SECTION 32 00 00
CAÑADA COLLEGE CAMPUS EXTERIOR
Design Standard

PART 1 GENERAL

1.1 PURPOSE

A. San Mateo County Community College District is committed to providing world-class educational facilities for its faculty, staff and students. This goal would be unfulfilled without emphasizing that the exterior environment is part and parcel to the educational experience. The campus exterior is not just the space left over between the buildings nor is it simply the void between the buildings and the parking lots. The design of the entire campus experience must be thoughtfully considered to achieve this goal.

B. Being an institution of higher learning, the built environment of the buildings and grounds should be exemplary and not merely representative of satisfaction of minimally accepted standards. The campus should have a park like quality, with a strikingly beautiful and impressive appearance while requiring minimal maintenance. The conscientious use of appropriate materials that satisfy aesthetic and economic goals should, in their own right, be employed to provide subliminal lessons on the conservation of natural resources. The landscape design shall provide directional cues and provide places to congregate and collaborate. At the same time, these elements shall provide clear emergency access and safe paths especially during the evening hours, when many classes are in session. To this end, SMCCCD, a publicly funded educational institution, also has a responsibility to 'teach' and 'lead' by being a showcase of the economy of employing the appropriate use of native and drought tolerant plants and the use of irrigation systems that conserve water. The design shall represent the proper balance of erosion control and hardscaping, and the economical use of lighting that provides way finding and safe access while also highlighting the beauty of the nighttime campus.

1.2 SITE DESCRIPTION

A. Adapted from the 2006 and 2011 Facilities Master Plans

1. The 132-acre site of Cañada College sits back and atop a hill above the surrounding valley, bordered by the residential communities of Woodside and Redwood City. There are two landmark entries into the campus. The primary entrance is located on Farm Hill Boulevard, while the secondary entrance is off a residential segment of Cañada Road. These entrances are marked with landmark elements such as walls, flags, and distinctive planting. The campus loop road serves as a connector street between Farm Hill Boulevard and Cañada Road. The loop road is similar to the figure '8' with the convergence separating into the upper and lower campus.

2. The Cañada College campus is a well organized distribution of classroom buildings, athletic facilities and outdoor spaces. The upper campus is comprised of the majority of instructional classrooms while the athletic facilities are located across the loop road in the lower campus. Bounded by buildings, there is a series of terraces beginning with the high point with parking Lot #7 to the outdoor terrace at Building 6, some 90 feet down the hill. Multi-story buildings assist with the transition between terraces. The major terrace, the Quad at the base of Building 9, transitions to the adjoining amphitheater, and then to the outdoor terrace at Building 6 and gathering areas in front of Building 3.The campus is strongly connected to its environment and vistas to the south and west. The athletic building and new athletic fields are located across the campus loop road.

3. Parking is provided in a series of parking lots which are at the westerly side of the upper campus. This arrangement provides convenient access to all major buildings and at the same

time avoids placing cars in the line of sight on the view side of the campus. Additional parking is provided at the convergence of the upper and lower campus, at the intersection of the two loops of the “8”-figured loop road. Minor additional parking lots provide limited parking areas close to the athletic facilities and the maintenance center.

4. Refer to the 2006 and 2011 SMCCCD Facilities Master Plan and the 2015 Master Plan Amendment for additional information about the campus and proposed projects.

PART 2 DESIGN STANDARD

2.1 CONSIDERATIONS

A. The following considerations should be taken into account when designing exterior spaces at Cañada College:

2.2 EXTERIOR DESIGN AND PROGRAM CONSIDERATIONS

A. Site Design: Consider the rustic and natural beauty of the surrounding environment and design appropriately to take advantage of the expansive views, while ensuring that intimate and protected outdoor gathering spaces and connections between buildings, parking areas, and quads are safe, inviting, and inspiring. Recent renovations to the central quadrangle areas and gateways to campus have established a precedent for the exterior design vernacular at Cañada College, which new site design projects should relate to.

B. Micro climate: To take advantage of the warm and sunny microclimate during most months of the year, open spaces call for the provision of shaded areas.

C. Emergency vehicle access: Emergency response vehicles must be provided with a clear and direct access to all areas of the campus.

