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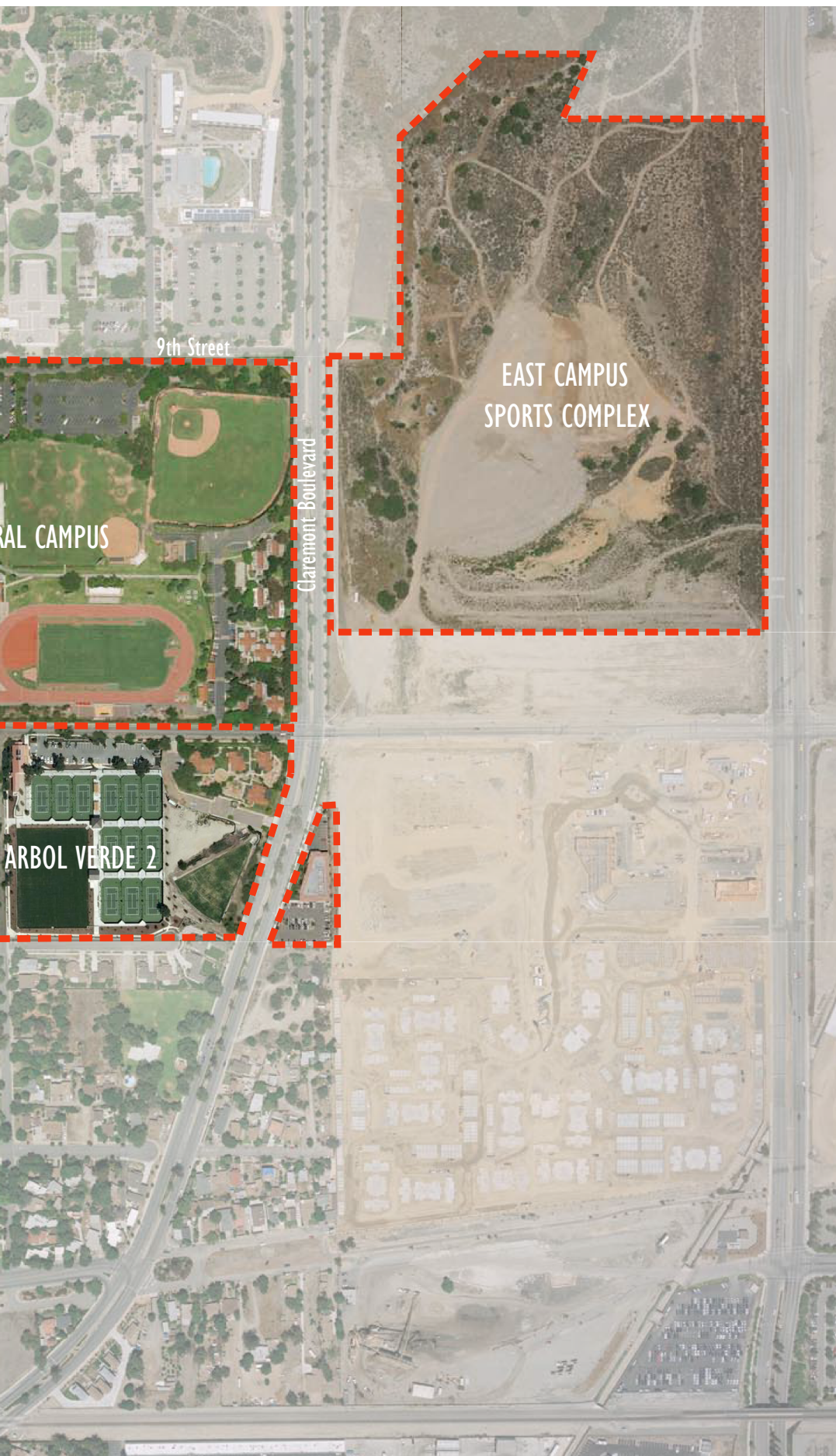
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Claremont McKenna College Existing & Future Campus Boundary



CLAREMONT McKENNA COLLEGE

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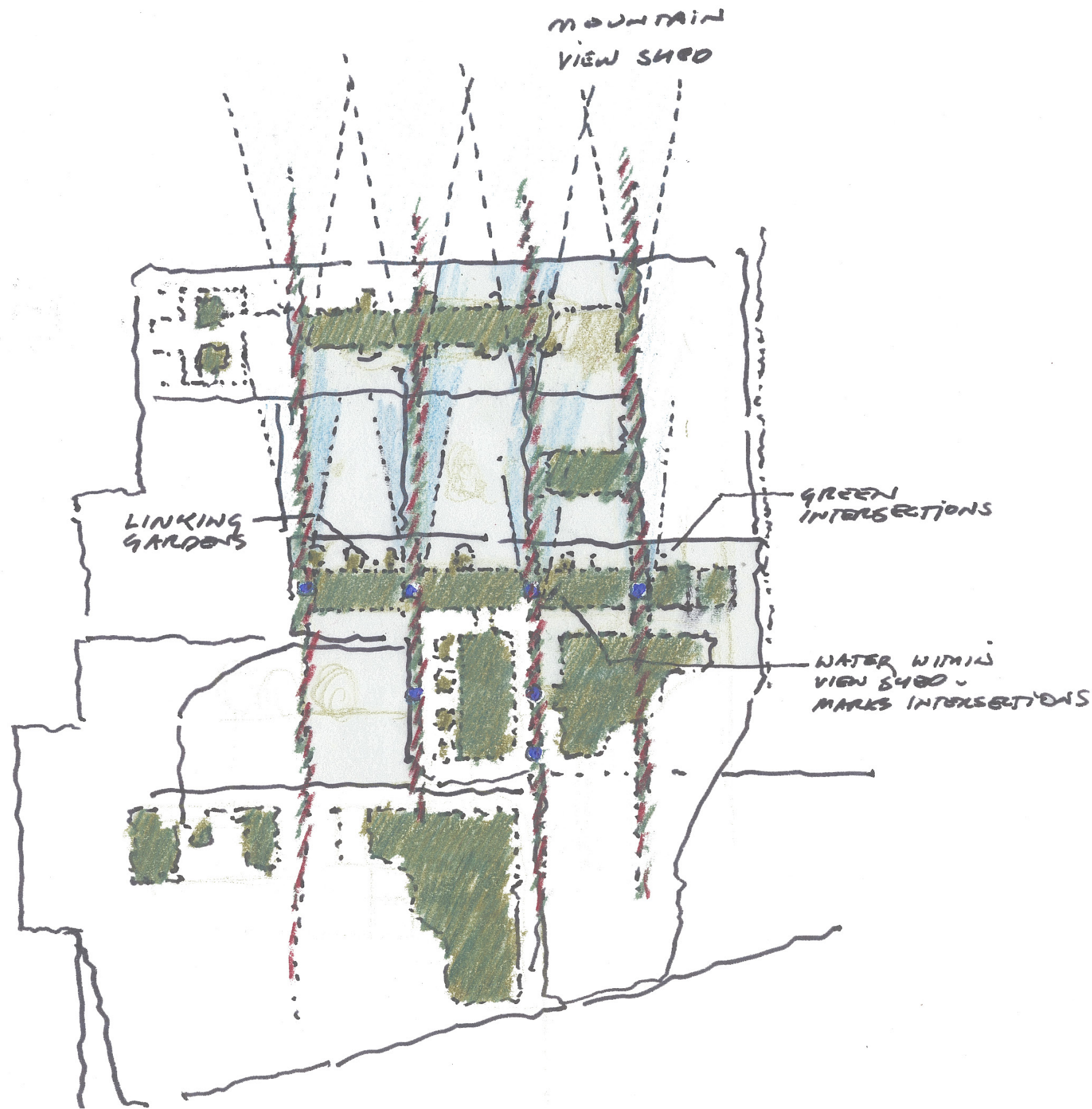
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I. masterplan background & introduction

Planning Goals & Objectives

Master Plan Overview

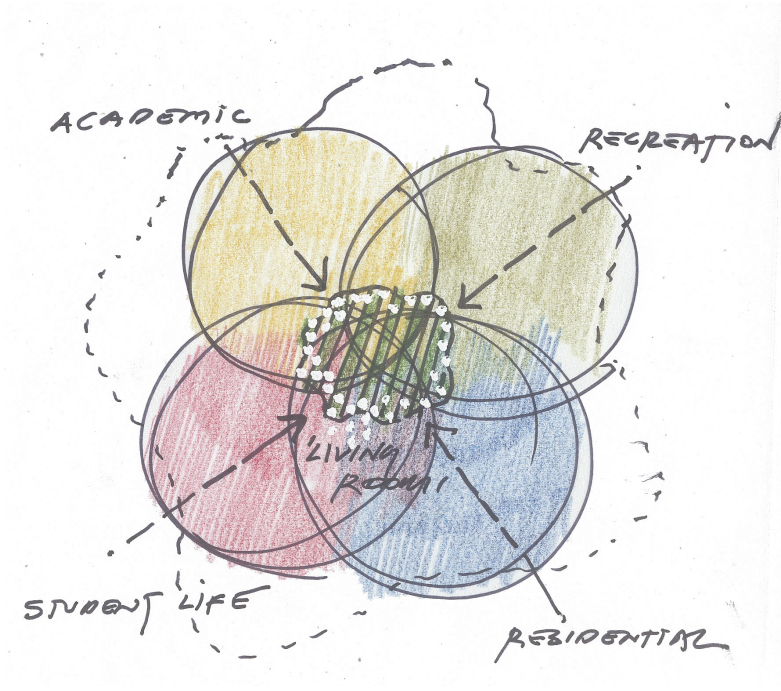
Since its founding in 1946, Claremont McKenna College (CMC) has provided a home for some of the world’s most accomplished students and distinguished scholars.

Although CMC’s campus has evolved over time, new and updated facilities will be required to address CMC’s academic and co-curricular needs in the 21st Century. The Master Plan will provide the College and the surrounding communities with a flexible vision for the future of CMC’s campus while assuring the preservation of treasured academic and civic assets.

In October 2008, the College’s Board of Trustees authorized the Buildings and Grounds Committee to complete a Master Plan process to guide the ongoing evolution of the campus. To be prudent, the Board of Trustees determined that the Master Plan should consider potential growth allowed under the Constitution for The Claremont Colleges, which currently limits CMC’s enrollment in Claremont to 1,400 students.



Today’s CMC students



Goals and Objectives

Among the key goals of the Master Plan are:

- Create a flexible Master Plan framework to guide campus improvements in response to CMC’s future programmatic needs and economic considerations.
- Enhance the appeal of the campus for student, faculty, staff, and community stakeholders.
- Enhance the campus community by expanding opportunities for interaction.
- Assure a sustainable campus through the use of environmental best practices.
- Provide a vision that preserves and strengthens CMC’s identity.
- Protect the campus and neighboring communities by minimizing and mitigating transportation related and other local and regional impacts.
- Steward existing campus architectural, landscape and historical features.



CMC fosters personal connections between faculty and students

| Campus Facts | 2010 | 2035 - 2040 |
|----------------------------|------|-------------|
| Land Area (approx. acres) | | |
| Primary Campus | 69 | 69 |
| East Campus Sports Complex | | 41.2 |
| Total | 69 | 110.2 |
| Population (in Claremont) | | |
| Student | 1150 | 1400* |
| Faculty | 135 | 175 |
| Student - Faculty Ratio | 9:1 | 8:1 |
| Academics and Campus Life | | |
| Academic Departments | 12 | 12 |
| Dining Hall | 1 | 1** |
| Varsity Teams | 21 | 21 |

* Current Constitutional enrollment limit.

** There will be one Dining Hall included in the proposed Campus Center.

Master Plan Process

Choosing a Path Forward

Following the selection of Moore Ruble Yudell Architects and Planners (MRY), the Building and Grounds Committee initiated the Master Plan process in the spring of 2009. A design and planning team was assembled that included mechanical, civil and traffic engineers, LEED-certified environmental specialists, and historic resource consultants.

MRY led a series of interactive workshops in which CMC students, faculty, alumni, and staff expressed their ideas, concerns and feelings to the design team. The design team incorporated what it learned in the workshops into a conceptual Master Plan that was unanimously approved by the Board of Trustees in December 2009.

CMC then reached out to community stakeholders, including the City of Claremont, community leaders within Arbol Verde, Claremont Heritage, and Protect Our Neighborhood to receive their input. Following those meetings the conceptual plan was placed on-line for informal public review and a community workshop was held on February 20, 2010.

This Master Plan document is a compilation of the feedback and input received through these multiple outreach opportunities.



CMC Student Workshop, Oct. 30, 2009



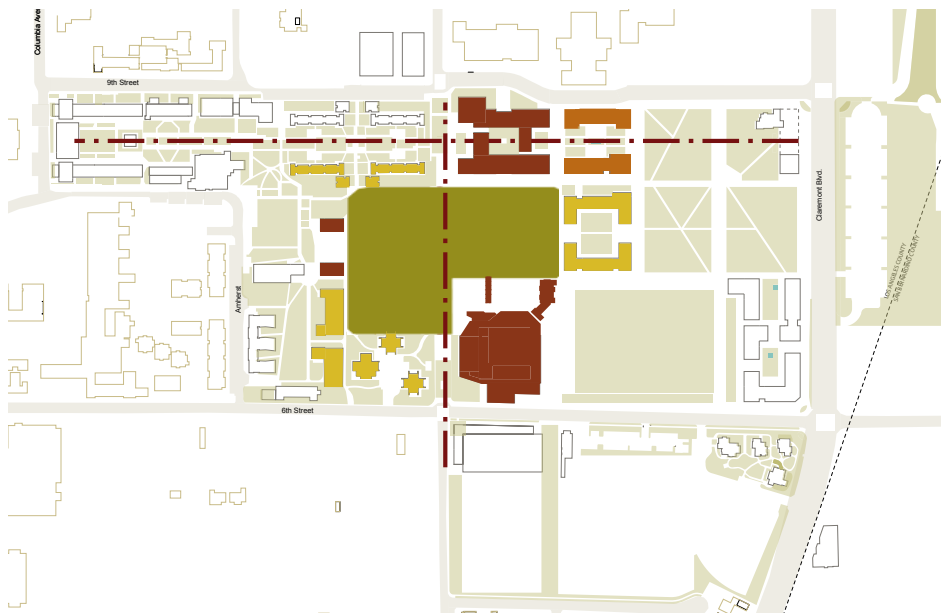
Community Outreach Meeting, February 20, 2010

II. proposed masterplan

Planning Principles

The Master Plan seeks to preserve and enhance the strengths and attributes that define Claremont McKenna College. The Master Plan invokes enduring principles while allowing flexibility to adapt to changes in program, pedagogy, and academic conditions. The new framework applied to the campus will manifest itself in the form of a new landscape armature including a network of pathways and new gardens at various scales.

Parents Field, traditionally known for being the landmark gathering spot on campus, will be expanded to form a larger central green and a new Campus Center will overlook its north edge. The Campus Center is to become the College’s living room, providing needed dining, meeting and gathering spaces to serve students, faculty, staff, and other members of the campus community. It will have an open ground floor with direct access to the outdoors and allow for easy connections to the surrounding campus. Together, these elements create a new “heart” for the CMC campus.

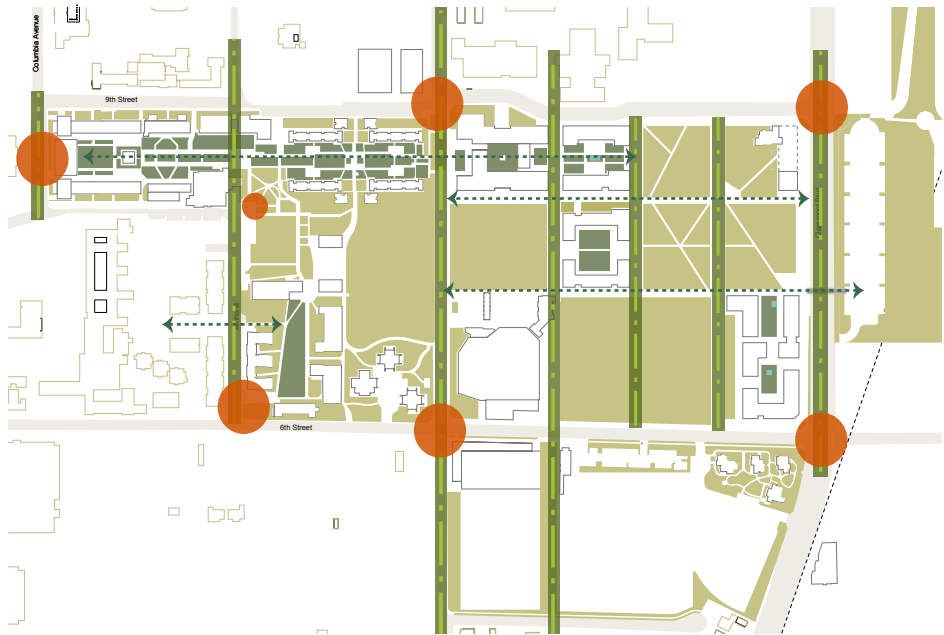


Creating a “Heart” for the Campus

Consistent with the concept of a garden campus, the existing athletic fields in the eastern portion of campus will be transformed into a series of gardens and open spaces defined by appropriately scaled academic and residence hall buildings. The East Campus Sports Complex will enable the College to relocate its athletic fields away from the academic and residential portion of campus and expand open space west of Mills Avenue.

Another element of the landscape framework is the creation and reinforcement of north-south pathways. Landscaped pathways will be an important part of the campus infrastructure, providing view-corridors to the mountains, circulation, storm water mitigation, way-finding elements, and spaces for social gathering. Enhanced north-south landscaped corridors, combined with east-west paths, will create a plaid of campus garden spaces that can support a variety of activities – passive gardens used as outdoor classrooms, general recreation, concerts and performances, intramural and club sports, commencement and reception ceremonies, as well as special events.

Finally, the North Mall will be anchored by the Kravis Center to the west, two new academic buildings to the east of the Campus Center, and a proposed alumni house and admission office, creating an Alumni and Admission Gateway at the corner of Ninth Street and Claremont Boulevard.



Gateways & Entry Points

Master Plan Design Guidelines

- Provide flexibility to adapt to changes in programs, pedagogy, and economic needs.
- Respect the needs and concerns of neighboring communities through campus perimeter landscaping and parking and mobility measures.
- Design suitably-scaled and well-proportioned buildings fostering interaction and strengthening connections with the surrounding campuses and neighborhoods.
- Articulation of larger building forms (such as the Campus Center and the Fitness and Athletics Center) to maintain scale and proportion.
- Define campus edges with buildings and landscape that promote CMC’s identity.
- Landscape that maintains flexible open space patterns and respects landmark trees.
- Create well defined courts and open spaces.
- Enhance Parents Field as the heart of the campus.
- Consider historical value and physical condition of existing buildings for possible re-use, as appropriate.
- Locate active uses and entry points at ground level.
- Construct space under buildings whenever possible to provide program, mechanical, parking, or other uses.
- Develop sustainable structures, landscape and infrastructure.

Architectural Expression

The general architectural character of the CMC campus consists of modest Mediterranean-inspired buildings with beige-colored stucco walls and clay tile roofs. A few buildings are more expressive, such as Claremont Hall and the soon to be completed Kravis Center. The variety of building styles is embraced by the encompassing landscape. The pattern of generous open spaces made up of courtyards, pedestrian ways and playfields, helps to weave the campus together.

Because of their location, size, appearance, or functions, certain structures can be considered featured campus buildings. Featured buildings include the Kravis Center, the Fitness and Athletics Center and the Campus Center. Such prominent buildings will be allowed an expressive use of a broader palette of color and materials. Featured buildings will have the opportunity for more interesting architecture compared to the background buildings that make up the majority of the campus fabric.

Individual projects will incorporate the following design guidelines:

- Building site selection consistent with the Master Plan.
- Building form, massing, setback, and height that respects adjacent buildings and complies with the Master Plan.
- Color and material palettes compatible with existing buildings and the Master Plan.
- Relationship to landscape that is welcoming and encourages outdoor uses.
- Signage and lighting design consistent with the Master Plan.
- Low carbon emitting building systems consistent with the Master Plan.





View and Landscape Corridors

North-south view corridors will mark key entry points to the campus and preserve sight lines to the San Gabriel Mountains and the surrounding region.

View corridors will be woven into the natural pedestrian patterns and provide a link to adjacent colleges and neighborhoods. Public gathering spaces will intersect view corridors at key points.

