on all four sides of column:
  - “Emergency” = 28 1/2” long by 2 3/8” wide, “911” = 2 1/4” high by 4 1/2” wide

Manufacturer/Model:
- PLC-8 Column, by Ramtel Corporation, 115 Railroad. Ave. Johnson, RI 02919, Toll Free: 877-788-7881, Rep: Charlene, P: 401-231-3340 ex.225 Email: customerservice@ramtel.com

News Rack

The Architect/Planning Office coordinates news rack consolidation and new rack placement, to reduce clutter and ensure circulation routes are kept free of randomly placed individual racks. The Concourse series news rack is designated as the campus standard. It can be installed as a single or double high set of racks, and can be single or double sided. A concrete pad below the racks is needed for anchoring. Both commercial publications and Stanford papers may be represented, as space and user demand allows.

Specifications:
- Color: Low-sheen Carbon Black, Kelly Moore #1245-407, or equal if approved.
- Graphics to be installed below glass surface, white letters only.
- Installed generally using modules of 2, 4, and 6 news boxes.
- Mount according to the manufacturer’s specifications onto a concrete surface.
- Preferably installed to maximize public use and minimize visual impact, in areas of high pedestrian traffic.

Manufacturer / Model:
E. Shared Amenities

Trash Receptacle

The campus standard for trash receptacles was implemented in early 1997 in response to the discoloration, misalignment, and bulkiness of the old concrete standard. This model has a rigid internal liner and a side opening door for ease of emptying. All cans should be attached to the ground by drilling holes to receive anchor bolt and epoxy, or when placed in a planting area, anchored into a concrete foundation. Care should be taken that they are installed level to the ground. Stanford Grounds provides trash pickup for these cans and must be notified to begin service when new cans are installed.

Specifications:
- 36 Gallon Capacity, side opening door
- 3/8" black powder-coated steel bars

Model/Manufacturer:
- Victor Stanley model #SD-42, through MJB Associates, Grass Valley, 530-272-8005 or equal with exact proportions, if approved by SU Architect/Campus Planning.

Recycle Receptacle

Stanford is committed to recycling and using ‘green’ products and processes whenever feasible. Development of a system for collection of four types of materials: mixed paper, bottles and cans, compostable materials, and trash is in progress. Currently, placement of recycle receptacles that hold paper, beverage containers (glass and plastic) and trash is encouraged at main campus eating areas, newspaper areas, and along paths where needs are anticipated. Use is optimized when recycle and trash receptacles are grouped. A side opening door allows easy removal of sometimes heavy material, and suits the requirements of PSSI services, Stanford’s recycling contractor. Once installed, PSSI must be contacted immediately with the location of the new receptacles so they may begin pick up. In most areas, recycle receptacles should be bolted into pavement or a concrete foundation using the same detail as the trash and ash.

Specifications:
- 36 Gallon Capacity, side opening door
- 3/8" black powder-coated steel bars, blue,
- "RECYCLE" or "PAPER RECYCLE" labeling

Model/Manufacturer:
- Victor Stanley model # SD-42, through MJB Associates, Grass Valley, 530-272-8005 or equal if approved by Stanford University Architect/Campus Planning Office.

Trash Receptacle

The campus standard for trash receptacles was implemented in early 1997 in response to the discoloration, misalignment, and bulkiness of the old concrete standard. This model has a rigid internal liner and a side opening door for ease of emptying. All cans should be attached to the ground by drilling holes to receive anchor bolt and epoxy, or when placed in a planting area, anchored into a concrete foundation. Care should be taken that they are installed level to the ground. Stanford Grounds provides trash pickup for these cans and must be notified to begin service when new cans are installed.

Specifications:
- 36 Gallon Capacity, side opening door
- 3/8" black powder-coated steel bars

Model/Manufacturer:
- Victor Stanley model #SD-42, through MJB Associates, Grass Valley, 530-272-8005 or equal with exact proportions, if approved by SU Architect/Campus Planning.
**Bicycle Rack 1**

**Lightning Bolt Rack**

The Lightning Bolt series bicycle rack is the most commonly seen rack on campus, one of only two campus standard rack styles. The favorite of bikers, it was chosen as a standard for its security and ease of use. A choice of configurations and lengths is available in the “LR” series to respond to physical constraints of spaces: single row configuration, perpendicular to rack base, double row perpendicular, or, for very tight spaces, single row diagonal. The Stanford University Architect/Planning Office sites new racks, and works with the Transportation Department to replace nonstandard racks and relocate existing racks when needs change. Although many other rack styles are seen on campus, an ongoing goal is to replace all nonstandard with standard racks.