D. Safety: Outdoor areas should feel safe and secure at all times.

1. Selection and placement of plants should not create hidden areas.

2. High canopied trees should be included for seasonal shade and to reduce concealment at the lower level.

3. Pedestrian and automobile paths should be well lighted and incorporate the use of clearly marked signage.

4. Aesthetic considerations during the daylight hours should be secondary to the primary concern of clear and unobstructed view for safety considerations day and night.

5. Root barriers should be employed where trees are planted near paved areas. Consideration must be made to prevent root-triggered pavement lifting that will cause trip hazards and the high costs of future sidewalk repair.

E. Pedestrian circulation: Emphasize the campus’ natural beauty and vistas. Provide pathways in naturally traveled areas to promote enjoyable walking experiences.

F. Accessibility: The hilly campus must be accessible to the entire community. Physical and mental limitations should not preclude the use of the use and enjoyment of the campus facilities by students, faculty, staff and the general public. Accessible paths of travel that allow the entire community to use the same or geographically similar paths shall be developed to minimize or eliminate the distinction between the varying degrees of physical disability.

G. Night time/ Day time use: Up to half of the Cañada College student population may be attending evening classes. Beyond the issues of personal safety, the exterior design should support an

evening experience. This may include orchestration of exterior features (i.e. graduating heights of features to conceal and reveal illuminated vistas). Well thought out lighting of landscape, site, and architectural features shall be coupled with safety and way finding lighting to create a comprehensive experience.

H. Art on Campus: Provision in the hardscape planning should be made for art placement and enjoyment. Art can take the form of water features, murals, tile mosaics, topiary, paving patterns, sculpture, and display areas for two-dimensional works. Provision should be made for evening lighting of artwork as well. Maintenance requirements and provisions for proposed artwork should be reviewed with the District Project Manager during the process of art selection.

I. Public Transportation, Passenger Drop-Off and Pick-Up Zones, Service & Delivery: Accommodate these necessary vehicle-based elements while maintaining a pedestrian-friendly and aesthetically-pleasing campus.

J. Bicycle Racks: Provide bicycle racks at strategic locations around the campus, for the convenience of bicyclists. Refer to 32 23 13 Bicycle Racks Design Standard for more information.

K. Permit Parking: Placement of parking permit dispensers, parking meters, and parking fee collection equipment shall be clearly identified and logically placed.

L. Drinking Fountains: Drinking fountains should be located within buildings. Exterior fountains are only required at athletic facilities. Refer to 22 47 13 Exterior Drinking Fountains Design Standard for more information.

M. Concessions: Placement of vending machines and concession stands, such as for coffee, juice, smoothies or prewrapped foods, shall be easily accessible and serviceable. Safety and accessibility concerns for pedestrian use should not be compromised for temporal servicing and re-loading of equipment or vending machines.

N. Security: Surveillance cameras shall be placed to capture images of vehicles entering and exiting the campus, as well as critical areas identified by SMCCD. Security systems shall be connected to the existing AMAG Access Controls and Alarm Monitoring System. Emergency telephones shall be located in well lit, easily identifiable areas along walkways, in plazas, and in parking lots. Locations shall be reviewed for convenience of use and minimum exposure to abuse and vandalism. It is important to note, that while the campuses are to remain open most of the time, there are times when the campuses must be physically closed (for example, during emergency response or power outages). Gates and/or removable lockable bollards, chains and padlocks, or some other provision(s) should be considered for this purpose, appropriate and unobtrusive to the surrounding environment.

O. Site Furniture and Receptacles: Standard benches, tables and chairs and waste and recycling receptacles have been selected by the District. Refer to 32 23 23 Site Furniture Design Standard and 32 23 23 Trash and Recycling Receptacle Design Standard for more information.

P. Hardscape and Landscape: Respect and build upon the existing selection and use of banded and colored concrete, comma benches, walkway lighting, handrails, stairs, paths, ramps and other site architectural elements, as well as the existing selection of specific landscaping elements, when designing improvements and additions to other exterior areas. See Section 4, Hardscape Materials and Design, below.