The use of “bioswales” to collect storm water run-off may be featured and integrated into the landscape design. A variety of native trees are proposed to give each view corridor a distinct identity.



View North to San Gabriel Mountains

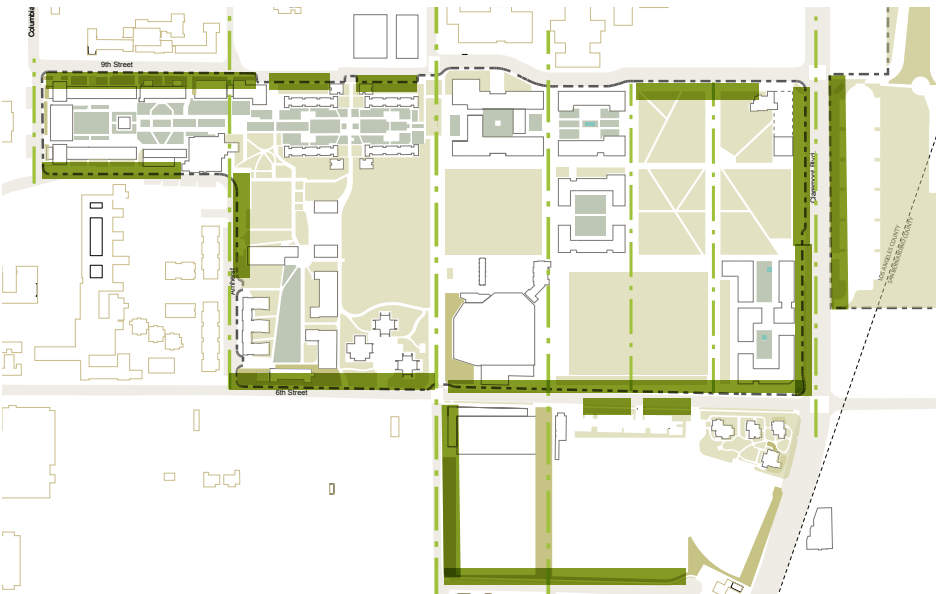
Landscape Framework

The landscape framework of the campus will celebrate and embody CMC’s distinctive garden setting. Taking advantage of the rich green network of the adjacent colleges and neighborhoods, a comprehensive landscape vision will be woven together linking campus and community. Dramatic view-corridors to the San Gabriel Mountains will further enhance the sense of identity and connection to the distinctive landscape of the Claremont region.

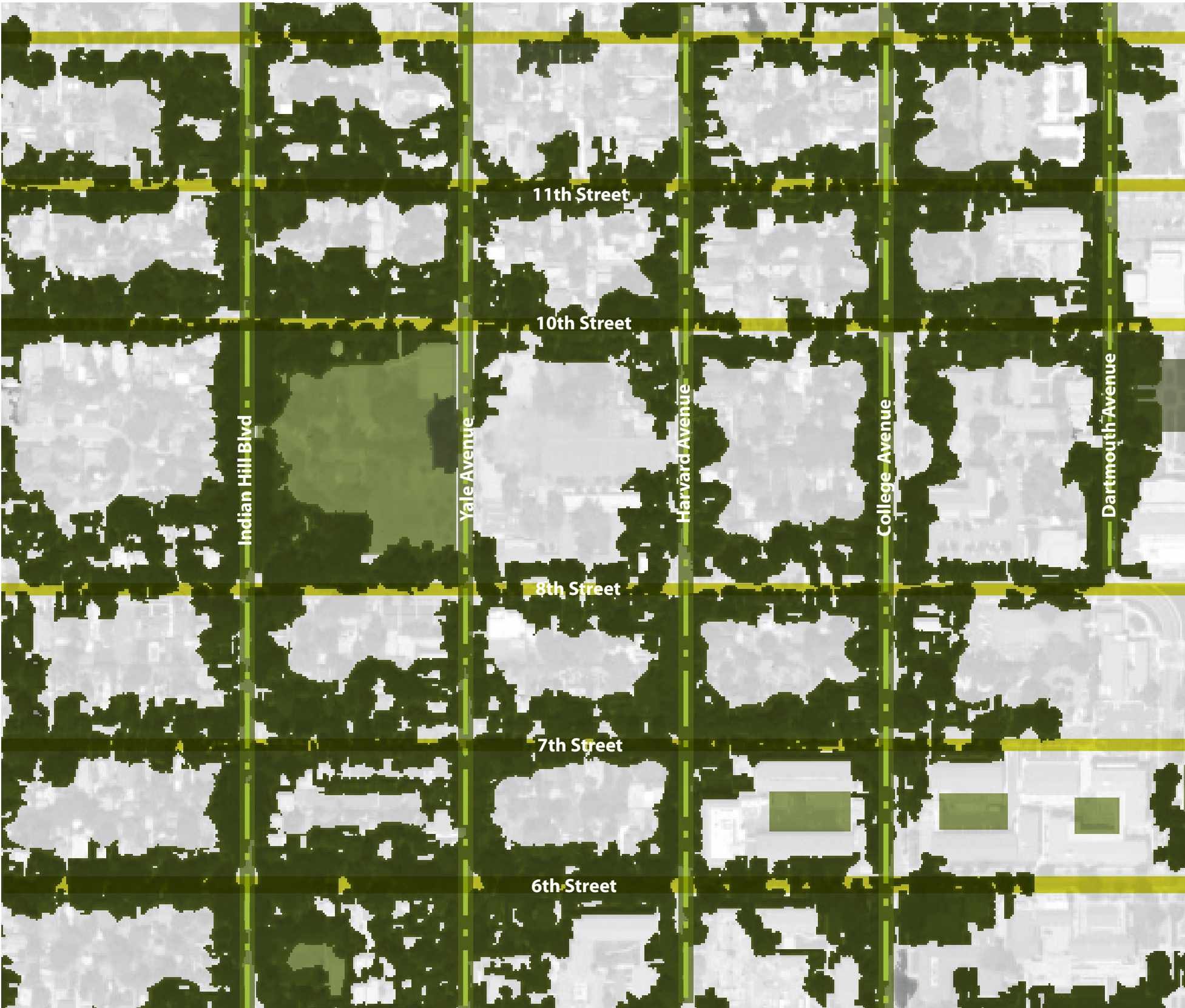
The character of the campus will be defined by a cohesive landscape fabric. The consistent use of hardscape materials, color palettes, and textures that are indigenous to the area will inform all aspects of campus landscaping. Open spaces, pathways, wayfinding, and lighting will create a safe and secure environment for the CMC community and its visitors.

Edges

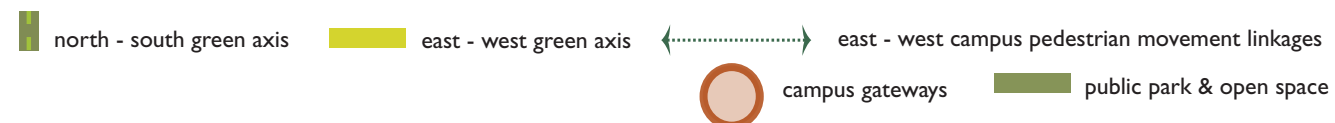
A re-envisioned campus edge and perimeter landscape is of critical importance to strengthening the identity of the CMC campus and preserving and enhancing adjoining neighborhoods. A “green threshold” to the campus will establish key landscape gateways with identifiable entry points to the campus for vehicular, bicycle, and pedestrian access.



Strengthening Corners & Edges



Weaving Campus and Community



Arbol Verde

CMC is committed to preserving the residential character of the neighborhood south of Harwood Place (AV1 District) and the transitional-academic nature of the neighborhood north of Harwood Place (AV2 District). Attractive landscaping and border/transition features will be provided at the campus boundary on the north side of Harwood Place. Best practices will be used for all exterior lighting in the fields, courts, exterior parking areas, and walkways of the transitional-academic area north of Harwood Place and south of Sixth Street. Potentially historic stone structures will be studied and preserved, as appropriate.

Development Agreement

CMC's usage of the AV2 District is currently governed by a development agreement, City Code and the City's General Plan. CMC intends to work with the City and local stakeholders to amend or replace the development agreement and to revise City Code in a manner consistent with the General Plan. The revisions are intended to expand the scope and term of the development agreement and to amend City Code in a manner that assures the ongoing preservation of the residential character of the AV1 District and provides a transitional buffer between the Institutional Educational (IE) District and the AV1 District.

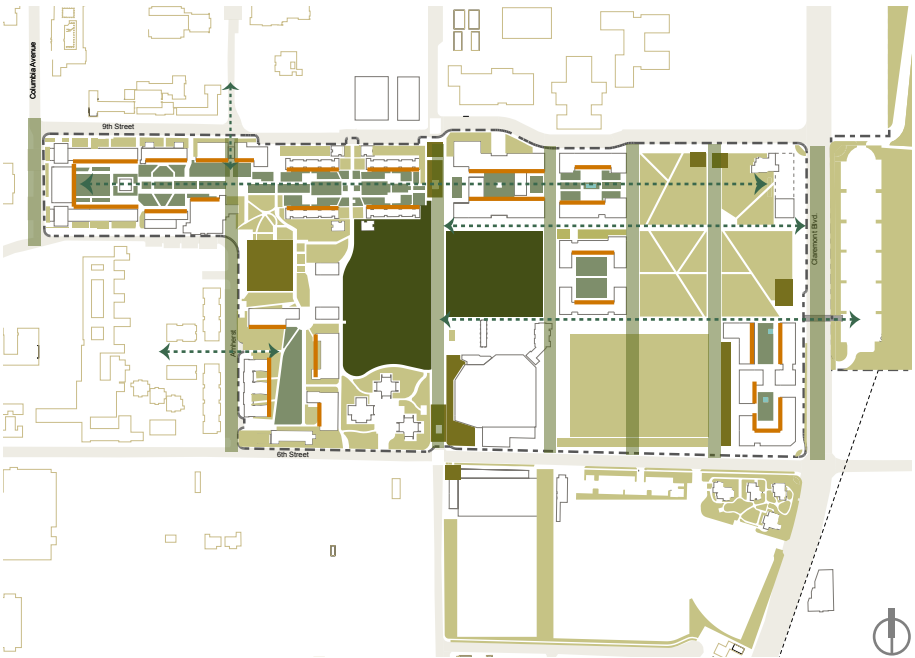
Currently, various parcels in the block bounded by Sixth Street on the north, Brooks Avenue on the east, Harwood Place on the south, and Mills Avenue on the east are zoned IE. In addition, the General Plan identifies those parcels as being planned for institutional educational usage. In order to regularize zoning and General Plan usage boundaries and to effectuate this Master Plan, the zoning map and certain General Plan usage boundaries must be altered so that all of the F7 Parking Structure and Administrative Space is located within the IE District, in compliance with an amended General Plan, and so that the parcels south of the F7 Parking Structure and Administrative Space and north of Harwood Place are zoned AV2 District.

Linked Terraces and Courts

A variety of formal and informal open spaces will reinforce the image of the campus as a pedestrian environment in a garden setting.

Landscaped open spaces and “outdoor classrooms” provide informal settings for interaction and learning for students, faculty, staff, and visitors at a range of scales from intimate to grand.

Buildings will be open to terraces and courts, extending the program of the buildings into adjacent open spaces.



Formal / Informal Scales of Landscape

Campus Topography

A predominant north to south cross slope of 3 percent provides opportunities for shaping the topography into terraces, steps, and low garden walls.

Landscape features allow for the creation of “built-in site furniture” for informal gatherings at multiple scales. Site walls and terraces will become an extension of the architecture, helping to integrate building and landscape into one composition.



Informal Outdoor Seating (Swathmore College)

Passive Open Space Meets Athletic Fields

The relatively low scale and low density of the campus structures and abundance of open space contribute to the sense of a campus-in-the-garden.

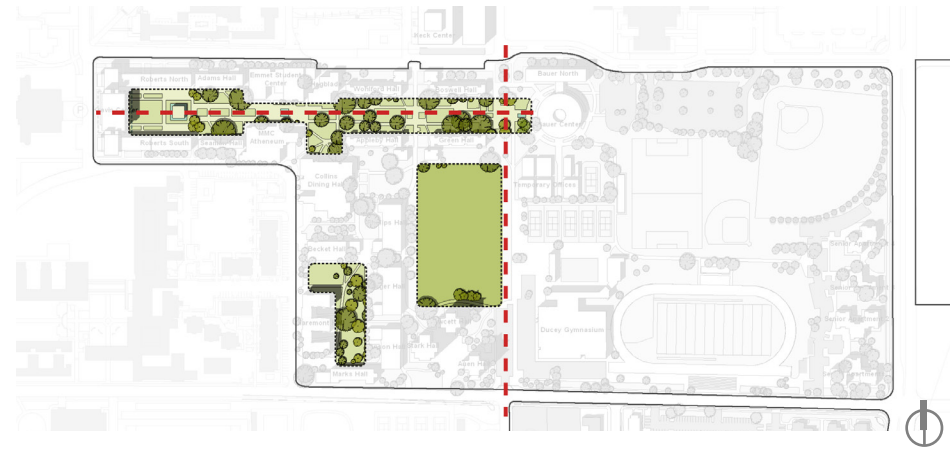
The existing campus combines both athletic fields and passive open space. Athletic facilities and fields are located primarily east of Mills Avenue. The North Mall, Parents Field, and the Mid-Quad and South-Quad courtyard gardens are on the west side of the Campus.

The Master Plan will expand the plaid of gardens connected by pathways throughout the campus by creating the East Campus Sports Complex east of Claremont Boulevard.

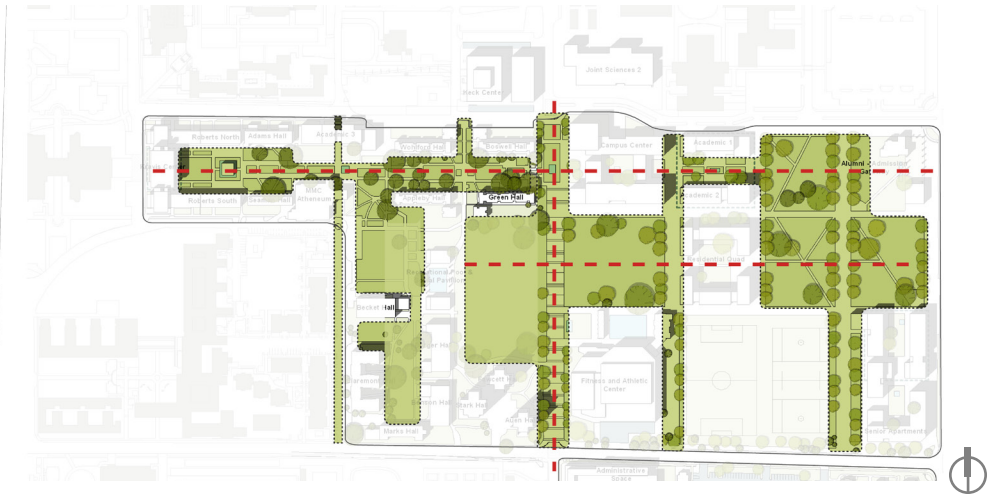
Varsity athletic fields will be located primarily in the East Campus Sports Complex with the possibility of a soccer field located south of Sixth Street.

The relocation and consolidation of varsity athletic fields will provide for the athletic needs of the students in an efficient and convenient manner that will enhance the garden setting at the core of the campus.

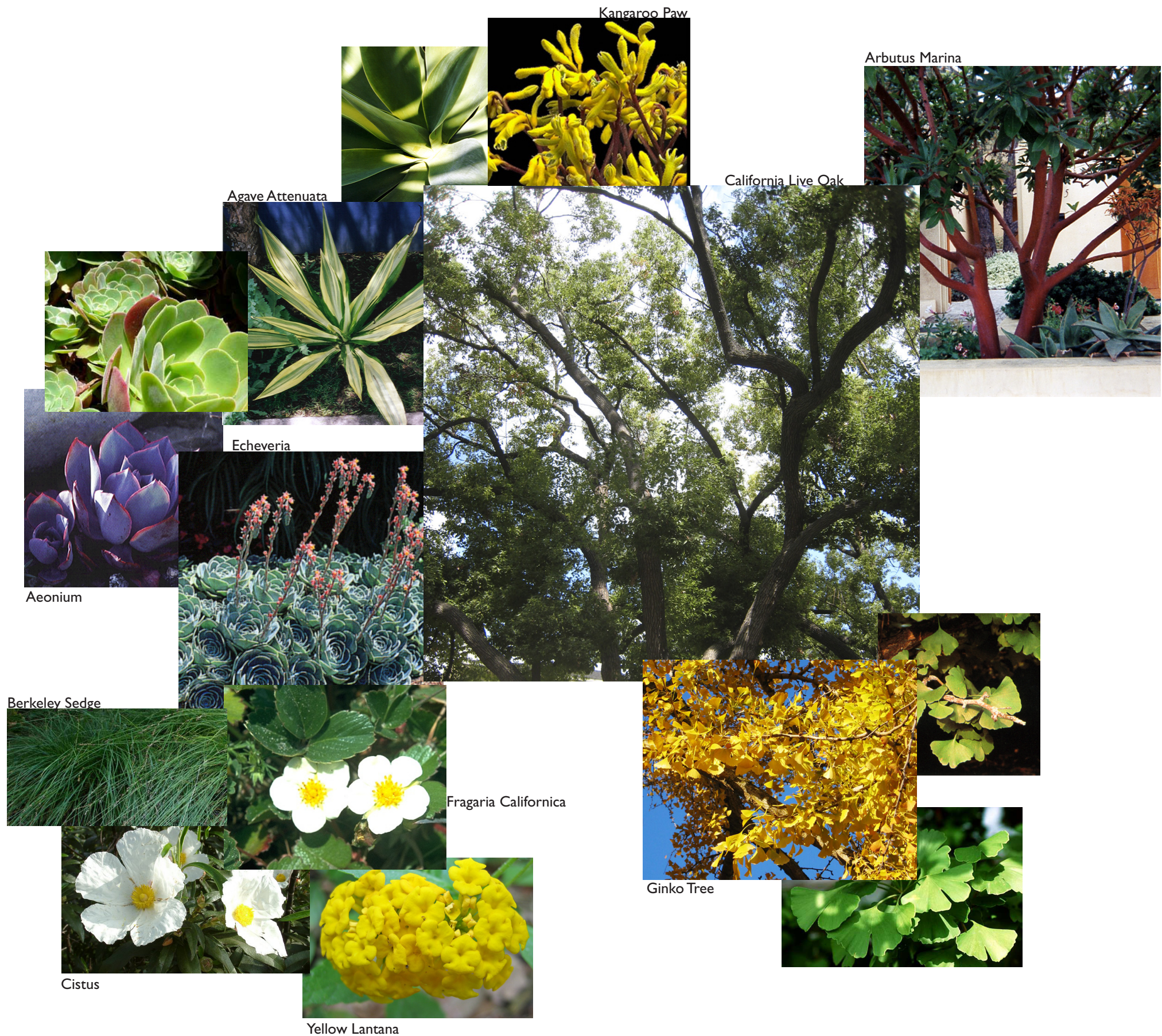
The adjacent open space diagram compares the current primary garden open spaces (not including athletic fields) with those proposed in the Master Plan.



Existing CMC major Open Space



Proposed Master Plan Open Space



Landscaping for Future Projects

The landscape of the CMC campus is identified by its characteristic garden setting. Beautiful California Live Oak trees along with other mature specimens are living landmarks providing important shading canopies for the campus. These landmark trees will be protected and preserved as key campus landscape elements. CMC is committed to using native, drought - tolerant plant materials that are appropriate to this climate. Turf shall be used sparingly where less water-dependant materials are not viable. The campus shall implement guidelines that promote water conservation through thoughtful landscape and irrigation design, installation and maintenance. CMC will conform to the requirements of the City of Claremont Water Efficient Landscape Ordinance.

Suggested plant pallet may include the following:

Trees

- California Live Oak
- Arbutus Marina
- Ginko Tree

Shrubs

- Agave Attenuata
- Kangaroo Paw

Ground Cover

- Berkeley Sedge
- Aeonium
- Yellow Lantana
- Cistus
- Echeveria
- Fragaria Californica

CMC has identified all trees that will be impacted by the various projects envisioned in this Master Plan in an accompanying submittal. In the planning of each project envisioned in this Master Plan, impacted trees identified as significant will either be moved or replaced in accordance with City or County requirements. CMC especially recognizes the importance that its Oak trees have in shaping the campus landscape and has retained a noted area arborist to evaluate and develop a maintenance program for the care and treatment of these trees.