**Specifications:**
- Extra Heavy, .188 wall square steel tubing with .75” solid bar loops, thermoplastic polyester powder coat, matte black.
- Single-sided perpendicular racks require six feet of space for bikes and approximately four feet for aisles, a total of ten feet.
- Double-sided perpendicular racks require approximately ten feet of space for two rows of bikes and approximately four feet on each side for aisles, a total of eighteen feet.

**Manufacturer/Model:**
- Creative Pipe, Inc. Contact: Mark Pappas, P.O. BOX 2458 Rancho Mirage, CA 92270, (760) 340-5555, Model LR-P (single side perpendicular) and LR-XP (double side perpendicular).

**Bus Shelter 1**

This bus shelter is one of the standards for passenger shelters on campus, and is a secure bus stop on the Marguerite shuttle route. The shelter is also durable and economical, and can be quickly installed on-site. Its design is unobtrusive on the site and matches the simple style and palette that governs the overall look of the university. Examples of use are at Parking Structure #5.

**Specifications:**
- Material: Aluminum structure, ¼” tempered glass windows, laminated sandwich panel roof.
- Size: 90” standard height (ground to roof top), 37 ¼” width, 140 1/2” length.
- Color: Bronze tinted.
- Cantilever shelter model.
- Benches are made out of clear Redwood or Douglas fir.

**Model/Manufacturer:**

**Bus Shelter 2**

This bus shelter is one of the standards for passenger shelters on campus, and provides a secure waiting place for public transportation. The shelter is of durable and graffiti-resistant material. It includes a front wind screen feature as additional weather protection for waiting passengers. The shelter design relates to the contemporary style and palette that governs the campus look, and the rounded edge detail on the roof gives the shelter architectural distinction. Examples of use are at Parking Structure #5.

**Specifications:**
- Material: Steel frame.
- Size: 99” standard height (ground to roof top), 51” width, 141” length.
- Color: Black semi-gloss, impact fade and chemical resistant paint.
- Flat-ceiling roof, freestanding benches, and a wind screen.

**Model/Manufacturer:**
E. Shared Amenities

Bollard 1
Wooden Bollard

The wooden bollard is the primary standard for campus. Where emergency access is required, hydraulic bollards or removable bollards are used. When connected by a chain, they are used along the sides of primary roads, including Campus Drive Loop Road and Palm Drive.

Specifications:
- Pressure-treated Lodgepole Pine, 8" diameter.
- Installed with height of 3 feet above grade, 2-3 feet embedment, 5'-6" o.c.
- Install removable wooden bollards in the bollard rows on fire access and service routes to provide a 12’ minimum opening when removed.
- With chain, spacing should be 12’ o.c. maximum; 5'-6" gaps for pedestrians.
- Detail of bollard and chain available from the Planning Office.

Model/Manufacturer:

Bollard 3
Metal Bollard

The metal bollard was designed to be compatible with the architecture and streetscape in more urban areas of campus. It has been used mainly at the edges of the Pedestrian Safety Zone and can be found on either end of Serra Mall, as well as in the SEQ. The design is custom to Stanford University, developed by the University Architect/Planning Office in collaboration with Grounds Services and the bollard supplier, Creative Pipe. As with wooden bollards, two designs are available: fixed, or removable with locking capabilities. Finished in flat black, it conforms to the campus standard flat black metal finishing spec, and is circled with high visibility reflectorized white tape to be seen at night.

Specifications:
- 6" Sch. 40 pipe 6.625 X .280 wall.
- Installed approximately 3’ above ground
- Facility Operations to supply lock and record lock information
- Black thermoplastic powder coat finish

Manufacturer / Model:

Bollard 5
Metal Bollard

This bollard is a revision to the original metal bollard design, allowing both the removable and the fixed bollards to be installed without base plates. Instead of a locking mechanism on the base plate, the locking mechanism is on the inside of this bollard. Examples of use are at the Clark Center, Lokey Labs, and the North/South Axis.