Q. Outdoor activities/events: The continued development of the Cañada College campus shall take advantage of its particularly beautiful natural views and vistas afforded by its hilltop location. A constructive and holistic approach shall be undertaken in developing the campus to graciously facilitate the many outdoor activities/events that presently occur and support the many outdoor activities that may occur in the future. The following is a sampling of the types of activities and events that could occur on a college campus:

1. Displays:
    a. Information about college activities - - current events
    b. General public information (e.g. emergency response information)
    c. Academic achievement/awards
    d. Art exhibits
2. Study:
    a. Individual Study
    b. Group Study
    c. Outdoor Education (e.g. art class / landscape class)
    d. Informal collaborative gatherings
3. Academic Support Activities:
    a. Academic Commencement activities
    b. Conference pre-function and break-out areas
    c. Performances (e.g. recital / concerts / plays / multi-media presentations)
4. Campus Life Activities:
    a. Exercise
    b. Fundraisers (e.g. car wash / barbeques / swap meets)
    c. Retail surge space
    d. Movie night
    e. Photography
    f. Food Fairs / Book Fairs / Club Fairs / Job Fairs
    g. Welcome Week / Podcast Tours
5. Landscape Maintenance
6. Waiting areas for transportation (public & private)
7. Landmark entries, secondary and tertiary gateways
8. Kindercaminata

2.3 PLANT SELECTION AND PLANTING DESIGN

A. Refer to 32 90 00 Planting Design Standards, Construction Specifications, and Details for additional information and guidelines regarding planting design and installation on SMCCCD campuses. Key points:

1. Each campus is subdivided into planting “zones”: undeveloped areas, perimeter areas, campus core, and specialty areas. Each zone has different requirements for plant selection and irrigation and maintenance requirements.

2. Planting and irrigation design should meet the requirements of LEED-NC WEc1.1, the Cal Green Building Code and the state’s model Water Efficient Landscape Ordinance. Site and planting design should meet the requirements of LEED-NC SSc5.1.

3. Preference should be given to native species first and then adapted, drought-tolerant species.

4. Consideration shall be given to SMCCCD’s commitment to integrated and natural pest management.

5. Consideration shall be given to SMCCCD’s lean maintenance budgets.

6. Coordinate all planting, particularly trees, with utilities. Utilize root barriers.

7. Minimize the use of turf lawn. No-mow fescues are *not* acceptable at Cañada.

B. Design for Seasons: Fall and Spring semesters are the most highly enrolled academic periods, followed by the Summer semester. Provide opportunities for shows of color throughout the seasons, but emphasizing Fall and Spring when more students and faculty are present to enjoy the natural beauty of blooms and color changes.

C. Refer to Appendix A: Approved Species List. This Approved Species List has been developed through previous landscape projects. It lists both historic plants and new plants. This list should be considered PRELIMINARY, and the design professional shall work with the District Project Manager to finalize the list prior to the design development phase of the project. It is the role of the design professional to select plants which are compatible with this palette. Not every species listed is located in every section of the campus and care should be taken to select a project palette which is visually and functionally balanced.

2.4 IRRIGATION DESIGN

A. Campus System:

1. Cañada College does not have a dedicated irrigation main; connect to nearest domestic water lane.

2. The campus does not have centralized irrigation control system. Irritrol Rain Master is the groundskeepers’ preferred controller.

3. Locate controller so that it is shielded from public view but easily accessed for maintenance and operations. Pedestal or wall-mounted controllers are acceptable.

4. Irrigation backflow preventers should be housed in an aluminum enclosure out of public view.

B. Refer to 32 84 00 Irrigation Design Standards, Construction Specifications and Details for complete information about irrigation design and installation on all SMCCD campuses. Key points:

1. Design irrigation systems that are water conserving, efficient, practical to maintain and manage, and flexible to changes in the campus development pattern.

2. Irrigation design should meet the requirements of LEED-NC WEc1.1, the Cal Green Building Code and the state’s model Water Efficient Landscape Ordinance, as well as the requirements of all agencies with jurisdiction.

3. Irrigation controller should be connected to real-time weather or ET data. Irrigation control and scheduling should be based on plant type, time of year and weather.

4. Irrigation systems should be designed with parallel purple pipe infrastructure, in anticipate of future reclaimed water use.

2.5 HARDSCAPE MATERIALS

A. Concrete Flatwork

1. Approved colors:

   a. Natural gray (standard) concrete

   b. Accent color: Davis Colors “Kahlua”

   c. Limit the use of concrete colors with Solar Reflectance Index values below 29.