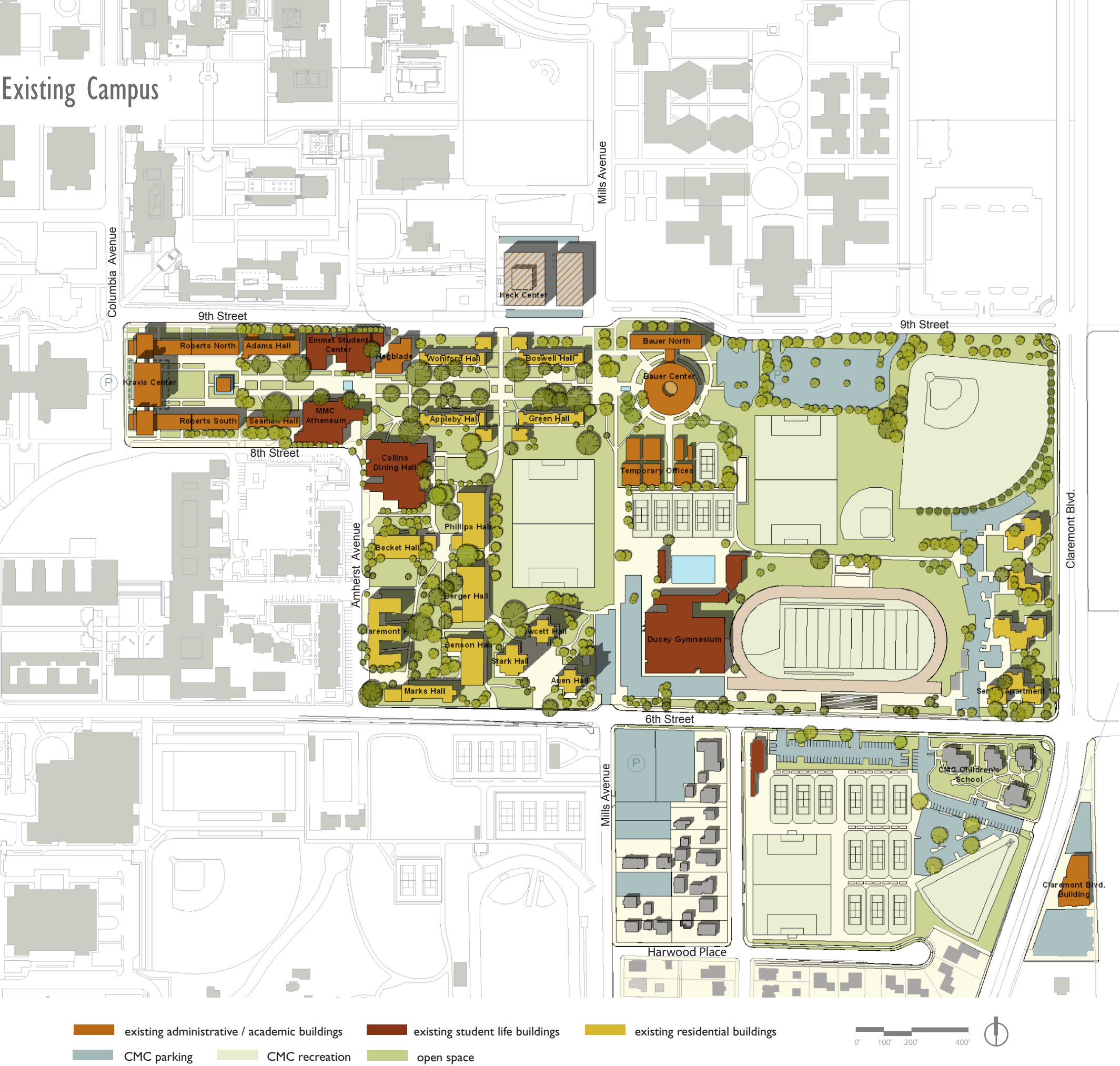
Master Plan Vision

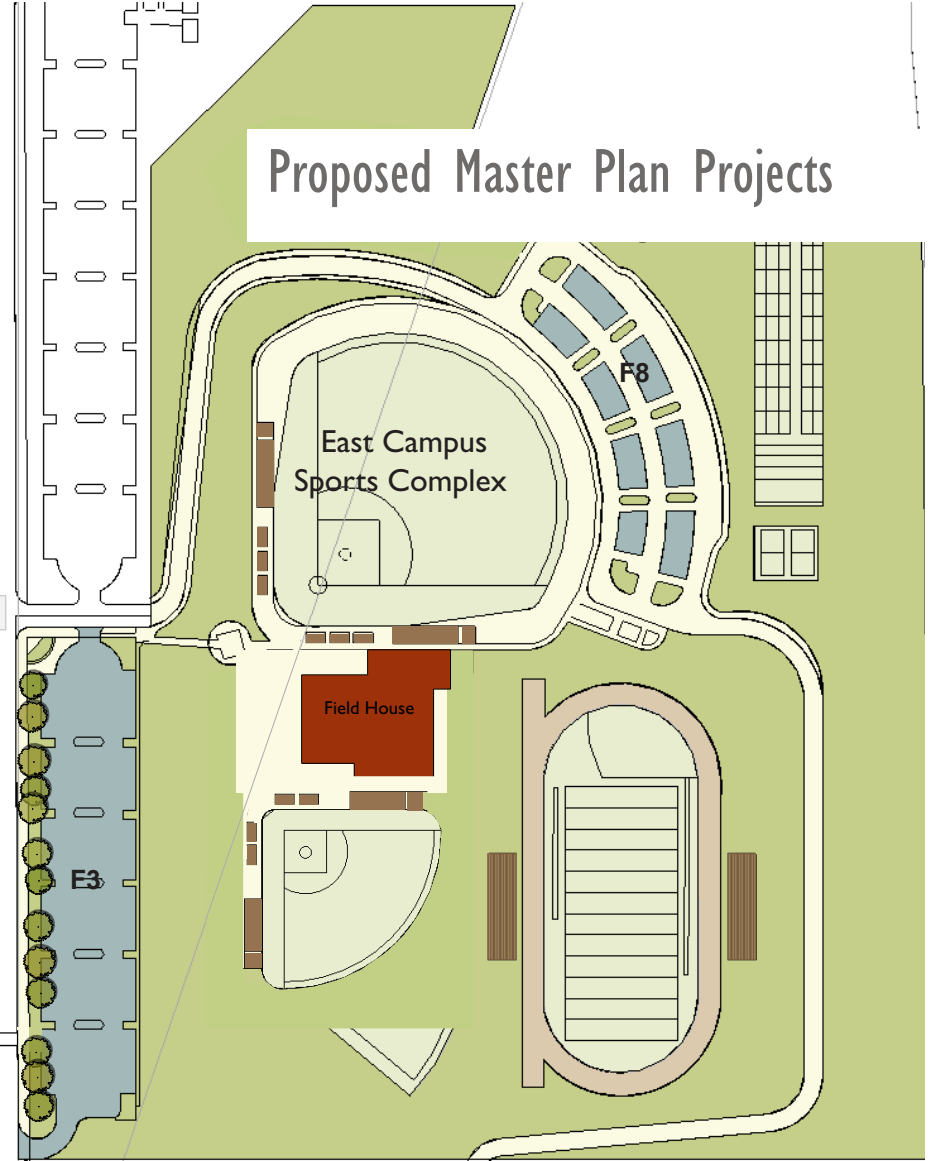
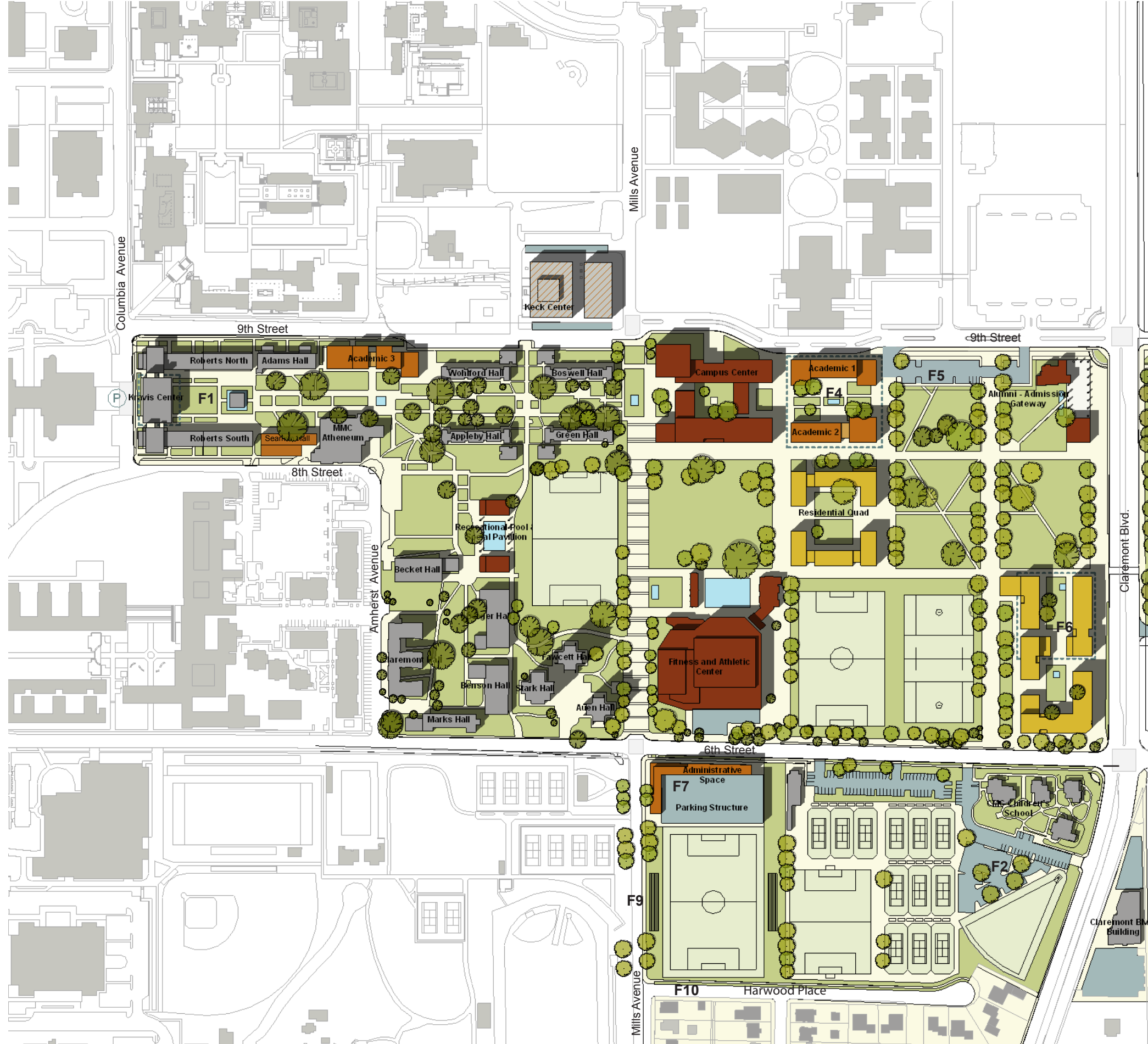
Planning for Smart Growth

The Master Plan provides a flexible and nimble guide to future building and site improvement decisions. The Master Plan must be adaptable to a variety of factors while addressing implications of strategic, economic, and physical planning considerations and preserving future options.

The Existing Campus Plan is shown to the right with buildings color-coded identifying their relative uses. The Proposed Master Plan on the facing page identifies proposed projects that may be completed during the life of this Master Plan.

As shown by the recent Kravis Center project, the College is committed to utilizing appropriate construction mitigation techniques to address construction-related impacts, including those related to noise, dust, vibrations, storm runoff, odors, hall routes, pedestrian and vehicular traffic patterns, parking relocation, and construction-related parking and staging.



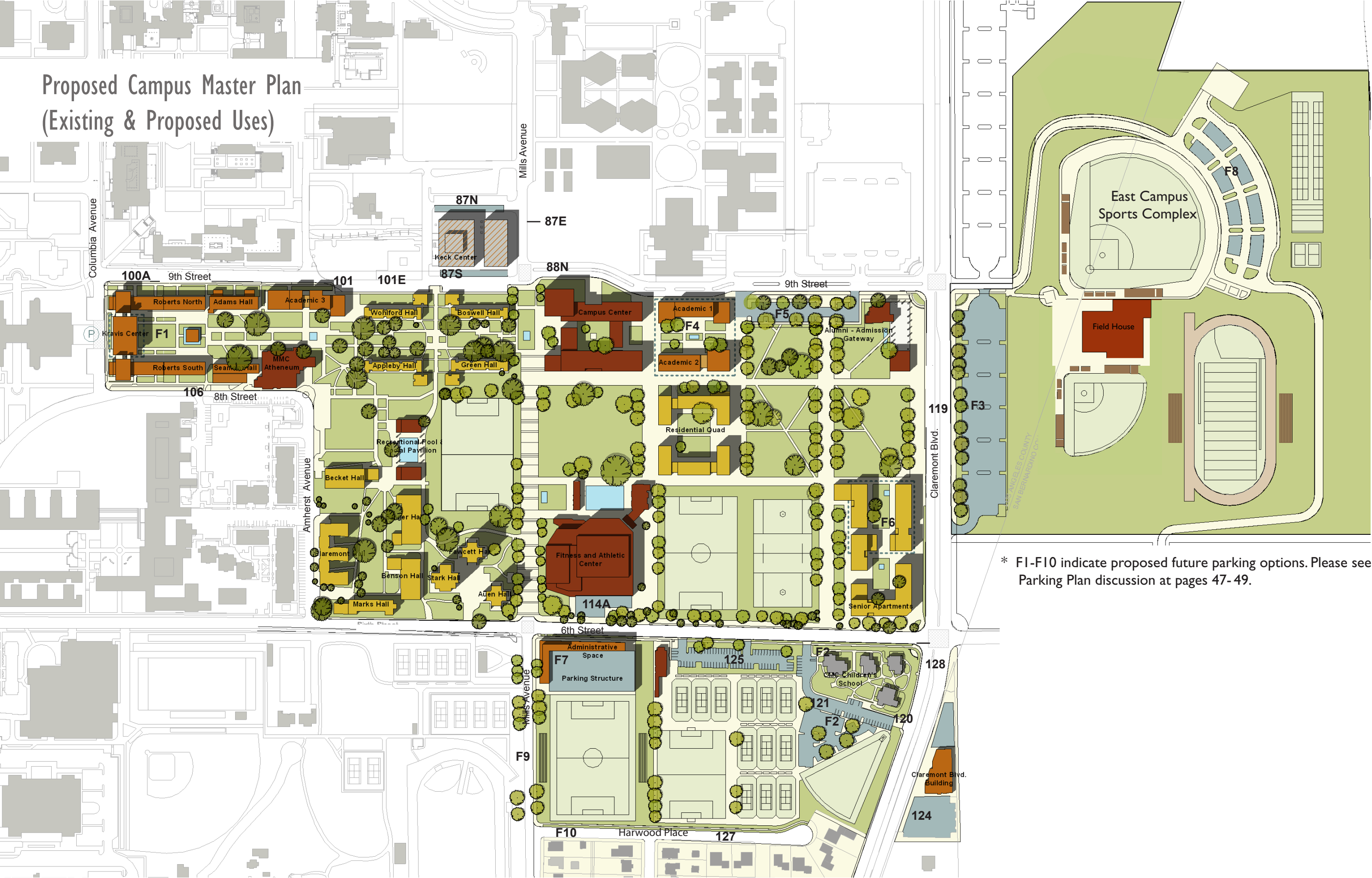


* F1-F10 indicate proposed future parking options. Please see Parking Plan discussion at pages 47- 49.

- proposed administrative / academic buildings
- proposed student life buildings
- proposed residential buildings
- CMC parking
- existing CMC buildings
- CMC recreation
- open space



Proposed Campus Master Plan (Existing & Proposed Uses)



Street Improvements

- Strengthening campus edge definition
- Enhanced pedestrian pathways
- Improve vehicular circulation

Central Campus

- Campus Center is the focal point of the campus at the intersection of Mills Avenue and the North Mall
- Open ground floor planning allows for connections to the North Mall
- Creates one of several enhanced campus gateways
- Academic Buildings 1 & 2 extend the North Mall eastward with possible subterranean parking below

Alumni & Admission Gateway

- A proposed alumni office and admission office create a new gateway at the eastern campus edge.

North Mall

- Enhancing the rich mix of academic, cultural, student life, dining, residence hall, and administrative uses
- Kravis Center creates a new campus gateway and anchors the west end of the Mall
- Seaman Hall Renovation / Replacement: Expands the current footprint of Seaman Hall to the south. The ultimate scope of this project will consider and appropriately address the preservation of the specimen oak tree currently located just to the north of Seaman Hall.
- Academic Building 3 is scaled to be compatible with its neighbors and a pedestrian passage connecting to Scripps College
- Developing a consistent approach to landscape and paving

Mid Quad

- Recreational Pool and Social Pavilion are centrally located on Parents Field
- Campus gateway and Athenaeum entry opportunities at the intersection of Amherst and Eighth Street

Parents Field Expansion

- The historic campus gathering spot is enlarged to accommodate more programs
- Creates a “heart” of the campus around which all campus elements have an address

Athletics & Recreation

- Replace Ducey Gymnasium with Fitness & Athletics Center
- Intramural and club sports fields replace football and track fields

East Residential Quad

- Two residence halls organized around a central court
- Student apartments replace previous apartments
- Garden courts replace previous athletic fields

East Campus Sports Complex

- Varsity and practice fields, courts and areas including a football and track facility, baseball and softball fields, Argentinean paddle tennis, an archery range, and a golf practice area
- Surface parking lots at street level and at field level
- A field house that includes locker rooms and other related facilities

South Athletic Field and Parking

- Parking structure with street-level administrative space
- Varsity soccer field and practice field
- Brooks Ave. landscaped and pedestrianized

Master Plan Vision

As the College implements the Master Plan over time, CMC needs to retain the flexibility to respond to institutional priorities and funding opportunities. As a result, the College has analyzed various sequencing options through the planning process to insure that appropriate infrastructure needs (including parking) are addressed in coordination with the associated projects. Following is an analysis of a potential implementation sequence for the Master Plan.

Preliminary Parking Phase (Surface Lots F2 and F3)

- The College is currently completing the F2 surface parking lot (south of Sixth Street), which will add 62 spaces to the College’s parking inventory.
- The College anticipates completing the F3 surface parking lot (east of Claremont Boulevard) within 3 years after the East Campus Sports Complex project is approved. The F3 lot will provide approximately 210 additional spaces to the College’s parking inventory.
- Collectively, the F2 and F3 lots will provide important flexibility to the College as it seeks to implement the Master Plan, providing options for temporary parking and staging for construction projects and absorbing short-term parking displacement as projects are constructed.

Fitness and Athletic Center

- Ducey Gymnasium was originally constructed in the 1950s to serve a men’s college of only 800 students.
- CMC now operates a co-educational athletics program of 21 varsity teams in partnership with Scripps and Harvey Mudd Colleges. Additionally, Ducey Gymnasium lacks basic recreational and fitness facilities that are now common at peer colleges and universities.
- The College has carefully evaluated potential options to renovate and expand Ducey Gymnasium and has determined that functional and economic obsolescence combined with facility size constraints preclude renovation and reuse of the current facility.
- The Master Plan therefore envisions a new Fitness and Athletic Center (FAC) located on the current site of Ducey Gymnasium.

Campus Center and Academic Buildings 1 and 2

- Currently, CMC’s dining and co-curricular facilities (such as Collins Dining Hall, Heggblade Center, McKenna Auditorium, and the Emmett Student Center) are located in separate, smaller-scaled buildings along the North Mall.
- Current planning practices expressed at peer institutions requires dining and other student co-curricular facilities to be consolidated into a single “Campus Center” providing a unified sense of place, mission and academic community.
- Given the size, programming and service access requirements of the Campus Center, its location was perhaps the most important planning issue studied through the Master Plan process.
- Ultimately, the Campus Center was planned for the current site of the Bauer Center at Ninth Street and Mills Avenue because the Bauer Center site:
 1. Is appropriate for the scale of the Campus Center.
 2. Has sufficient service access.
 3. Occupies a pivotal point at the intersection of important north-south and east-west axes at the center of the campus, flanking an expanded Parents Field.
 4. The Bauer Center cannot be refurbished because of the significant costs associated with seismic and other structural upgrades and because it cannot provide appropriate teaching and research space for the College’s Psychology Department, the Robert Day School of Economics and Finance, and other academic and administrative uses.
- Academic Buildings 1 and 2 will replace the academic and administrative space that will be lost when Bauer Center is eliminated and are anticipated to provide appropriate teaching and research space for the Psychology Department, the Robert Day School of Economics and Finance, and other academic and administrative uses.
 1. As discussed above, CMC anticipates that the F3 surface lot on Claremont Boulevard will serve the temporarily displaced parking during the construction of Academic Buildings 1 and 2 and the demolition of Bauer Center.
 2. In addition, the varsity soccer field would need to be relocated before construction of Academic Buildings 1 and 2 could commence.