Specifications:
- Material: Round Steel Pipe.
- Size: 36’ standard height, 6’ diameter.
- Color: Black, thermoplastic coated
- Domed cap, inset reveal, and mounted as removable-embedded.

Model/Manufacturer:
V. Appendix
A. Hoover Pavilion Historic Preservation Approach

1. Background

The Hoover Pavilion is an L-shaped building with two wings: the original wing, which was constructed in 1931, has a six-story tower at its northern end topping a four-story main building. The second wing which was added in 1939, is a four-story addition in the same style and materials extending to the east of the central tower. The building housed the Palo Alto Hospital from 1931 to 1968 and has supported the programs of the Stanford University Medical Center since 1968. The Hoover Pavilion has been evaluated for historical significance by two qualified reviewers; both evaluators agree that it meets the criteria for listing on the California Register of Historic Places.

The Hoover Pavilion will be renovated as part of the Stanford University Medical Center Facilities Renewal and Replacement Project. The renovation is designed to comply with the Secretary of the Interior’s Standards for Rehabilitation of Historic Properties. The building has been remodeled repeatedly over the years and was seismically strengthened in 1982 and 2001. Few original finishes have survived in the interior spaces; most were removed by a major modernization project in 1963.

2. Planning Objectives

- Renovate Hoover Pavilion to house medical offices and clinics offering state-of-the-art facilities, infrastructure and equipment
- Meet or exceed applicable codes and standards, including the Secretary of the Interior’s Standards for Rehabilitation of Historic Properties
- Improve the historic character of the building exterior by removing intrusive elements such as mechanical equipment and overgrown landscaping by restoring the original finishes
- Accommodate compatible new uses on the site while preserving views of the distinctive tower element

3. Preservation Approach: Building

The Hoover Pavilion was designed in Art Deco style. The building has a distinctive “ziggurat” form at its central tower, with a distinctive red pyramidal roof rising above the flat roofed wings. Site design guidelines were prepared to ensure that the view of the distinctive profile of the central tower is preserved as the project also includes the addition of a new office building and a parking structure on the site. The historic exterior materials of the building include: integrally-colored concrete, embossed terracotta panels, pierced terracotta screens, ceramic tile, cast concrete ornamental details, a bronze doorway surround and bronze light fixtures. The majority of windows are double-hung three-over-three; many windows have been modified over time. The entry doors have been replaced since the 1930s and at least one door converted to a window. The original drawings call for a tile roof on the central tower however, a photograph taken in the 1930s shows a smooth roof surface.

The preservation approach for the building is to restore the appearance of the historic exterior while accommodating rehabilitation of the interior of the building, where decades of remodeling have removed most historic character and materials. A three-level preservation hierarchy will guide decision making during project design. The three levels are:

Level 1 (Preserve): Important historic materials will be preserved or restored.

Level 2 (Rehabilitate): Historic features that may be inconsistent with modern code requirements. Project will attempt to preserve these where feasible or replace them with compatible new materials.

Level 3 (Remove or Replace): Later additions to the building that detract from its historical character will be removed where possible or replaced with compatible materials or screened from public view.

The pages that follow include photographs of the elevations of the building and brief descriptions of the Level 1, 2 and 3 items for each façade and the interior.
A. Hoover Pavilion Historic Preservation Approach

Main Entry (North façade of 1931 wing)

Level 1 (Preserve): Terracotta panels, screens (at penthouse level) and tiles, cast concrete decoration, bronze lanterns, pyramidal roof

Level 2 (Rehabilitate): Windows, 2nd floor landing railing, entry steps, door surround, doors in stair tower

Level 3 (Remove or Replace): Stair railing at entry steps, glass entry doors; antennas and most rooftop equipment

North façade of 1939 wing (1931 wing to right in photo)

Level 1 (Preserve): Terracotta panels and tiles

Level 2 (Rehabilitate): Windows, doors to roof terraces

Level 3 (Remove or Replace): Equipment on roof terraces; air conditioning units in window openings
A. Hoover Pavilion Historic Preservation Approach

Details of Level 1 features:

Pyramidal roof, terracotta panels, screens and tile details

Molded plaster and bronze relief over main door; bronze lantern at main door

Molded concrete relief at main entry
A. Hoover Pavilion Historic Preservation Approach

**East Entry of 1939 wing**

**Level 1 (Preserve):** Terracotta panels and tiles

**Level 2 (Rehabilitate):** Windows

**Level 3 (Remove or Replace):** Door, exterior lighting, air conditioning units in window openings, exposed conduit pipe

**South façade of 1939 wing**

**Level 1 (Preserve):** Terracotta panels and tiles

**Level 2 (Rehabilitate):** Windows

**Level 3 (Remove or Replace):** Loading dock, garbage containers, picnic tables and shade structure, basketball court
A. Hoover Pavilion Historic Preservation Approach

East façade of 1931 wing

Level 1 (Preserve): Terracotta panels and tiles

Level 2 (Rehabilitate): Windows, trees, restore door opening

Level 3 (Remove or Replace): Rooftop equipment, attached 2nd floor walkway to Nurses’ Cottage, colored glass infill on ground floor windows

Details of Level 3 features:
- Detail of door conversion
- Detail of 2nd floor walkway
- Detail of window infill (red glass panel)
A. Hoover Pavilion Historic Preservation Approach

South façade of 1931 wing (Nurses’ Cottage in foreground to be removed)

Level 1 (Preserve): Terracotta panels and tiles

Level 2 (Rehabilitate): Windows

Level 3 (Remove or Replace): Fire escape, 2nd floor walkway to Nurses’ Cottage

Detail of fire escape
A. Hoover Pavilion Historic Preservation Approach

West façade of 1931 wing

Level 1 (Preserve): Terracotta panels and tiles, awning

Level 2 (Rehabilitate): Windows

Level 3 (Remove or Replace): Modern glass doors

Detail of awning, doors
A. Hoover Pavilion Historic Preservation Approach

4. Preservation Approach: Interior finishes

The remaining historic fabric in the interior occurs in two areas: the entry foyer and the stairwells. These are Level 2 areas, as building code requirements for fire safety, exiting, and accessibility may require alterations to some of these elements. There are some art deco decorative materials in the entry foyer that should be considered for reinstallation, if feasible. These are pictured below.

5. Preservation Approach: Site and Setting

The original landscape plans for the site, developed by Reed and Corlett in 1930, show a formal circulation network of arcing driveways surrounded by an informal scattering of young trees (primarily eucalyptus, oak and pine).
Appendix

A. Hoover Pavilion Historic Preservation Approach

Some of these early plantings have survived on the site; however the plant materials are declining in vigor, over sized and interspersed with more recent additions.

The fountain plaza at the entry is not a Reed and Corlett design; the original site plans show a simple stepped entry across an oval of lawn. While no construction documents survive for the fountain, it appears in a 1957 aerial photograph. While later than the period of significance for the building (1930-1941), the fountain plaza is consistent with the original oval entry lawn and is should remain.

Two basic preservation goals underlie the approach for the site and setting:

- Maintain and enhance views of the central tower, primarily from the intersection of Palo and Quarry Roads
- Restore historic landscape planting where feasible around Hoover Pavilion. Design new site landscaping to enhance and compliment restored landscaping.

These goals will be accomplished alongside program goals to

- Enhance pedestrian and vehicle circulation on the site
- Provide attractive outdoor seating and passive recreation areas
- Use drought tolerant plant materials

Site character circa 1931-1939
Later, during the 1940s and 1950s, new plantings of evergreen shrubbery and trees were added, particularly at the main entrance and along the northern façade.

North façade, circa 1950
A. Hoover Pavilion Historic Preservation Approach

Following the preservation hierarchy developed above, the preservation approach for the site is as follows:

Level 1 (Preserve):
Maintain formal planting and geometry of entry fountain landscape:

- Protect and restore original elements and fountain.
- Consider replanting with more drought tolerant materials.