2. Approved finishes:

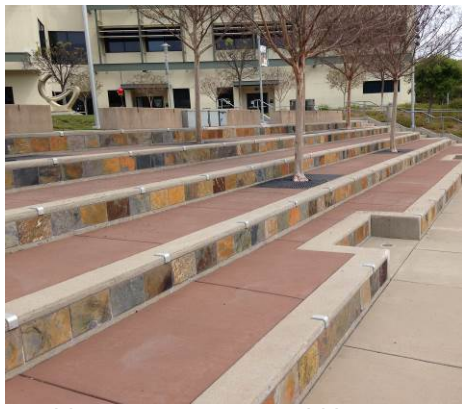
   a. Typical pedestrian concrete shall be medium broom finished.

   b. Accent stripes or bands may have sandblast finish. Mask the edges of adjacent concrete sections that will not receive a sandblasted finish, for protection.

3. Photographic examples:

Natural gray concrete
(walkways throughout campus)

Davis Kahlua concrete bands in
natural gray concrete flatwork
at Building 2



Davis Kahlua concrete at Amphitheater (with African multicolor slate)

Davis Kahlua concrete bands in natural concrete flatwork at Building 9

B. Cast-in-Place Concrete Seat Walls

1. Design of concrete seat walls should relate to existing “comma” seat wall found throughout campus.

   a. Approved color: Davis Colors “Sandstone”

   b. Finish: light sandblast

   c. Specify 1/8” radius corners

   d. Seat walls should have skate guards, see specifications below.

2. Photographic examples:

Davis Sandstone “comma” seat wall by Building 2

Davis Sandstone seat wall/planter by Building 5

Pre-cast Davis Sanadston sandstone cap on retrofitted planter by Building 17

C. Stone

1. Approved stone materials:

a. Prairie Brown granite

1) Application: entry monuments, entry sign veneer, seat pads

2) Supplier: Cold Spring Granite (located in Cold Spring, Minnesota)

b. Academy Black granite

1) Application: water feature boulders

2) Supplier: Academy Black Quarry (located outside of Clovis, California), operated by Cold Spring Granite Company

c. African multicolor slate

1) Application: accent tile for feature wall architectural elements

2) Supplier: American Slate (located in Walnut Creek, California)

2. Photographic examples:

Prairie Brown granite sign wall

Academy Black granite at water feature

Prairie Brown seat pads

Academy Black granite boulders and wall cap (natural concrete paving with terra cotta quarry tile)

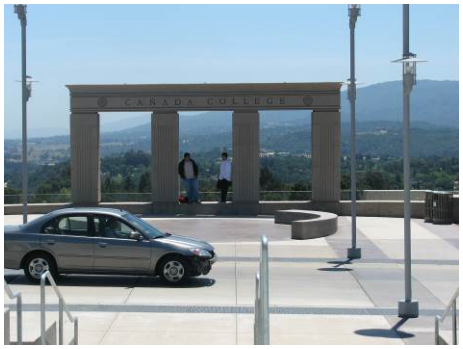
African multicolor slate

African multicolor slate at Amphitheater

D. Stucco

1. Standard: Superior Stucco #746 Ambrose

2. Photographic examples:



Ambrose stucco on Entablature

Ambrose stucco sack/patch on formerly aggregate planter

E. Handrails

1. Design of handrails should relate to design of handrails existing on campus.

2. Handrails to be tubular galvanized steel.

3. Photographic examples:

Stair Nosing

4. Specify grooved and painted treatment warning strips on stair nosing, compliant with applicable codes. Do not specify surface-adhered treatments, as they eventually fail and become a maintenance burden.