- When completed, Academic Buildings 1 and 2 would include subterranean parking (F4), and could be served additionally by the proposed F5 surface lot on Ninth Street and the F3 lot on Claremont Boulevard.

Student Apartments

- Since the 1980s, CMC has provided student apartments at the corner of Sixth Street and Claremont Boulevard. The apartments are generally made available to juniors and seniors, who often prefer the apartments to traditional residence halls.
- The current apartments only serve about one-half of those desiring an apartment, and they are approaching functional and economic obsolescence.
- The Master Plan contemplates replacing the current apartments with a higher density apartment complex that could house approximately 20-25% of the College’s students.
- The new student apartment project is planned for the same site as the current apartments, so the project is not dependent on the prior completion of any other planned project. However, for one or two academic years during the construction of the new apartments, student housing needs would be met through the use of off-campus solutions, including, to the extent available agreements to utilize surplus student housing at other members of The Claremont Colleges.
- Parking for the new student apartments would be provided by the inclusion of a subterranean lot (F6) constructed with the new student apartments, by the F3 and F2 lots or by the proposed parking structure at Sixth Street and Mills Avenue (F7).

Residential Quadrangle - East Campus Sports Complex - Sixth Street Parking Structure and Administrative Complex

- In the event that in the future the College grows to 1,400 students on its Claremont campus, additional student residence halls would be required.
- The Master Plan contemplates potentially adding two new residence halls on the current site of the varsity soccer field. Consequently, the soccer field relocation, discussed above, would need to be completed prior to the addition of the new residence halls. Moreover, the new residence halls would impact the softball field and possibly the baseball field.

- Consequently, we anticipate that portions of the East Campus Sports Complex (such as the softball and baseball fields) would need to be completed prior to construction of the new residence halls.
- Parking for the East Campus Sports Complex would be provided by the F8 surface lot adjoining the fields, with overflow parking provided by the F3 surface lot along Claremont Boulevard.
- Parking for the new residence halls would be provided by the Sixth Street Parking Structure (F7), which would also provide parking for the Administrative Complex and for other campus needs.

Seaman Hall Renovation / Replacement

- Seaman Hall was originally constructed in the 1950s as an academic / administrative building. Seaman currently houses classrooms and research space on the first floor and faculty offices on the second floor. The interior configuration of Seaman Hall does not satisfy the College's current teaching and research needs, and the narrow width of the building is a particular constraint. However, Seaman Hall is located just to the south of one of the campus' specimen oak trees.
- Thus, depending on the condition and health of the oak tree currently in front of Seaman Hall, the College would ultimately plan to renovate and / or replace the current Seaman Hall with a new academic / administrative building, with the ultimate project scope depending on the status of the oak tree. If a renovation is appropriate, there is an opportunity to expand Seaman Hall to the south without impacting the oak tree on the north side and while maintaining an appropriate setback from 8th Street.

Academic Building 3

- In the event that in the future the College grows to 1,400 students on its Claremont campus, additional academic space for teaching and research would likely be required. Academic Building 3 is planned to provide such additional space in case of increased enrollment or other programmatic needs.
- Because most of the College's current co-curricular facilities would need to be replaced prior to constructing Academic Building 3, construction will not likely commence until Academic Buildings 1 and 2 and the Campus Center have been completed.
- Parking for Academic Building 3 would be provided by the Academic 1 and 2 subterranean lot (F4), the Ninth Street surface lot (F5) and the Sixth Street Parking Structure (F7).

- Cumulatively, the Campus Center and the Sixth Street Parking Structure and Administrative Complex will shift a significant amount of staff parking and campus service demand from the west side of campus to the center and east side of campus.

Alumni and Admission Gateway

- The Master Plan contemplates that the corner of Ninth Street and Claremont Boulevard will become an increasingly important entrance and gateway to the College. It is the planned location of an alumni house, which is a common facility at peer institutions and a future admission office (the "Alumni and Admission Gateway").
- When the baseball field has been relocated to the East Campus Sports Complex, the College would be able to construct the Alumni and Admission Gateway.
- Parking for the Alumni and Admission Gateway would be provided by the F5 lot on Ninth Street.

Recreational Pool and Social Pavilion

- As part of the College's outreach process with students, CMC asked for feedback on what facilities were most important to them as part of their residential experience. Apart from the need for the Campus Center and the FAC, students most desired a recreational pool and social pavilion. This represents another example of a facility that exists on many other campuses, including within The Claremont Colleges, but which is currently lacking at CMC.
- In considering an appropriate location for such a facility, it was important to identify a location that was central to the campus and isolated from surrounding neighbors.
- When the proposed new student dormitories are completed, the College will have sufficient housing capacity to remove Phillips Hall and use that site for the Recreational Pool and Social Pavilion.
- Because the Recreational Pool and Social Pavilion will be used by students whose parking needs are served elsewhere on campus, no additional parking will be need to support the Recreational Pool and Social Pavilion.

East Campus Sports Complex

- In order to support the comprehensive playing field needs for athletic and recreational purposes for the College as well as for the Claremont McKenna-Harvey Mudd-Scripps joint athletic program, the College is planning to construct the East Campus Sports Complex. The East Campus Sports Complex will include varsity level facilities for football, track, baseball, softball, archery, and Argentinean paddle tennis. The football and track facility as well as the baseball and softball fields will provide bleacher-style seating.
- A field house will support the varsity athletic programs, facilities and attendees.
- Although many of the players and attendees who use the fields are expected to walk from the main campus, and visiting teams will travel by bus, parking for the East Campus Sports Complex is provided by the F3 and F8 parking lots, which will be constructed prior to usage of the various sports-related facilities.

Lighting for Athletic and Recreational Fields

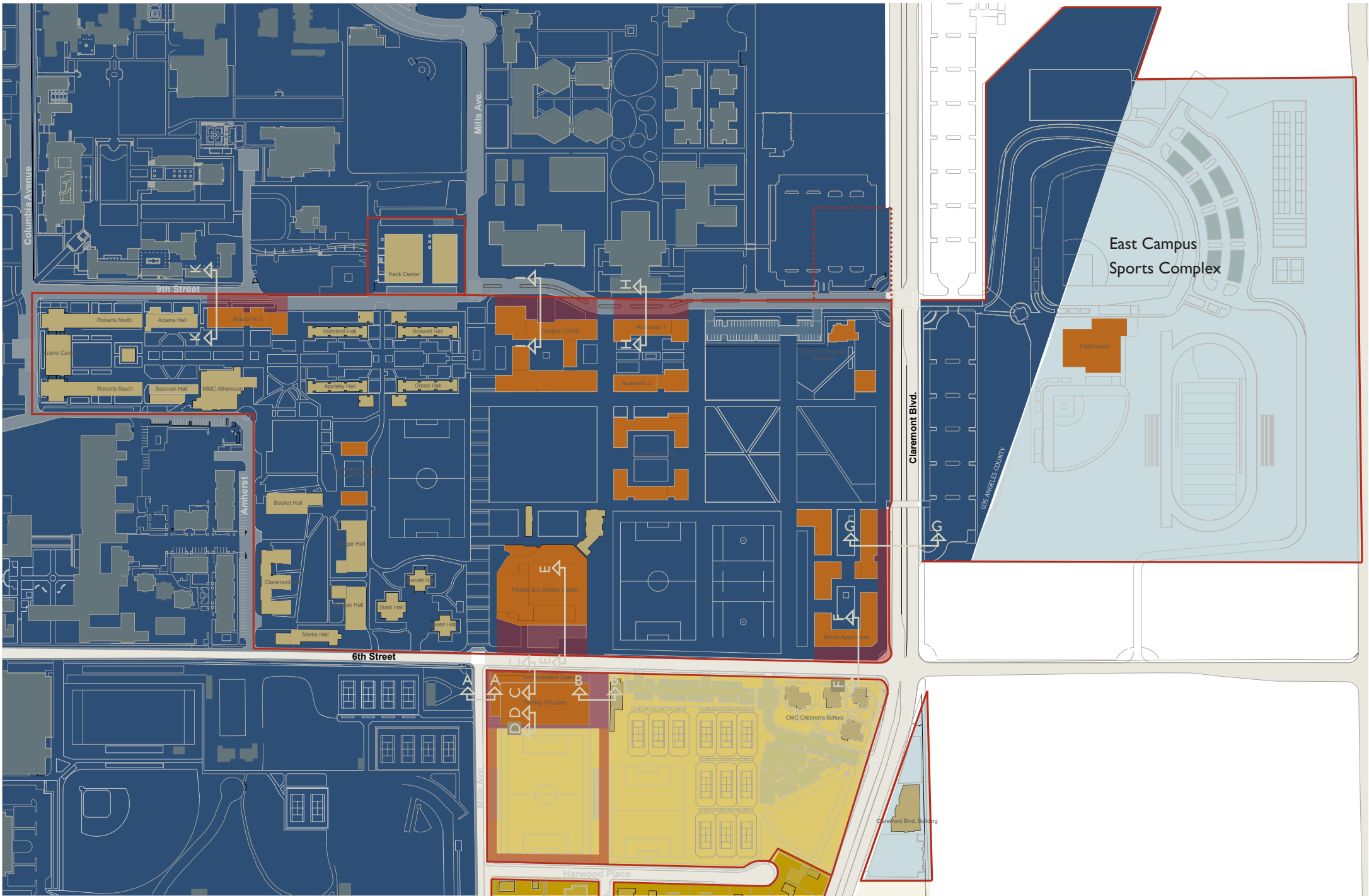
- The Master Plan includes the following current or proposed playing fields for athletic and recreational purposes:
 - The proposed field South of Sixth Street and the practice field adjacent to the Bisantz Family Tennis Center;
 - Two proposed playing fields that would replace the current football and track facility;
 - The playing field on the current Parents Field; and
 - The playing fields proposed for the East Campus Sports Complex.
- Given the need to support the comprehensive playing field needs for athletic and recreational purposes for the College as well as for the Claremont McKenna-Harvey Mudd-Scripps Joint Athletic Program, the College is planning to install field lighting on its various athletic and recreational fields.
- CMC plans to install lighting for all of its varsity and recreational fields, courts, ranges, and areas. CMC plans to utilize and implement best practices with respect to field lighting at the time such lighting is installed in connection with a particular project.

Proposed Building Height and Setbacks

The approximate massing and location together with the maximum height and minimum setback of potential projects contemplated by the Master Plan are set forth in the adjacent summary. The height limits shown in this Master Plan remain subject to all exceptions set forth in Section 16.130.060(B) or elsewhere in the Claremont Municipal Code. The depictions and descriptions are provided for schematic purposes with the acknowledgement that actual designs may vary.

Proposed Field Lighting

The intramural and club sports fields that may replace the football and track fields north of 6th Street will be lighted by lights placed on light standards (poles) that are no taller than the current light standards and that are setback at least as far from 6th Street as the current light standards. The varsity playing fields located in the AV2 district at the northeast corner of Mills Avenue and Harwood Place will be lighted by lights placed on light standards that are no taller than 80 feet, which will comply with the terms of the revised Development Agreement, the revised zoning code and the revised conditional use permit. The varsity playing fields located in the East Campus Sports Complex will be lighted by lights placed on light standards no taller than 80 feet from field level and will comply with the terms of any development agreements governing the East Campus Sports Complex as well as all applicable zoning codes.

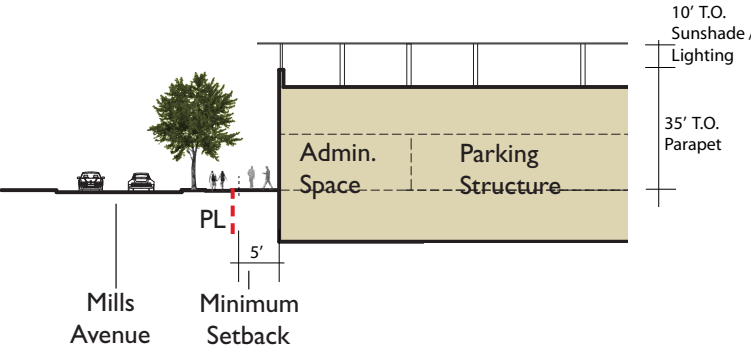


Proposed Setback and Zoning Information

- existing CMC buildings
- proposed new buildings
- CMC campus boundary
- section reference
- IE zone - institutional - educational
- AV1 zone - arbol verde 1
- AV2 zone - arbol verde 2
- increased height & reduced setback zone
- city of upland



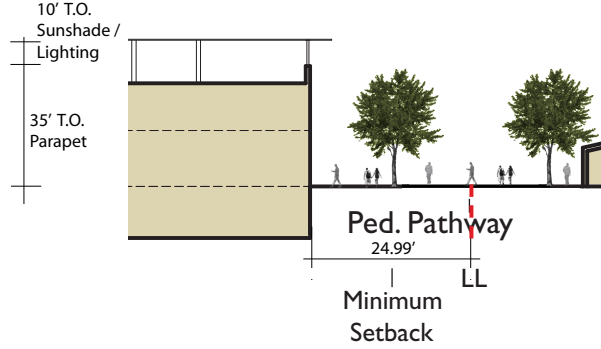
Section A-A:
Mills Avenue at Proposed Parking Structure



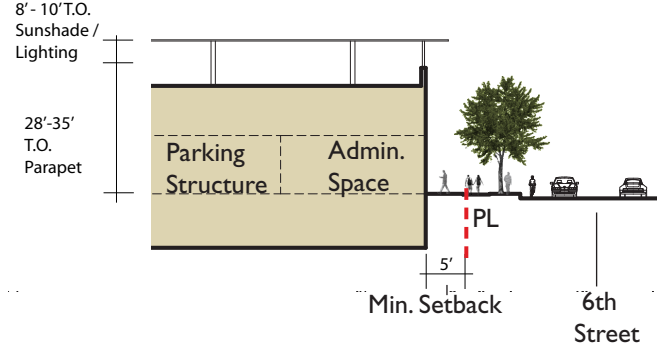
The proposed Parking Structure with Administrative Space building will have up to four-levels, of which no more than three-levels will be above grade. The top-level will have no roof or full height walls, only sunshades, lighting, railings, vents, elevator shafts, stairwells, and support structures. The Administrative Space will not be located above ground level.

- **Height:** The Parking Structure/Administrative Space building will be no higher than 35 feet to top-of-parapet, with sunshades, lighting, railings, vents, elevator shafts, stairwells, and support structures being no more than an additional 10 feet in height (for a combined total height of no more than 45 feet).
- **Setback:** The Parking Structure/Administrative Space building will be setback at least 5 feet from (a) Mills Avenue property line (Section A-A), (b) at least 24.9 feet from the lot line (centerline of vacated Brooks Avenue) (Section B-B) and setback at least 5 feet at southern (Section D-D) boundaries of the parcel on which it is located and (c) setback of least 5 feet at 6th Street property line (Section C-C). The setback area will be used for landscape, pedestrian and driveway areas.

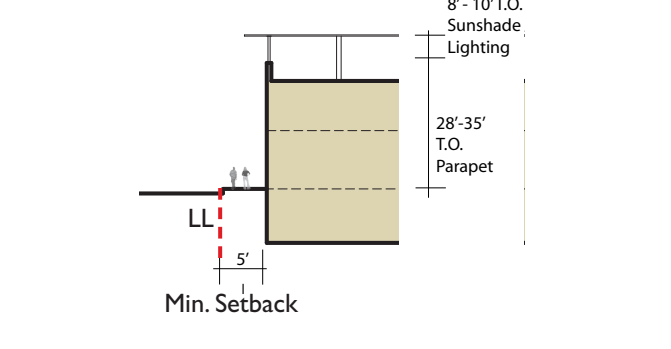
Section B-B:
Eastern Lot Line at Proposed Parking Structure



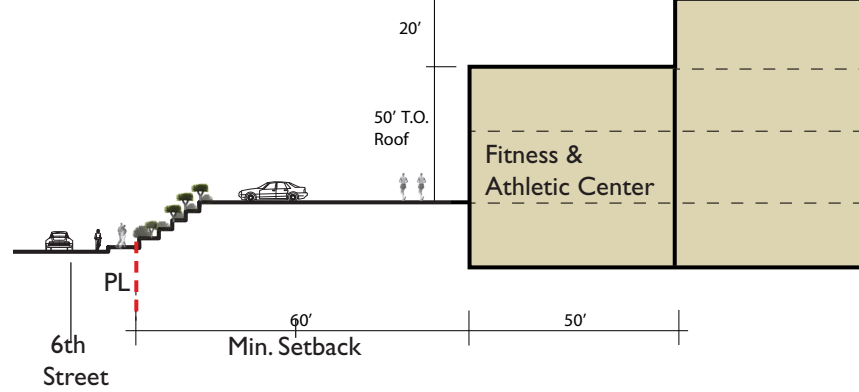
Section C-C:
6th Street at Proposed Parking Structure



Section D-D:
Southern Lot Line at Proposed Parking Structure



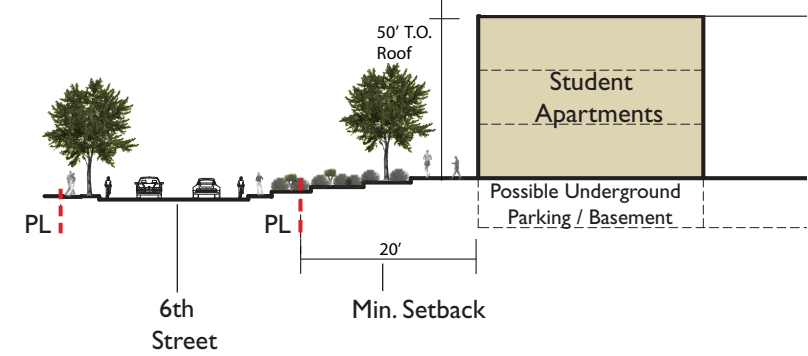
Section E-E: 6th Street at Fitness & Athletic Center



The proposed Fitness & Athletic Center building will have up to four-levels, of which no more than three-levels will be above ground. The building massing will be stepped up from two stories to three stories moving north from 6th Street.

- **Height:** The two-story (above ground) volume will be no higher than 50 feet. The three-story (above ground) volume will be no taller than 70 feet.
- **Setback:** The two-story (above ground) volume will be setback at least 60 feet from 6th Street property line. (Section E-E). The three-story (above ground) volume will be setback at least 110 feet from 6th Street property line. The setback area will be used for landscape, pedestrian and plaza areas.

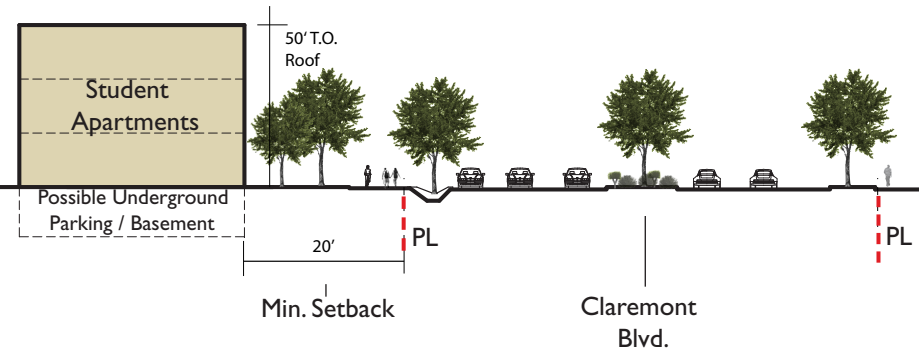
Section F-F: 6th Street at Proposed Student Apartments



The proposed Student Apartments building will have up to four-levels, of which no more than three-levels will be above ground. The potential subterranean level may be used for parking or basement purposes.