Level 2 (Rehabilitate):

- Restore foundation plantings in an historically consistent manner:
  - Vertical evergreens @ pilasters (yew, cypress, etc.)
  - Add spreading junipers to screen base and equipment (Pfizer juniper or sim)
  - Maintain adequate planting zone on west façade
  - Remove trees at east façade and replace foundation planting per above
  - Develop appropriate accent planting at building entries
- Develop additional passive use areas at large planting area east of fountain and at front entry. Provide planting and site furnishing consistent with other site landscaping
- Replace site walkways and paving with appropriate geometries and materials.

Level 3 (Remove or Replace):
Remove loading dock and other non-historic improvements and renovate courtyard to achieve the following:
- Seating and other passive use areas for use by building occupants and visitors
- Formal planting patterns to reinforce use areas and circulation
- Use trees to further reinforce courtyard geometries and use, provide shade and enhance views from above.
B. SHC Clinics

The SHC Clinics Expansion parcel shall be developed through the demolition of SHC’s portion of the ED Stone complex (Grant, Boswell, East, West) and be constructed to the East of the New Stanford Hospital, bounded by Quarry Road Extension to the West, and Roth Way/Pasteur Drive Extension and Dean's Lawn to the South. The Quarry Road Extension has functioned as a discreet access road to the back-of-house functional areas of the Medical Center, as a majority of pedestrian and vehicular traffic continues South on Campus Drive West toward the University. The intersection of the Quarry Road Extension and Campus Drive West is a subtle vehicular threshold between the Medical Center and the University. This transition is clearly exemplified in the stark difference between the high-speed boulevard character of Quarry Road, and the organically shaped and densely planted Campus Drive West which slowly winds its way around the perimeter of the University.

The fundamental identity of Stanford Hospital and Clinics relies upon the innate relationships of their world-class inpatient and outpatient medical treatment programs. Therefore, it is essential that the Clinics Expansion be well integrated with the New Hospital through its physical proximity, building characteristics and use of open space. The primary patient/visitor drop-off and entry sequence shall occur along Pasteur Drive, so as to strengthen the connection between Hospital and Clinics while maximizing the organizational potential of Pasteur Mall. Clinics visitors will have the opportunity to park in the existing Parking Structure 4 (below Pasteur Mall). The turn-around time for clinics visits is significantly higher than that of hospital visits. Therefore it is essential that the amount of parking in this area be sized to adequately serve the patient population.
B. SHC Clinics

The secondary access to the Clinics shall be along Quarry Road Extension, at the Southern edge of the site. A parking structure will be constructed in this area, sized appropriately to accommodate clinics staff, who will access the building discreetly along Quarry Road Extension. The existing Marguerite shuttle stop located behind the East Pavilion shall remain in service, allowing clinics staff to easily access the building from the Palo Alto Caltrain station as well as satellite parking lots and structures.

The SHC Clinics Expansion shall be a continuation of the building composition exhibited in the New Stanford Hospital; featuring a repeated modular approach with a stepped massing and planted roofs. This complex of buildings will stand alone, distinct and separate from the Hospital, although physically connected at one or more levels for the purposes of patient transfer. The tallest portion of the building complex shall be concentrated toward the center of project area, stepping down in scale toward the Quarry Road Extension. The materials and color of the Clinics shall be similar to that of the New Stanford Hospital. However, subtle differences in fenestration pattern and materials may be utilized to achieve a clear distinction from the Hospital complex. The visibility and configuration of the main entry to this complex shall be less prominent than the Campus Gateway entries to SHC, LPCH and SoM.

The primary pedestrian and bicycle movement to the clinics shall occur along The Promenade, the primary north-south axis which runs through the entire Medical Center. Together with The New Stanford Hospital to the West and the FIM-2 Building to the South, the clinics shall frame the SHC Courtyard. This courtyard (in approximately the same location as the existing Stanford Hospital Fountain) provides a climactic point of relief along the promenade where the populations of the Hospital, Clinics and School of Medicine converage. Roth Way (to the South of the SHC Courtyard) is a primary East-West pedestrian and bike corridor which divides the SHC district from the SoM district.

Across the Quarry Road Extension (to the East) shall remain essentially as it is today. The existing surface parking is well screened by planting, so as not to diminish the experience along campus drive. At the North end of this parcel, the emergency generator farm will need to be expanded, in order to meet the stringent emergency-power demands for the LPCH Expansion Hospital. This area shall be fenced in sufficiently to insure secure access and visual quality.