5. Photographic example:

F. Truncated Domes

1. Specify cast in place truncated dome pavers, compliant with applicable codes, such as Armortile.

2. Colors: Dark gray/charcoal when yellow is not required by code.

3. Photographic example:

G. Anti-Skate Devices

1. Where anti-skate devices are required, an embedded skate guard is preferred.
2. When embedded skate guard is not possible, use these approved products:
   a. Skatestoppers® clear anodized FA series skate deterrent for poured concrete
   b. Skatestoppers® clear anodized HR series skate deterrent for hand rails
3. Do not use adhesive-mounted skate guards.
4. Photographic examples:

Skatestoppers® FA-902.5

Skatestoppers® HR-1.9

H. Road Barriers

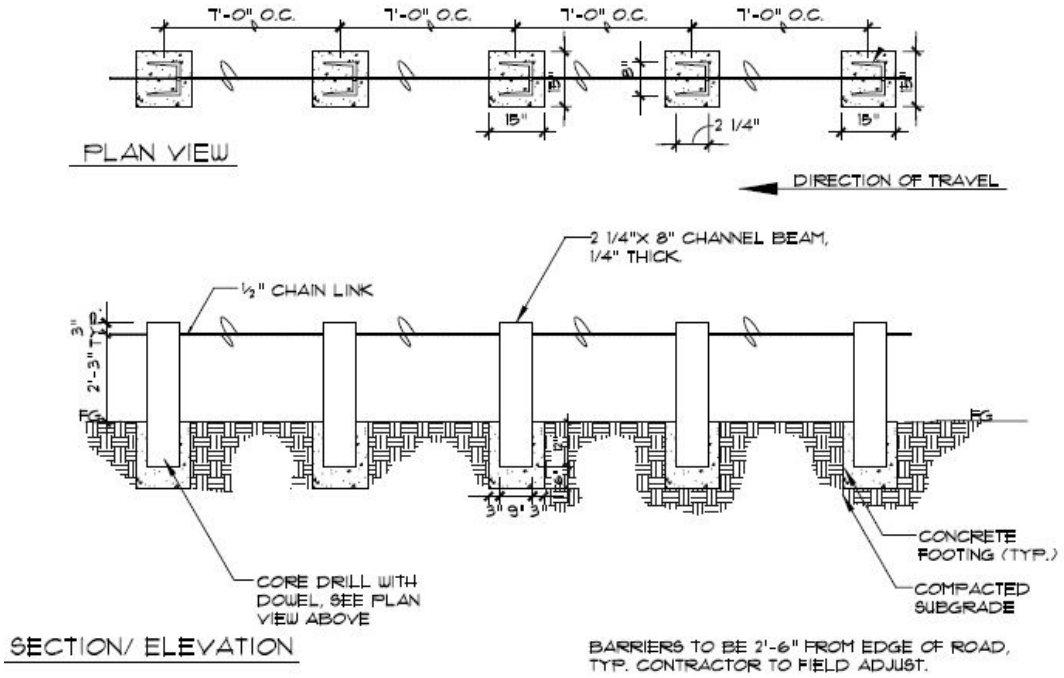
1. Materials:

   a. C channel: 2 ¼” x 8” channel beam, ¼” thick

   b. ½” chain link

2. Photographic example:

3. Typical detail:



2.6 Approved Manufacturers/Supplies

a. Davis Colors

b. Cold Springs Granite

c. American Slate

d. Superior Stucco

e. Skatestoppers

PART 3 EXECUTION

3.1 SUBSTITUTIONS

A. These Standards have been approved by SMCCCD as Guidelines. Any deviation from the Standard must be approved by the District Project Manager.

3.2 ASSOCIATED DESIGN STANDARDS AND CONSTRUCTION SPECIFICATIONS

Emergency Vehicle Access Design Standard

09 91 13 Exterior Paint Design Standard

Divisions 30-34 Design Standards and Construction Specifications

32 23 13 Bicycle Racks Design Standard

32 23 23 Trash and Recycling Receptacle Design Standard

32 23 43 Site Furniture Design Standard

32 84 00 Irrigation Design Standard, Construction Specification and Details

32 90 00 Planting Design Standard, Construction Specification and Details

01 81 13 Sustainability Design Standard

San Mateo County Community College District is strongly committed to promoting sustainability throughout their campus projects. Section 01 81 13 Sustainability of the Design Standard provides guidelines and recommendations for implementing sustainability strategies. Where relevant, specific sustainability criteria is noted in this section; however, each project team should review and cross reference that front section while developing the specific project and its documentation. Each discipline shall confirm that specific performance and manufacturer information provided in the specification section is in alignment with code requirements, LEED criteria, and any other goals for sustainability.

Refer to Appendix A: Approved Species List – Cañada (PDF)

END OF SECTION