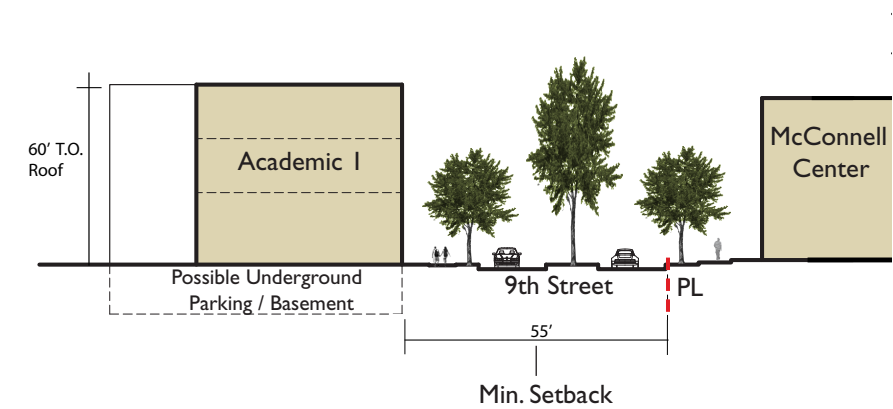
- **Height:** The Student Apartments building will be no higher than 50 feet.
- **Setback:** The Student Apartments building will be setback at least 20 feet from (a) 6th Street property line (Section F-F) and (b) Claremont Boulevard property line (Section G-G). The setback areas will be used for landscape, pedestrian and driveway areas.

Section G-G: Claremont Blvd. at Proposed Student Apartments



See Section F-F for height and setback references.

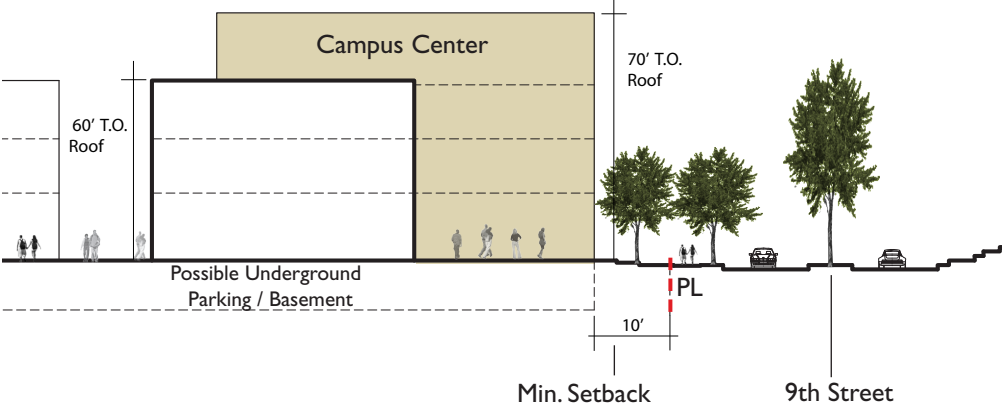
Section H-H: 9th Street at Proposed Academic Building I



The proposed Academic Building I will have up to four-levels, of which no more than three-levels will be above ground. The potential subterranean level may be used for parking or basement purposes.

- **Height:** The Academic I building will be no higher than 60 feet.
- **Setback:** The Academic I building will be setback at least 55 feet from the current 9th Street property line (Section H-H) and at least 25 feet from any future property line.

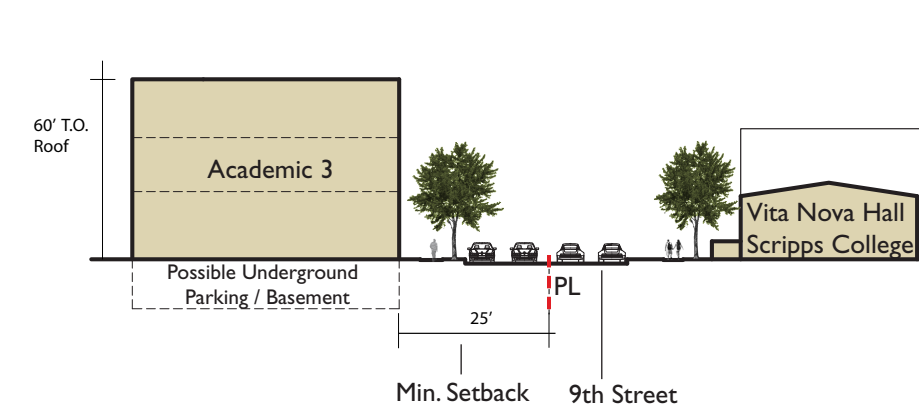
Section I-I: 9th Street at Proposed Campus Center



The proposed Campus Center building will have up to five-levels, of which no more than four-levels will be above ground. The potential subterranean level may be used for parking or basement purposes.

- **Height:** The Campus Center building will be no higher than 70 feet.
- **Setback:** The Campus Center building will be setback at least 10 feet from 9th Street property line (Section I-I).

Section K-K: Ninth Street at Proposed Academic Building 3



The proposed Academic Building 3 will have up to four-levels, of which no more than three-levels will be above ground. The potential subterranean level may be used for parking or basement purposes.

- **Height:** Academic Building 3 will be no higher than 60 feet.
- **Setback:** Academic Building 3 will be setback at least of 25 feet from 9th Street property line (Section K-K).

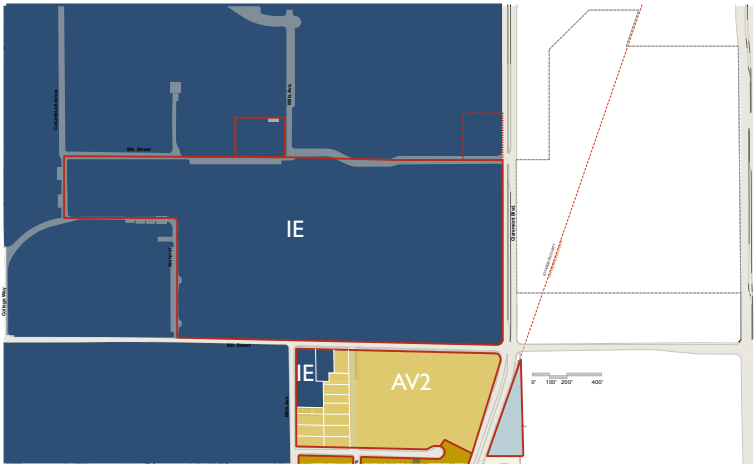
Campus Area Comparison

The adjacent summary illustrates projected changes to the allocation of building space during the next thirty years. Because of the distant time horizon, allowances have been made for student enrollment to potentially reach 1400 students, which is CMC’s current enrollment limit under the Constitution for The Claremont Colleges. The realization of each proposed project will be subject to programmatic needs and economic considerations. The existing campus zoning and General Plan designation will be altered to provide consistent zoning under the entirety of the proposed Parking Structure and Administrative Space.

| | Existing | Proposed |
|-----------------------------------|----------|----------|
| Lot Coverage | | |
| Primary Campus * | 12% | 15% |
| East Campus Sports Complex | | 1.7% |
| Total (Primary Campus + E.C.S.C.) | | 10% |
| Floor Area Ratio | | |
| Primary Campus * | 0.3 | 0.5 |
| East Campus Sports Complex | | 0.02 |
| Total (Primary Campus + E.C.S.C.) | | 0.3 |

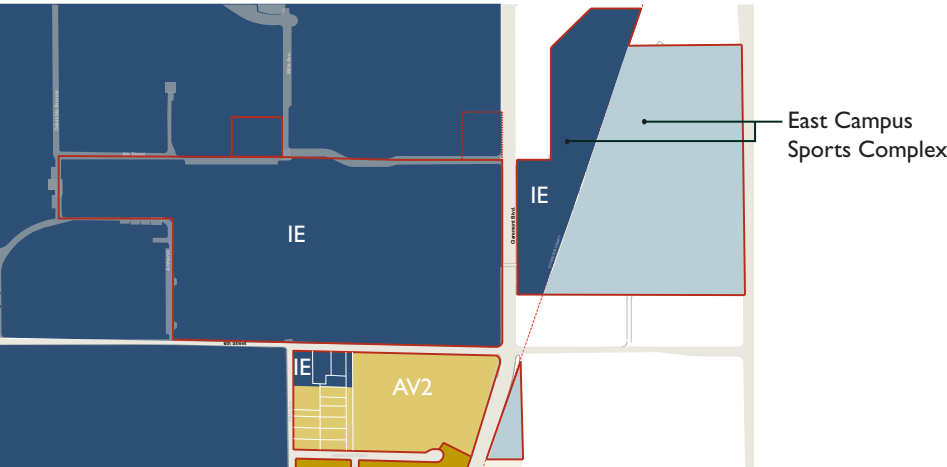
* Includes CMC Primary Campus and AV2 Zones only

Existing Campus Zoning Map



IE - institutional educational AV2 - arbol verde 2
AV1 - arbol verde 1 CMC campus property city of upland

Proposed Campus Zoning Map



IE - institutional educational AV2 - arbol verde 2
AV1 - arbol verde 1 CMC campus property city of upland

| | Proposed (GSF) | Removed (GSF) | Net Increase (GSF) |
|--------------------------------------|----------------|---------------|--------------------|
| Academic / Administrative / Support | | | |
| Academic 1 | 60,000 | | |
| Academic 2 | 60,000 | | |
| Remove Bauer North | | - 31,205 | |
| Remove Bauer South | | - 37,170 | |
| Mills Offices | | - 2,899 | |
| Academic 3 | 75,000 | | |
| Alumni - Admission | 34,000 | | |
| Seaman Hall Renovation / Replacement | 30,000 | - 6,182 | |
| Subtotal | 259,000 | - 77,456 | 181,544 |

| | | | |
|-----------------------------|---------|----------|---------|
| Student Life Facilities | | | |
| Campus Center | 140,000 | | |
| Remove Emmet Student Union | | - 7,472 | |
| Remove McKenna Auditorium | | - 10,059 | |
| Remove International Place | | - 1,097 | |
| Remove Heggblade Center | | - 8,773 | |
| Remove Collins Dining Hall | | - 20,507 | |
| Remove Story House | | - 3,580 | |
| Rec Pool & Social Pavillion | 8,000 | | |
| Athenaeum Addition | 10,000 | | |
| Subtotal | 158,000 | - 51,488 | 106,512 |

| | | | |
|-----------------------------|---------|----------|---------|
| Residence Halls | | | |
| Existing Student Apartments | | - 41,941 | |
| Proposed Student Apartments | 140,000 | | |
| Residence Hall Quad | 110,000 | | |
| Remove Remove Philips Hall | | - 13,286 | |
| Subtotal | 250,000 | - 55,227 | 194,773 |

| | | | |
|--|---------|----------|--------|
| Athletic Facilities | | | |
| Remove Ducey Gymnasium | | - 41,941 | |
| Fitness & Athletics Center | 132,000 | | |
| Removal Existing Structures for Soccer Field | | - 25,000 | |
| Field House (East Campus Sports Complex) | 30,000 | | |
| Subtotal | 162,000 | - 66,941 | 95,059 |

| | | | |
|--|---------|---------|---------|
| Parking Structure | | | |
| Parking Structure and Administrative Space | 150,000 | | |
| Removal Existing Structures | | - 5,000 | |
| Subtotal | 150,000 | - 5,000 | 145,000 |

| | | | |
|------------------------------|---------|-----------|---------|
| M.P. Increase in Area Totals | 979,000 | - 256,112 | 722,888 |
|------------------------------|---------|-----------|---------|

| | |
|---|---------|
| CMC Existing Campus Building Area ** | 718,423 |
| S.F. per Student (1150 enrollment in Claremont) | 625 |

| | |
|---|-----------|
| CMC Proposed Master Plan Campus Building Area | 1,441,311 |
| S.F. per Student (1400 enrollment in Claremont) | 1,030 |

| | |
|--|-----------|
| Pomona College 2003 Master Plan Campus Area (For Comparison) | 1,979,897 |
| S.F. per Student (1450 enrollment in Claremont) | 1,365 |

** Including Kravis Center - 53,587gsf of Keck Science Center allocated to Pitzer and Scripps Colleges.



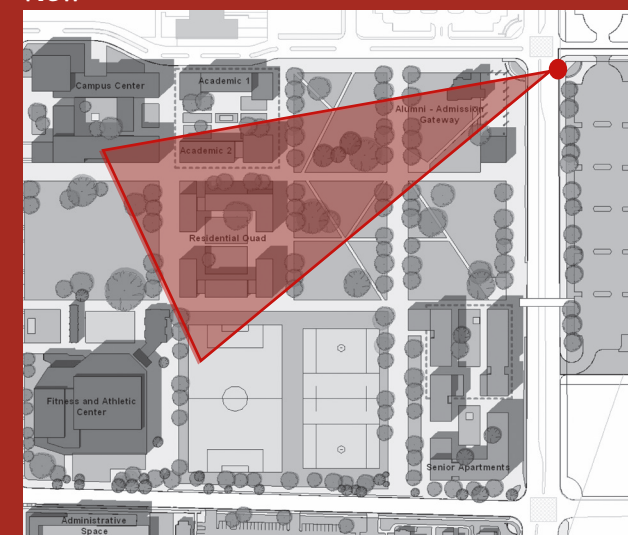
Vision for CMC

- Illustrates how the Master Plan accommodates new programmatic needs of the campus, while preserving the intimate scale of the existing campus and strengthening the character defining elements.
- Provides for needed academic, campus life, athletic, and residential growth.
- Strengthens east/west and north/south campus axes.
- Enhances open space network.
- Improves campus edge definition.
- Clarifies entries and gateways.
- Improves campus circulation and pathways.
- Unifies and harmonizes entire campus.



View Looking East along the North Mall

View



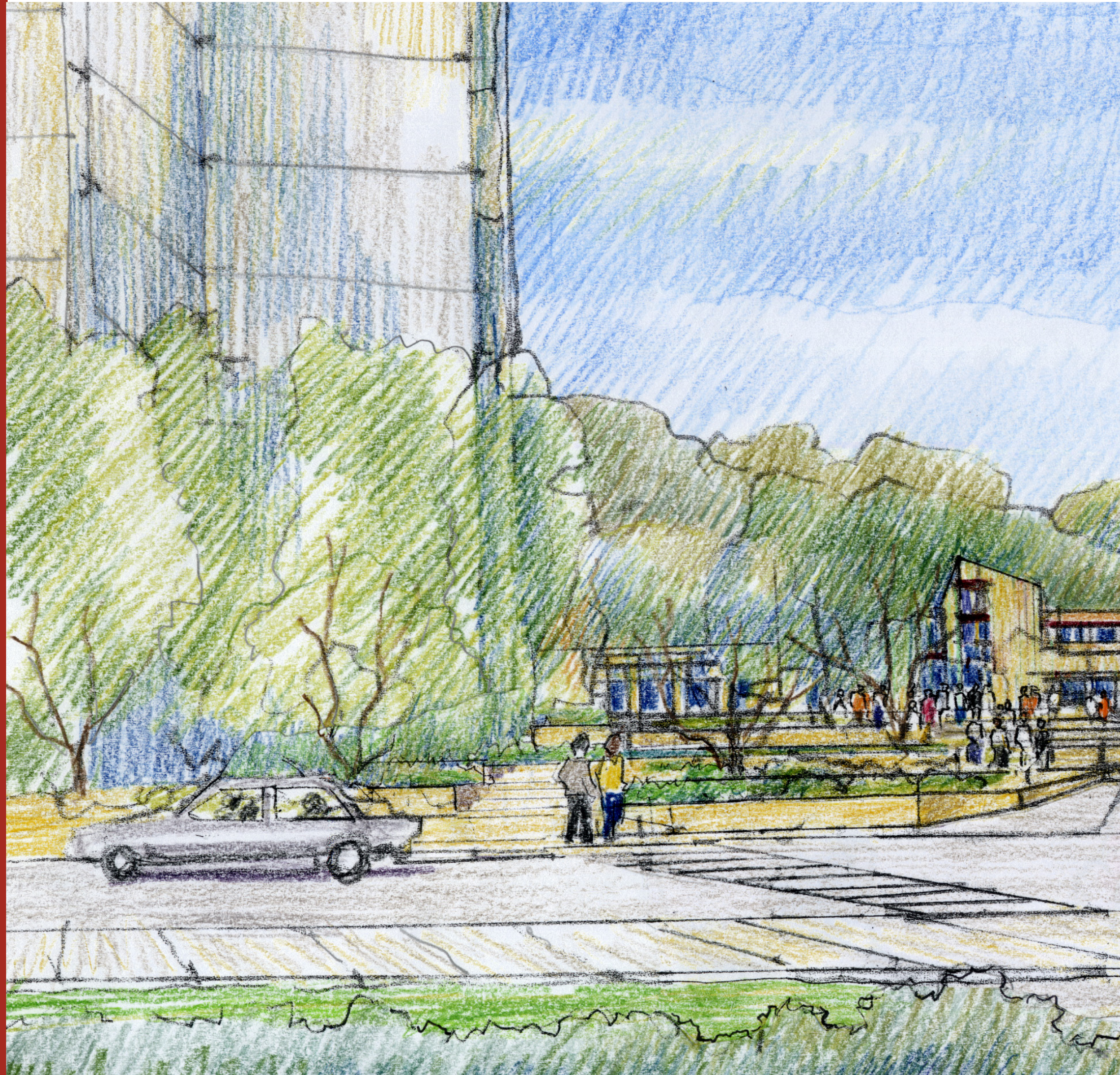
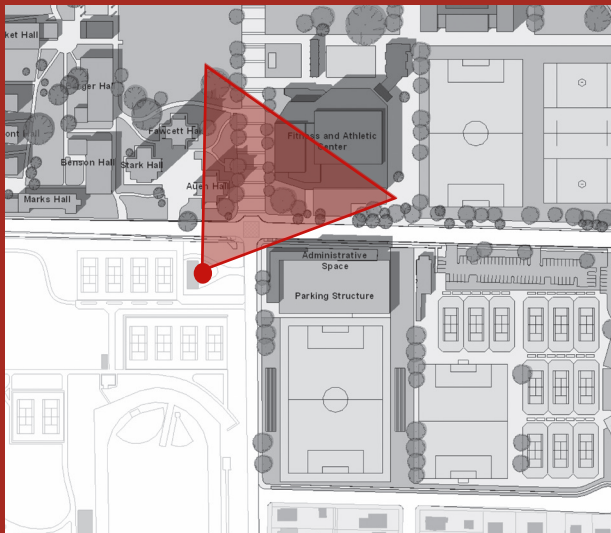
Mills Avenue & Sixth Street Gateway

- The intersection of Mills Avenue and Sixth Street will be an important gateway to CMC.
- View shows three proposed projects: Fitness and Athletics Center (middle); Campus Center (far left); and Parking Structure with Administrative Complex at street level (far right).
- Fitness and Athletics Center along with landscape will define the campus perimeter along Sixth Street. The building form steps down as it engages Sixth Street.
- Sixth Street gateway features landscape and signage linking to the enhanced tree-lined pedestrian-way (aligned with Mills Avenue) leading to the Campus Center.



View Looking North - East from the intersection of Mills Avenue and Sixth Street

View





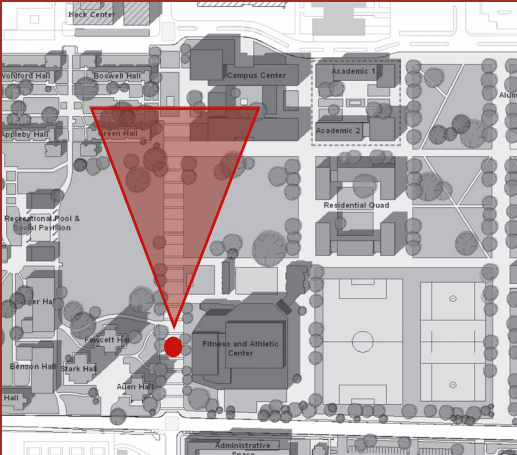
Creating a Heart at CMC

- The Campus Center will be located at the key intersection of the North Mall and Mills Avenue.
- The Campus Center will be modulated to be similar in scale to the adjacent buildings.
- A tower element may be located at the corner of the Campus Center providing commanding views of the surrounding campus and mountains.
- Parents Field will be expanded to the east to create a stronger campus “heart.”



View Looking North along Mills Avenue

View





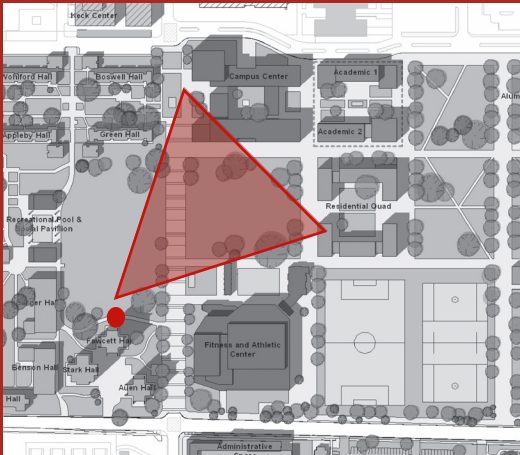
Weaving of the Campus Plaid

- All primary campus components, including academic, service, athletic, and residential uses have an address on the focal open space.
- The Campus Center will be located at the heart of campus.
- The strength and continuity of the North Mall will be maintained.
- Two and three story buildings will be compatible with existing campus buildings and the surrounding campuses and communities.
- An expanded Parents Field will allow more buildings to be at the heart of the campus.
- Landmark trees will be preserved wherever possible.



View Looking Northeast from Parents Field

View





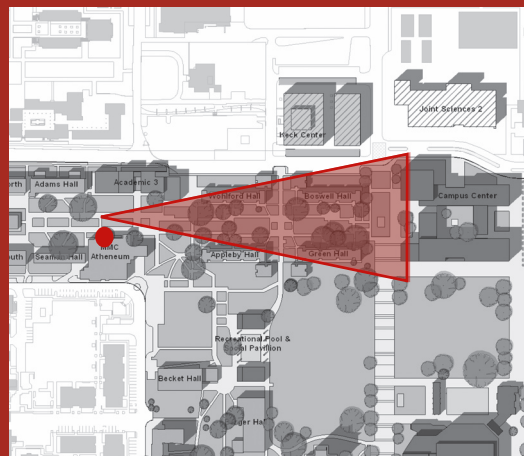
Building on the Tradition of the North Mall

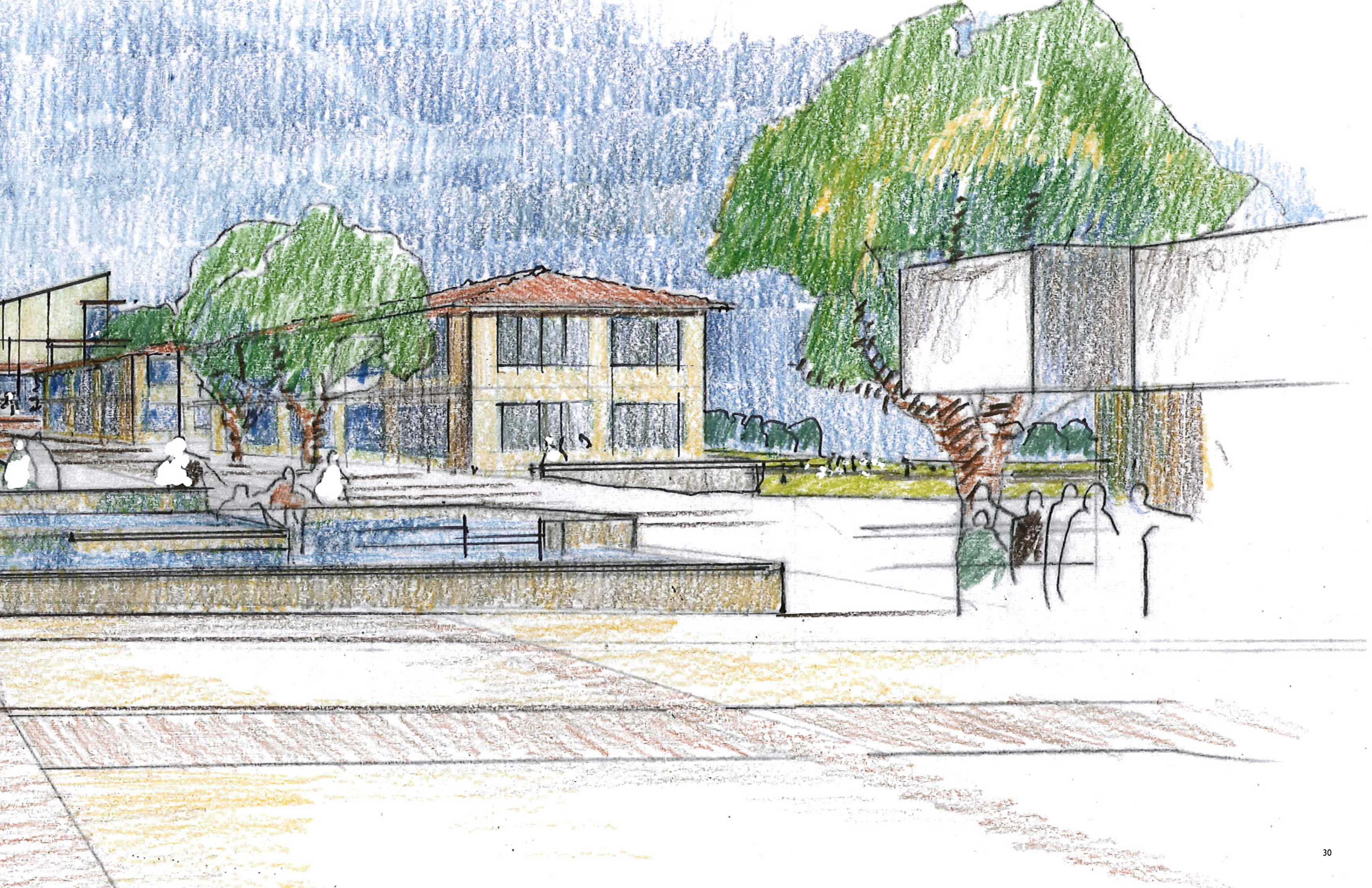
- Academic, cultural, administrative, dining, and student residential uses have and will coexist on the North Mall.
- Proposed three-story academic building, at left, will maintain compatibility with existing buildings along the North Mall.
- Pedestrian passage in the center of the proposed academic building is aligned with Amherst Avenue to provide a direct connection with Scripps College.
- Buildings, landscape, and fountains shape the North Mall as a primary gathering and interaction space on campus.
- Proposed Campus Center is visible in the background.



View Looking East along the North Mall

View





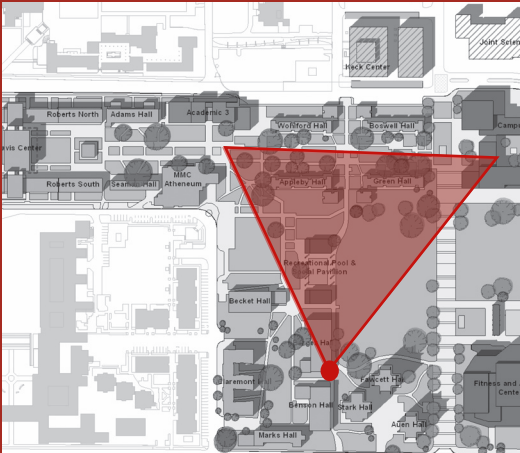
Crossroads of the CMC Campus

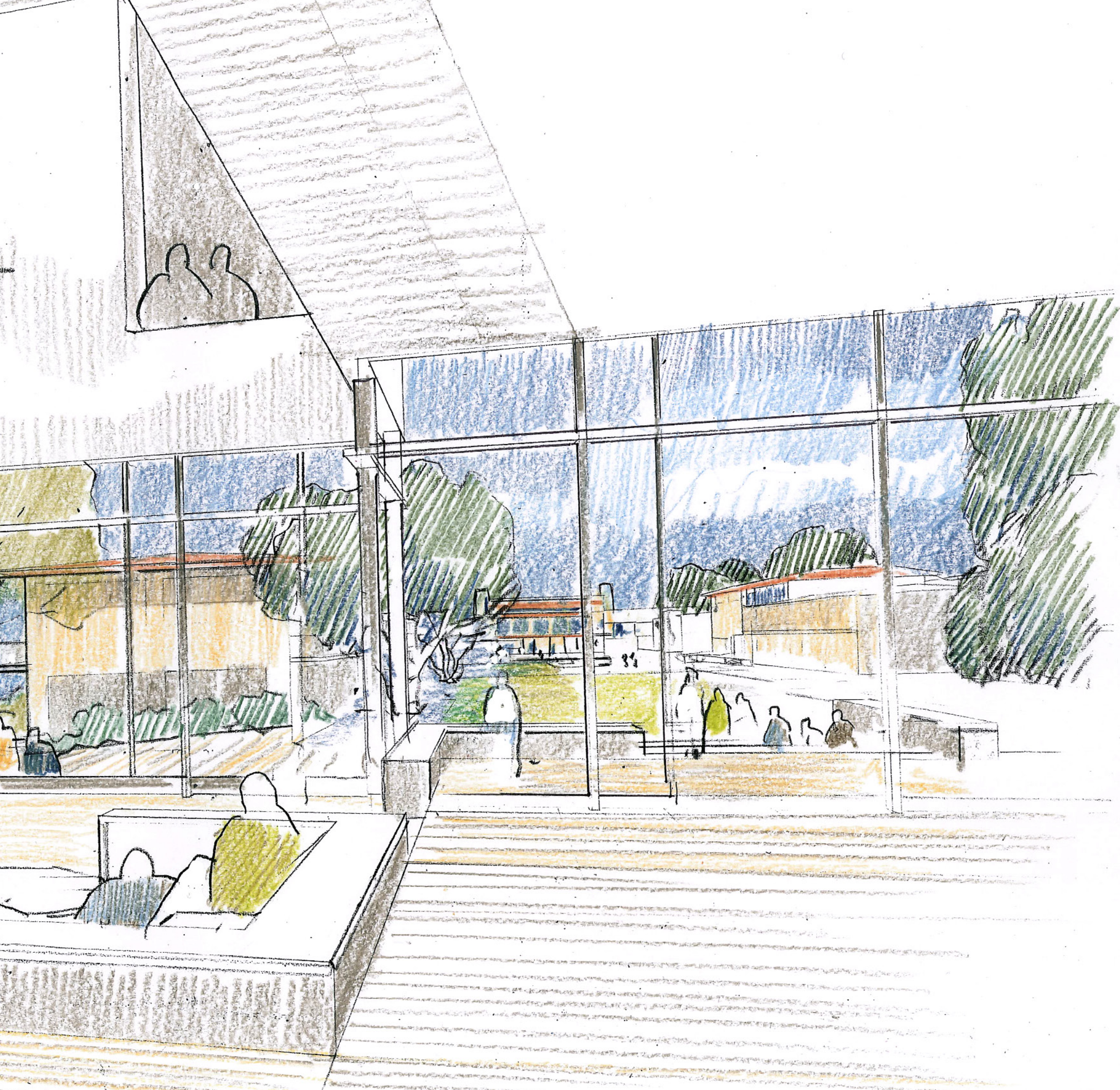
- Campus Center is located at the heart of campus overlooking an expanded Parents Field.
- Inviting social spaces at garden level will enhance interaction between students, faculty, staff, and visitors, while framing and shaping connections to the campus, landscape, and open space.
- Opportunities for special spaces on multiple levels within the building.
- Preservation and celebration of landmark trees.
- Completed Kravis Center is shown at right.



View West from the proposed Campus Center

View





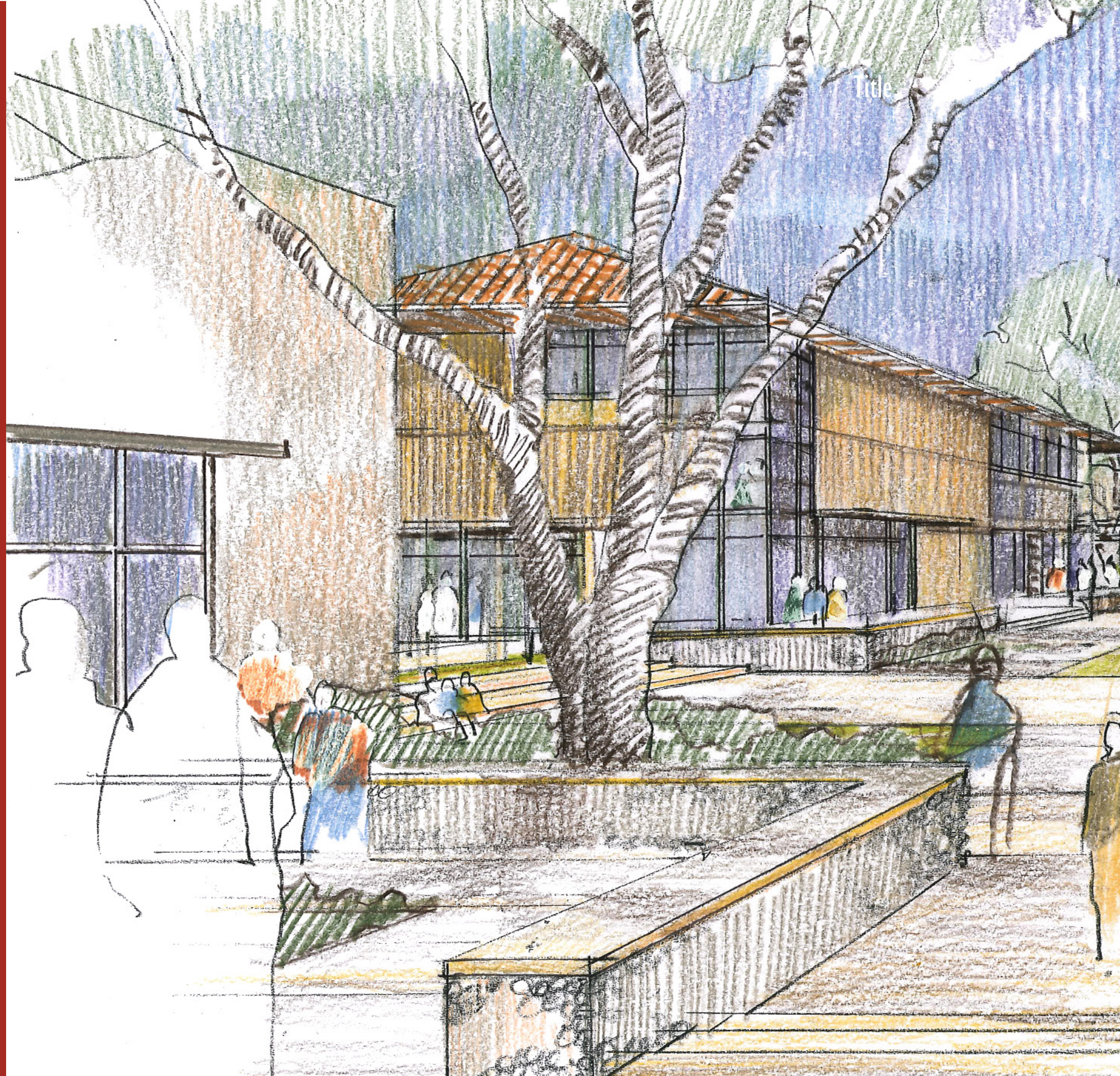
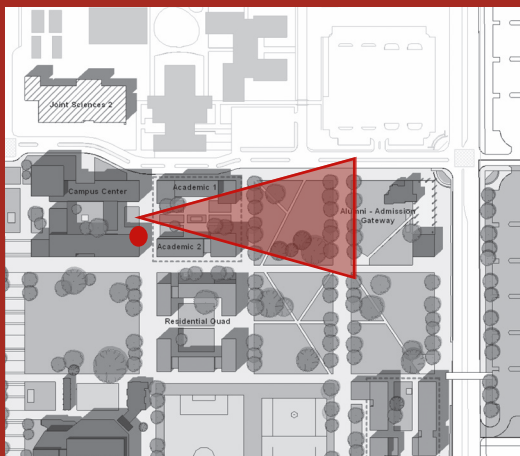
Extending the North Mall

- Maintains and strengthens the continuity of the North Mall east to Claremont Boulevard.
- Proposed three-story academic buildings will maintain similar qualities of the existing buildings on the North Mall.
- Moderately scaled buildings define active courtyards and pathways.
- In the distance, beyond new gardens, the North Mall ends with low-scaled Alumni and Admission buildings proposed to create a new Claremont Boulevard gateway to the campus.



View Looking east along the North Mall

View





Sustainability on Campus

Current Sustainable Design Initiatives

Claremont McKenna College has already taken significant steps to reduce its environmental impact. Resource management is a vital component of CMC’s sustainability efforts. Currently, CMC tracks many aspects of its resource usage.

CMC is a member of the Society of College & University Planners, the Association for the Advancement of Sustainability in Higher Education (AASHE), the Pacific Coast Association of Physical Plant Administrators and the Association of Facilities Officers in Higher Education. Membership and participation in these organizations reflects the College’s intent to partner with leading organizations and model best practices as CMC continues its stewardship of its campus and resources.

In June 2007, CMC committed to a climate change initiative named the American College & University Presidents Climate Commitment, under which CMC must meet specific climate reducing targets.

Presidents signing the American College & University Presidents Climate Commitment are pledging to eliminate their campus’s greenhouse gas emissions over time through:

- Completing an emissions inventory.
- Setting targets and interim milestones for becoming climate neutral.
- Taking immediate steps to reduce greenhouse gas emissions by choosing from a list of short-term actions.
- Integrating sustainability into the curriculum and making it part of the educational experience.
- Making the action plan, inventory, and progress reports publicly available.

LEED Policy

CMC is committed to pursuing environmental best practices when designing, constructing or undertaking the significant renovation of buildings on its campus. At a minimum, CMC will design, build, and pursue certification of all new buildings at a LEED “Silver” level or higher. Significant building renovation projects will also apply LEED standards throughout the course of the project. Additionally, the College will apply principles of sustainability and related best practices in its daily maintenance and operation.

Energy & Water Conservation

Steps have been taken to monitor and understand energy usage on campus. Energy retrofit studies have been conducted and lighting retrofits implemented. The College is also implementing an advanced irrigation control system to reduce irrigation water consumption.

Materials & Resources

Claremont McKenna College has implemented green purchasing policies and uses green seal certified cleaning products, recycled hand towels, and Energy Star appliances. An electronics recycling program has been implemented along with recycling green waste generated on campus through composting. Solar powered trash compactors have been utilized to reduce trip generation associated with trash collection.



Claremont Hall, LEED Silver



Kravis Center, LEED Silver/Gold Target

Proposed Sustainable Initiatives for the Master Plan

Key Considerations

The Master Plan carefully considers site sustainability, energy and water resource management. The Master Plan provides for strategies to be implemented over time allowing for technological advances to be incorporated. Key considerations include:

Stormwater:

Stormwater treatment serves as an important element in the sustainability design. Due to the campus' natural soil conditions, there are several opportunities for stormwater treatment and infiltration within the campus. Given the available open space of the campus, implementation of sustainable landscape features such as linear bioswale systems can be integrated along with the landscape design. This element of "daylighting infrastructure" creates a strong awareness of water and location, which will lend the campus a sustainable and natural environment.

Landscape:

Landscape is an important aspect of campus environment. Opportunities exist to utilize landscape elements to shade buildings on the south, east and west, and tree selection and location will seek to maximize such opportunities.

Climate Responsive Design:

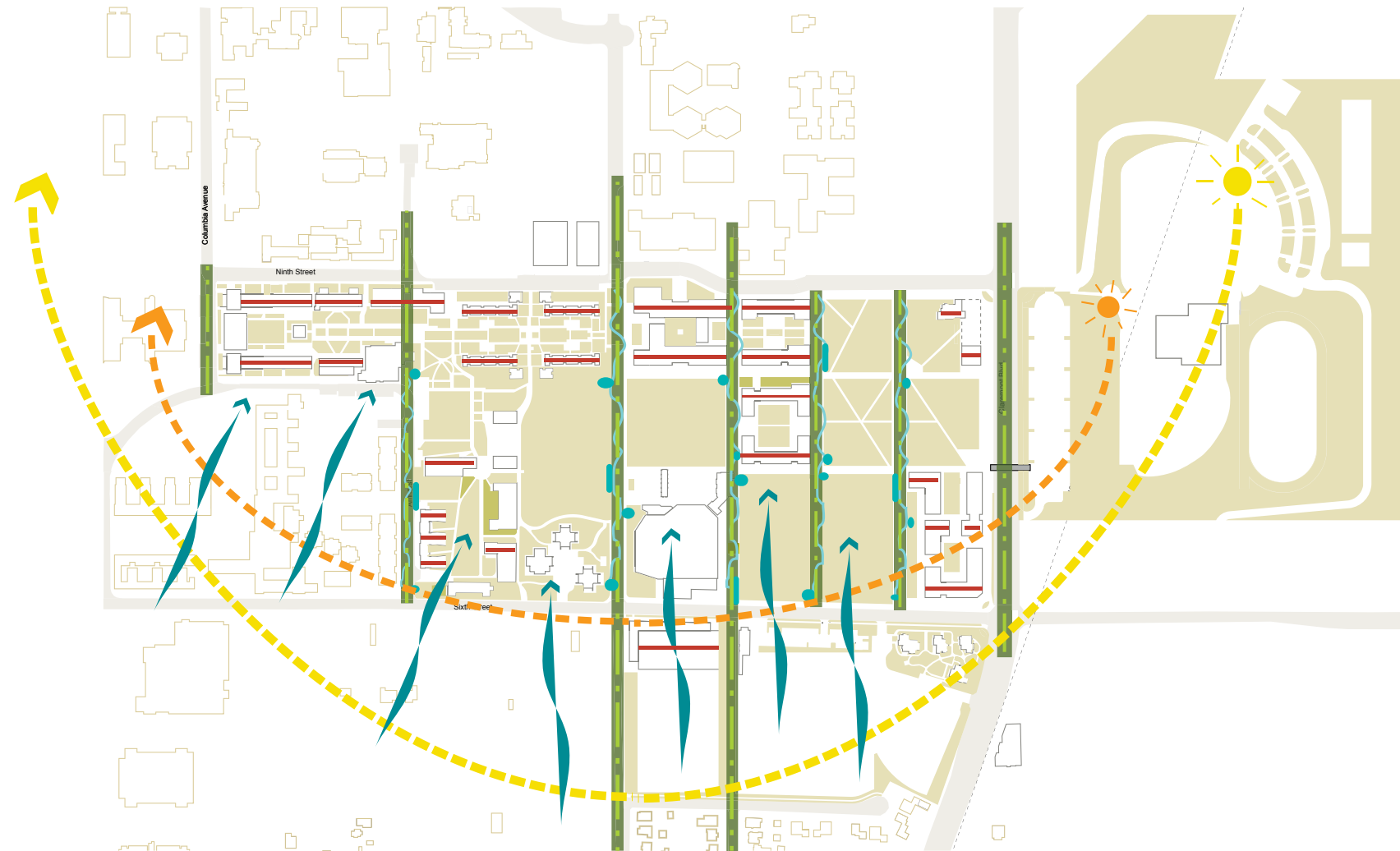
Climate responsive design seeks to respond to the sun, wind, and climate. Orientation of buildings has been considered to minimize east/west exposure where possible, reducing solar exposure. During most of the academic year, the moderate climate provides excellent opportunities for natural ventilation through mixed-mode systems.

Water:

Significant opportunities for water conservation and water reuse exist within the campus. Water reduction target goals will be considered and implemented as practical. Opportunities for grey water recycling to provide recycled water for cooling towers, irrigation, and toilet flushing have been identified and may be pursued on a project-by-project basis, if reasonably economical.

Energy & Carbon Emissions

A strategy has been identified to utilize radiant cooling systems and mixed-mode ventilation within certain facility types to minimize energy consumption. Certain new or existing facilities may be tied into a new central cooling plant to take advantage of diversification of load and high efficiency chillers.



Site Analysis: Sun path, prevailing winds, optimum orientation, and green corridors

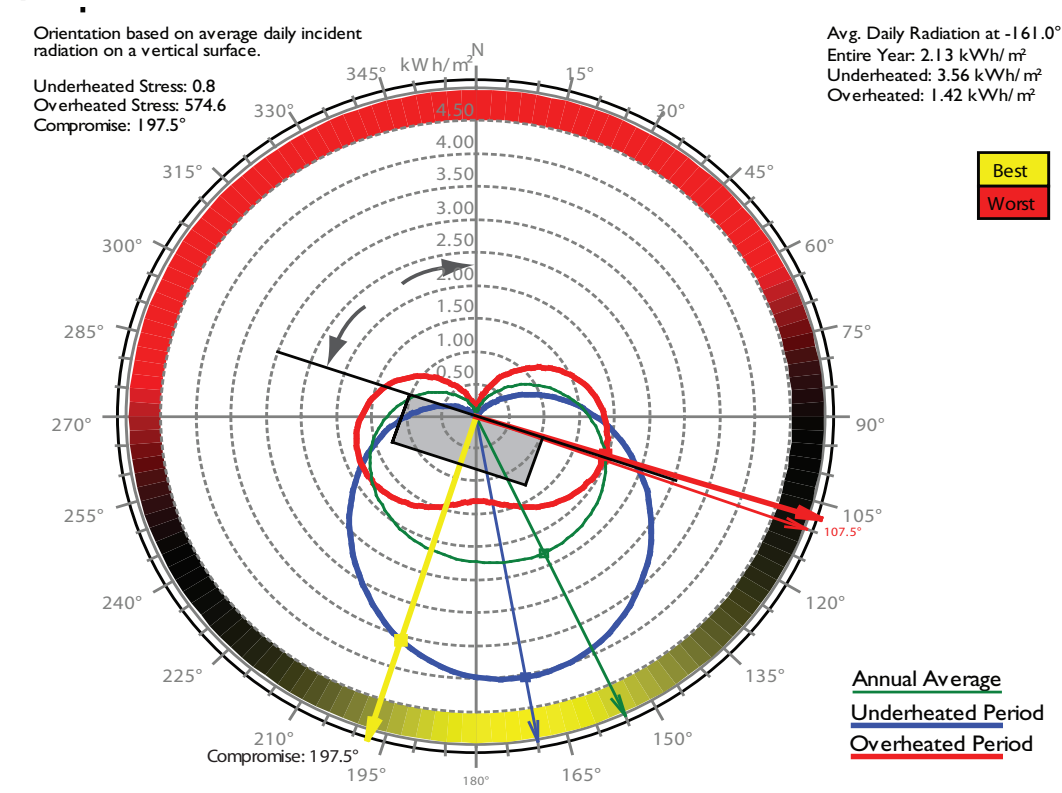
Site Analysis

Climate Analysis

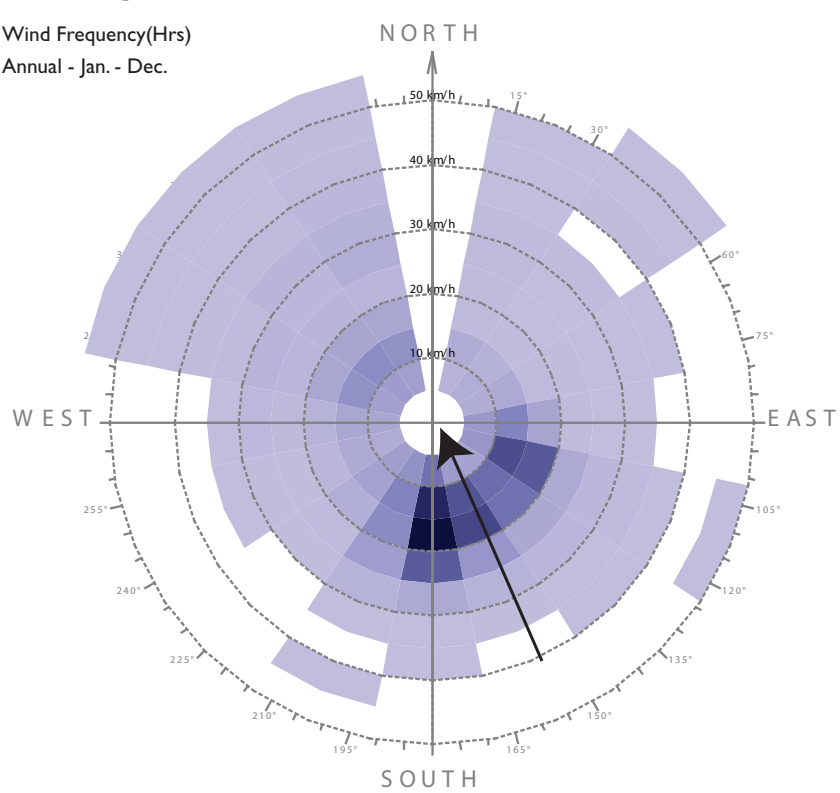
Claremont McKenna College is located at 34° latitude, where the sun is high during summer months and shade on the southern and western facades of buildings is desirable. Lower winter sun can provide some benefit in terms of solar gains, but spring and autumn sun angles can cause particular challenges for shading. The optimum building orientation is 18° from an east/west alignment, facing slightly southwest, and providing reduced solar exposure from afternoon sun. Solar resource for the region is excellent, making solar photovoltaic and solar thermal potentially feasible.

The climate in Claremont offers comfortable conditions for the majority of the year, with good opportunity for natural ventilation via mixed-mode systems. Wind speeds are low, but the prevailing southerly breezes could be used to enhance comfort in external areas. Diurnal swings are significant year round offering an opportunity to utilize natural ventilation. An east/west building alignment could maximize the opportunity for natural ventilation.

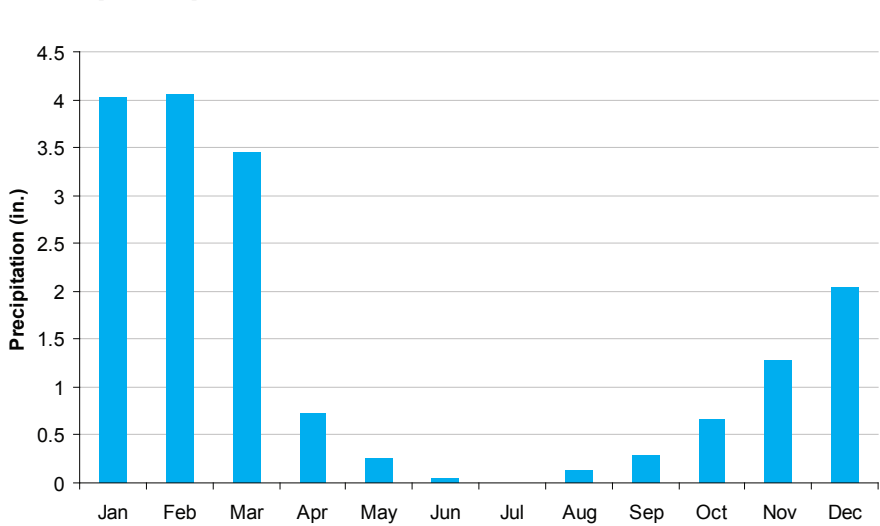
Optimum Orientation



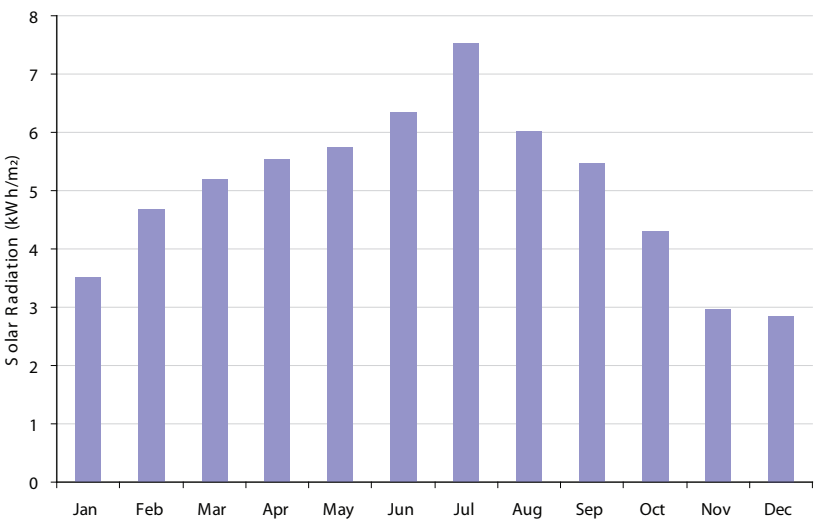
Prevailing Winds



Monthly Precipitation



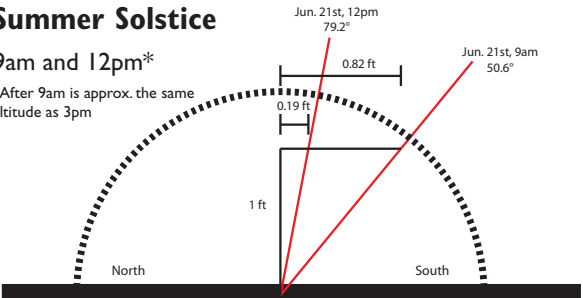
Monthly Solar Radiation



Solar Altitude: Summer Solstice

9am and 12pm*

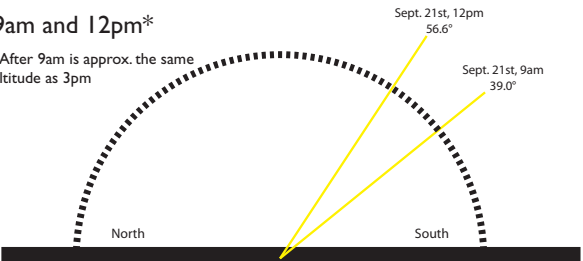
*After 9am is approx. the same altitude as 3pm



Solar Altitude: Spring/Autumn Equinox

9am and 12pm*

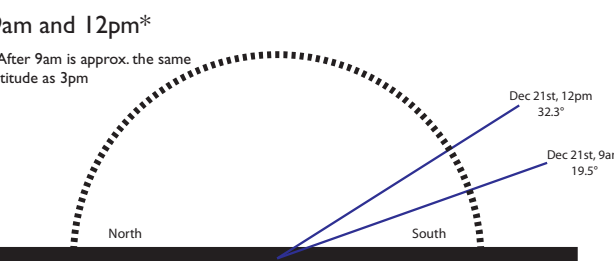
*After 9am is approx. the same altitude as 3pm



Solar Altitude: Winter Solstice

9am and 12pm*

*After 9am is approx. the same altitude as 3pm



Passive and Active Design Strategies

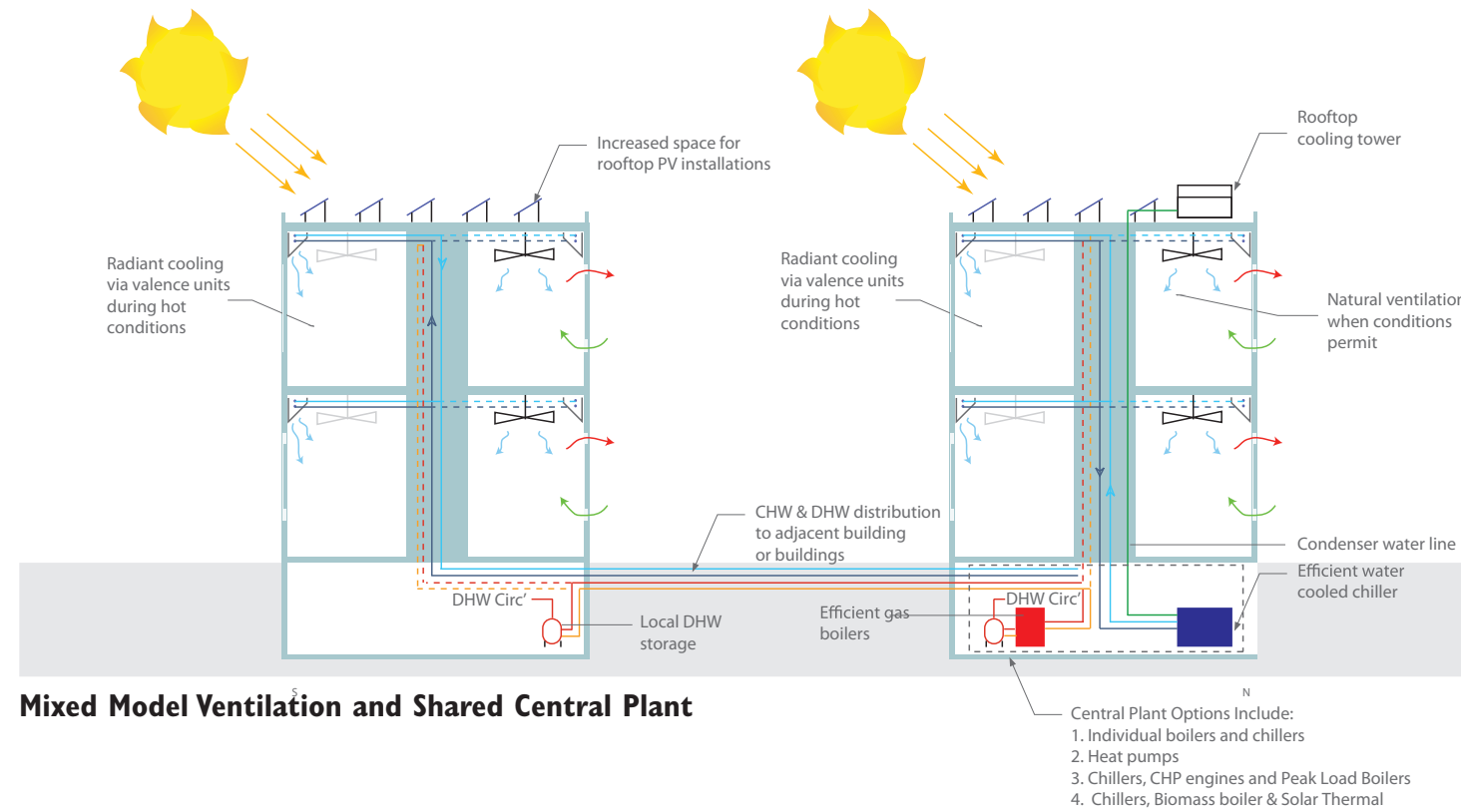
The Master Plan focuses on minimizing the impact on the local and global environment through climate responsive design. The aim is to reduce energy consumption through passive and active design strategies, and consider the application of renewable technologies.

Passive Design Strategies

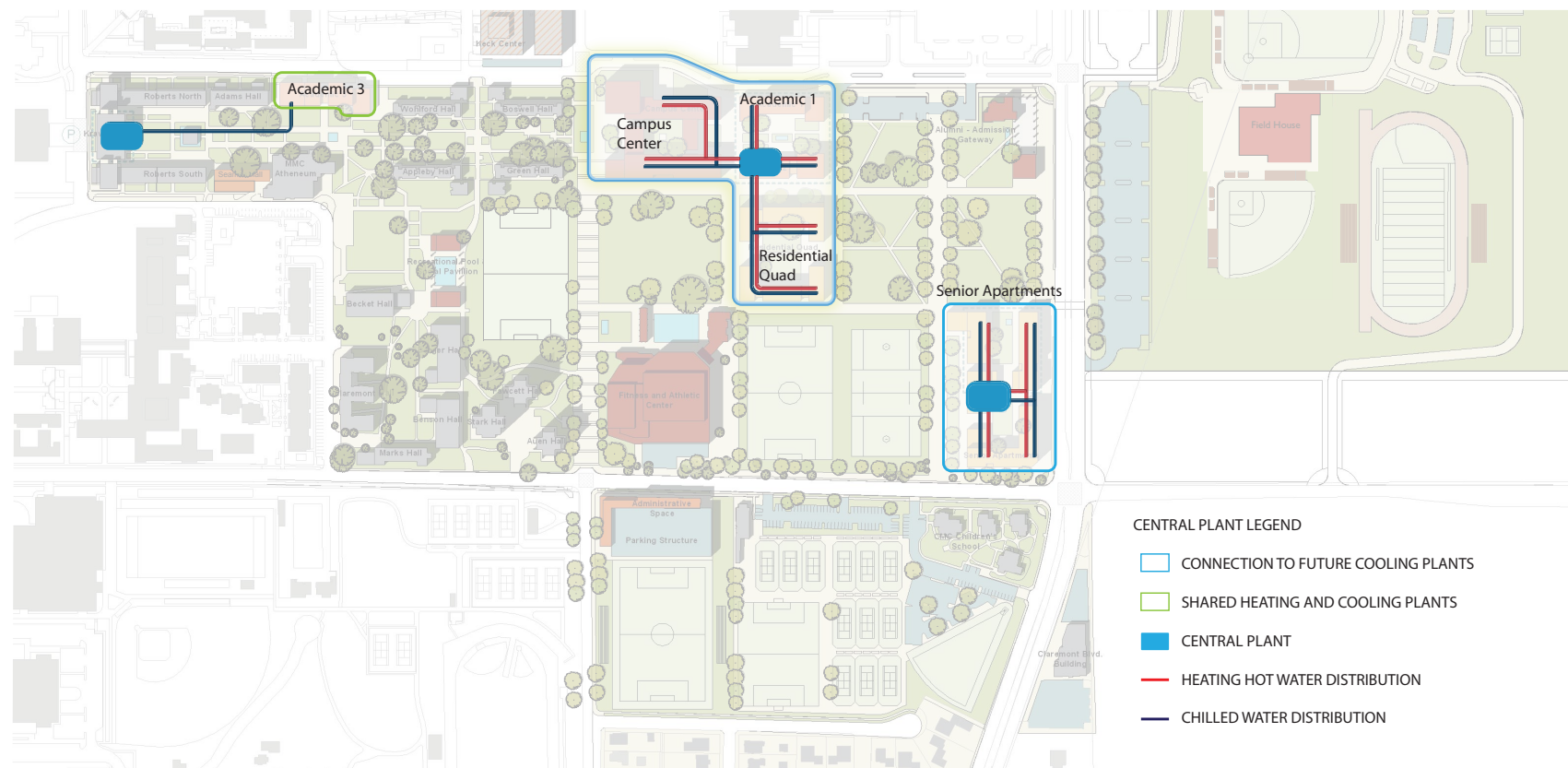
Passive design strategies seek to minimize energy consumption for heating, ventilation, and lighting systems by reducing demand through appropriate orientation, massing, and strategies such as night cooling, natural ventilation, and day lighting. Given the local climate, mixed-mode systems utilizing natural ventilation may provide significant opportunities for energy reduction and will be considered on a building-by-building basis.

Active Design Strategies

Active design strategies work to reduce the energy consumed by mechanical systems through strategies such as right-sizing, efficient system design, and efficient equipment selection. Shared heating and cooling plant and infrastructure can provide the opportunity to integrate a wider range of system options, and will be considered on a building-by-building basis.



Mixed Model Ventilation and Shared Central Plant



Central Heating and Cooling Plant Opportunities

Renewable Energy Opportunities

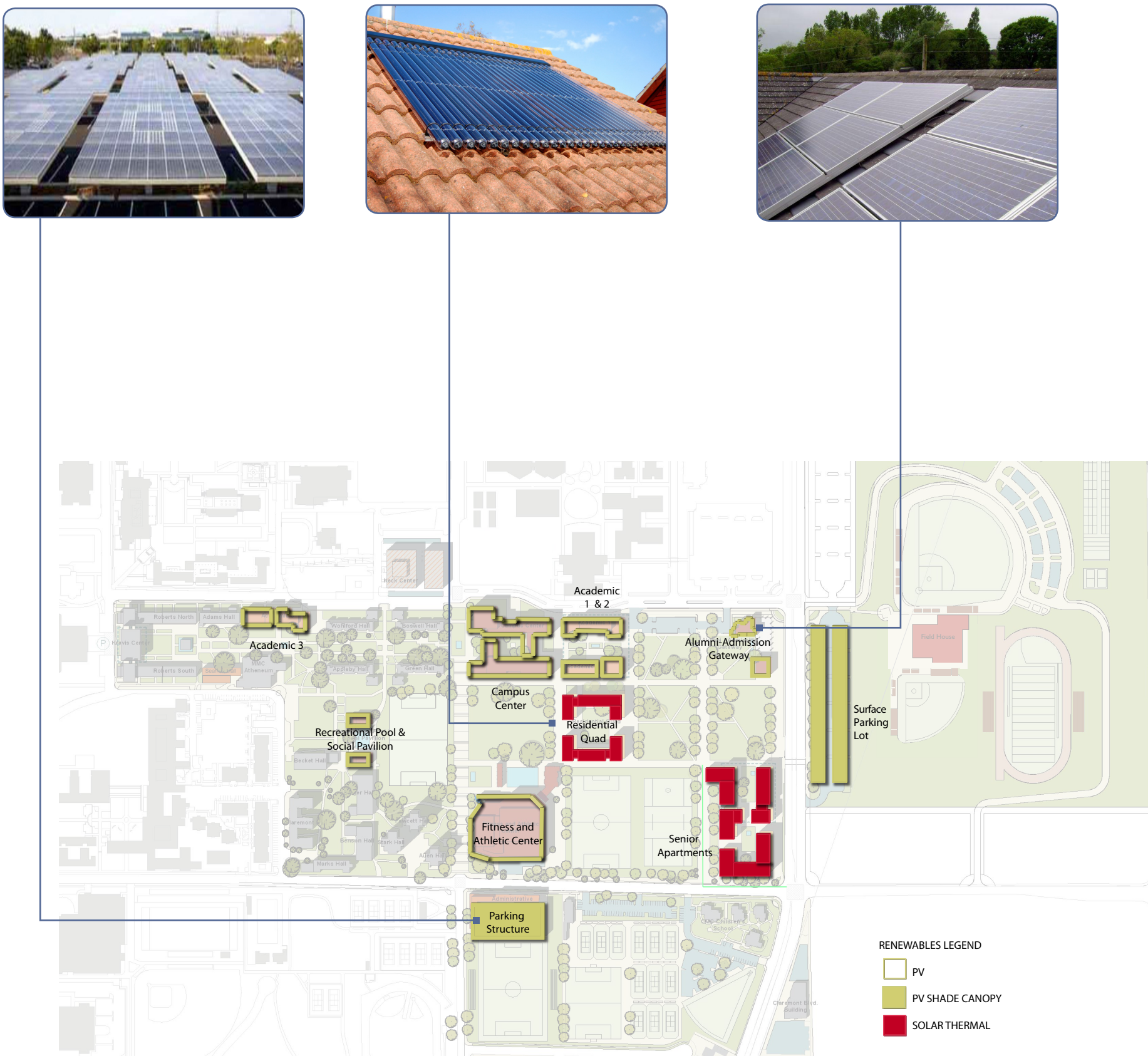
A variety of renewable energy technologies have been investigated for usage on the campus. Studies have shown solar energy to be the most abundant on-site energy resource, creating opportunities for integration of solar photovoltaic and solar thermal technologies, particularly from spring through autumn. Average wind speeds on-site are too low for viable power generation from wind turbines and there are no other nearby renewable energy resources, such as hot well geothermal, biomass, or low-impact hydro. Possible solar thermal and photovoltaic applications are described below.

Solar Thermal Domestic Hot Water

Solar thermal collectors utilize the sun’s energy to directly or indirectly heat water. The existing and proposed residential dormitories have been identified as having high domestic hot water loads making them potentially suitable for solar thermal technologies. Higher angle collectors would be most suitable to maximize winter and mid season hot water generation due to lower occupancy during summer months. CMC will investigate the practicality of utilizing solar thermal collectors for proposed and existing dormitories on a building-by-building basis.

Site and Building Integrated Photovoltaic

Photovoltaic panels capture the sun’s energy and directly generate electrical power. The power is then transformed through an inverter from DC to AC for use in buildings. The viability of utilizing photovoltaic technology will be considered on a building-by-building basis. Academic and administrative buildings may be suitable for integration of photovoltaic technology when solar thermal would not be effective. Photovoltaic panels may also be considered as integrated sunshade elements on top of parking structures or surface parking where there is potential for power generation.



Claremont McKenna Renewable Energy Opportunities

Water Use

Water Use Reduction Strategy

The campus uses water within buildings for potable and non-potable uses. Dormitory buildings have high water demands for showers and academic buildings have high water demands for cooling towers. Irrigation across the campus also accounts for a large demand. The Master Plan will attempt to minimize potable water demands as outlined below.

Building Water Efficiency

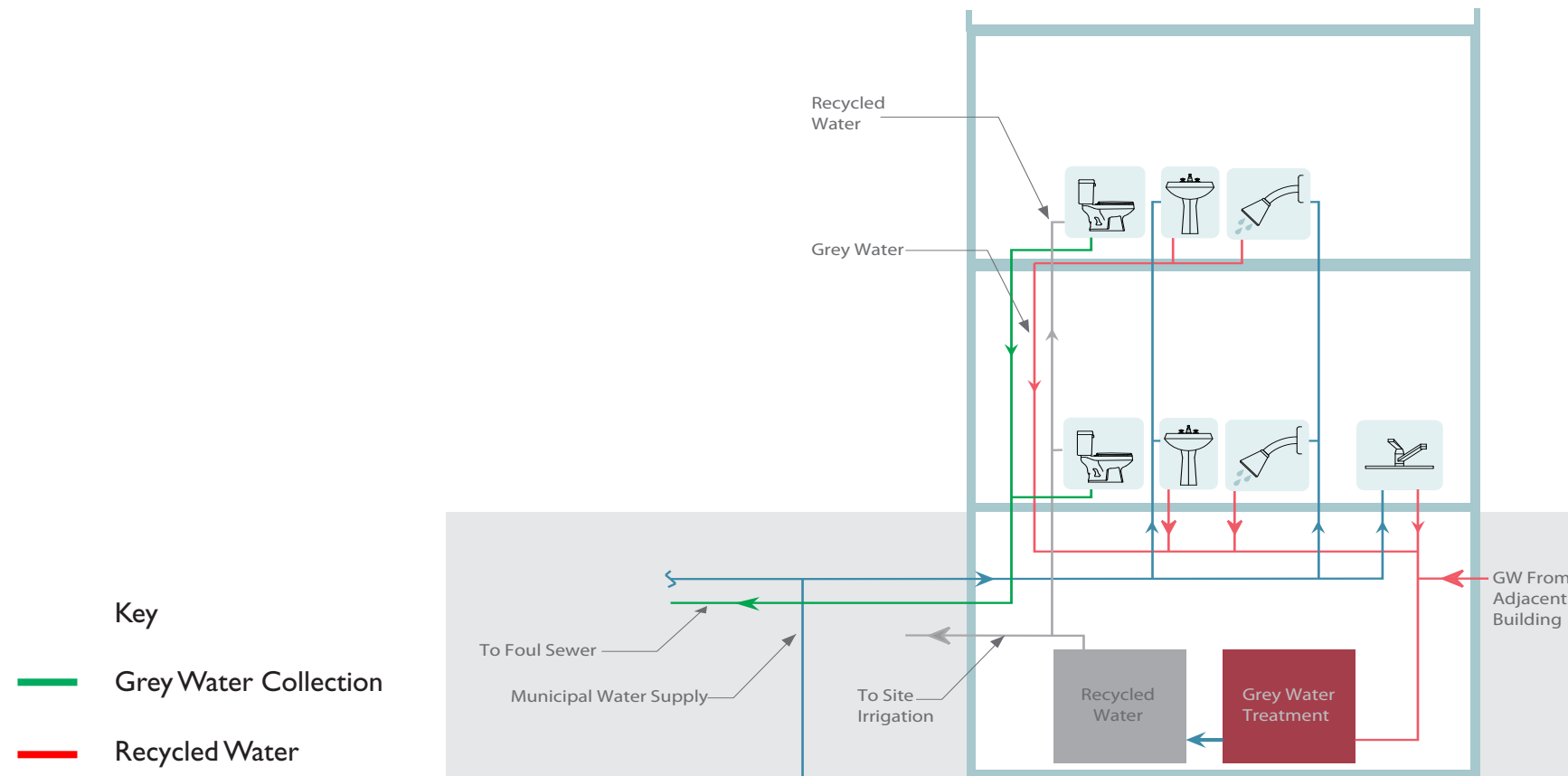
New and existing buildings will minimize water consumption through the use of low-flow fixtures, showers, urinals, and toilets.

Building Water Recycling

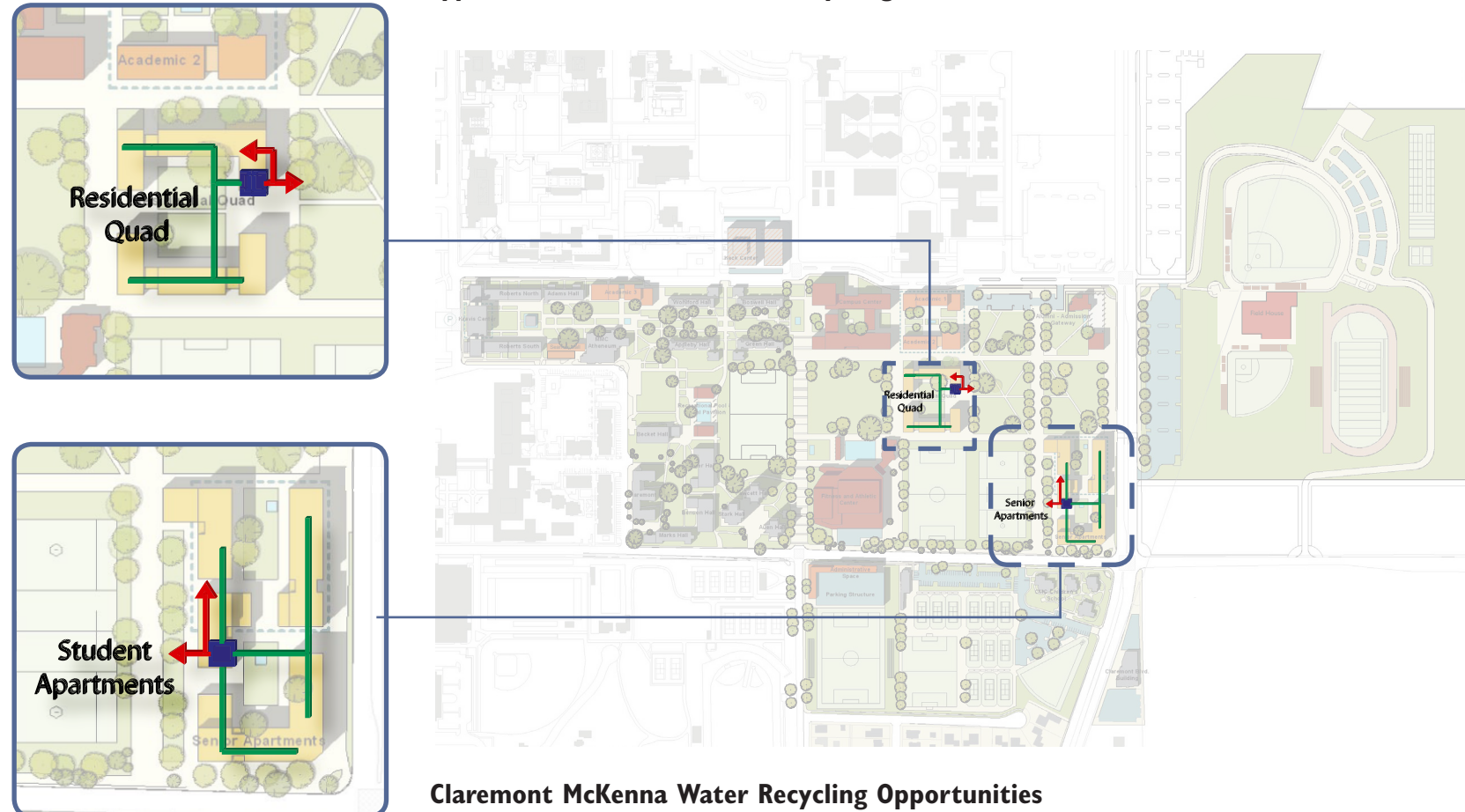
Water treatment and reuse strategies (such as grey water or black water treatment and recycled water use for toilet flushing, irrigation or cooling towers) will be considered for new buildings on a building-by-building basis.

Landscape Irrigation

Demand for potable water for irrigation should be reduced through the selection of native or drought tolerant species when possible. Irrigation demands may be further reduced through drip irrigation and irrigation management systems. Where grey or black water treatment systems are utilized, the ability to provide local or wider reuse of water for irrigation will be considered. The City of Upland has indicated that it would like to provide grey water to be utilized in irrigating the East Campus Sports Complex. If Upland provides grey water to the East Campus Sports Complex, CMC will reasonably endeavor to utilize such water for irrigation to the extent that CUC is allowed to do so by all water suppliers and regulatory bodies.



Typical Water Treatment and Recycling Scheme



Claremont McKenna Water Recycling Opportunities

Existing Tree Inventory

Preservation of Landmark Trees

One of the unique qualities of the CMC campus is its mature trees, including specimens of California live oak, stone pine, and sycamore trees.

These trees are significant because they contribute to the beauty of the campus, the quality of the experience, and identity of the place.

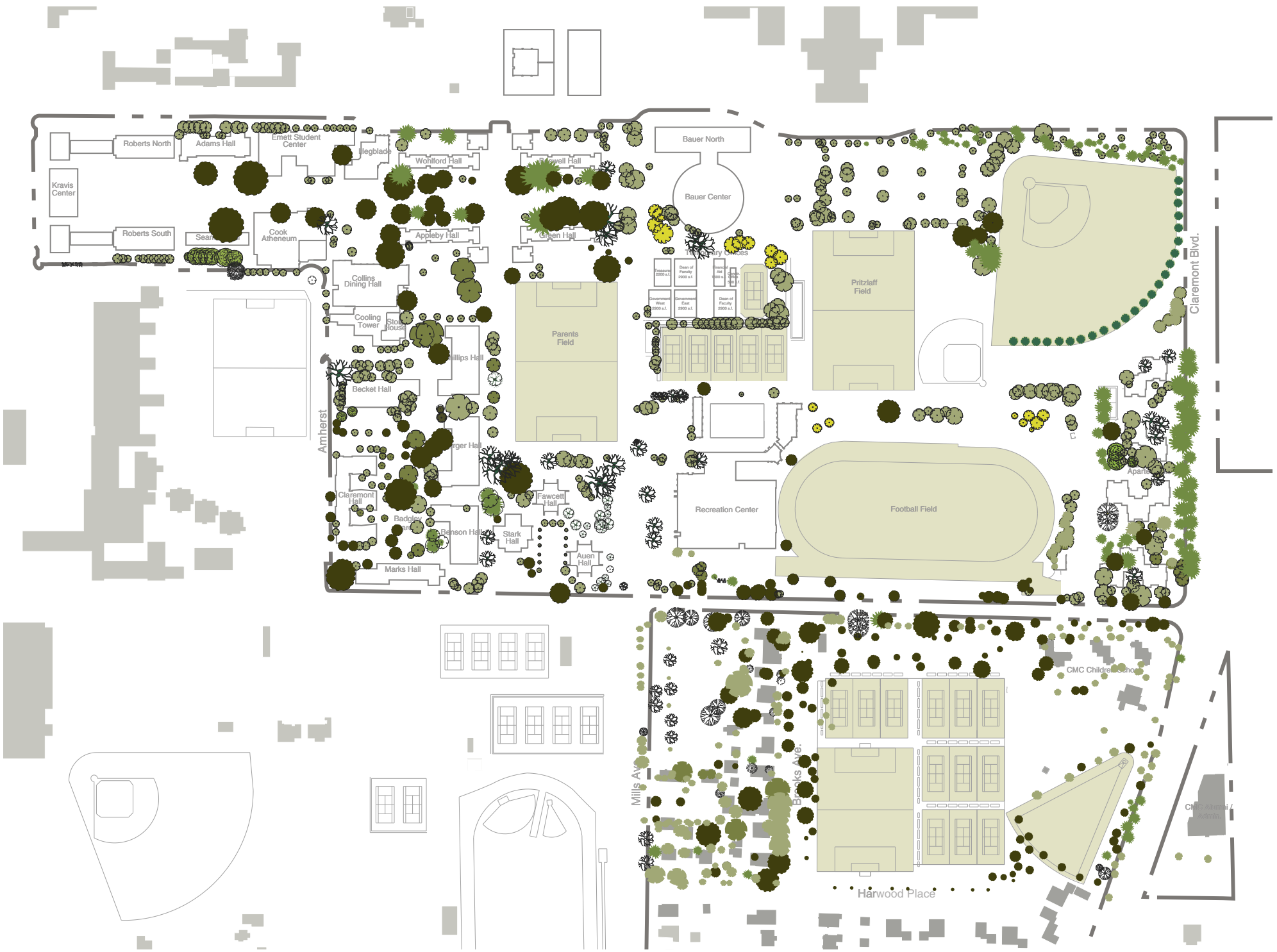
The campus’ trees live in concert with the trees of the surrounding Claremont neighborhoods, which have a rich heritage of streets lined with abundant California live oak, camphor, pepper, and jacaranda.

CMC’s arborist has inventoried and assessed the trees on campus and has a tree maintenance program involving annual assessments and proactive pruning to maintain tree health, shape, and prevent pest infestation and wind or other damage.

CMC is committed to preserving and maintaining landmark tree specimens where appropriate and integrating existing trees into a new landscape Master Plan vision that links campus and community.



View East along North Mall



Existing Trees at CMC

- oak
- pine
- redwood
- olive
- sycamore
- eucalyptus
- pepper
- camphor
- italian cypress
- miscellaneous



Mobility & Circulation

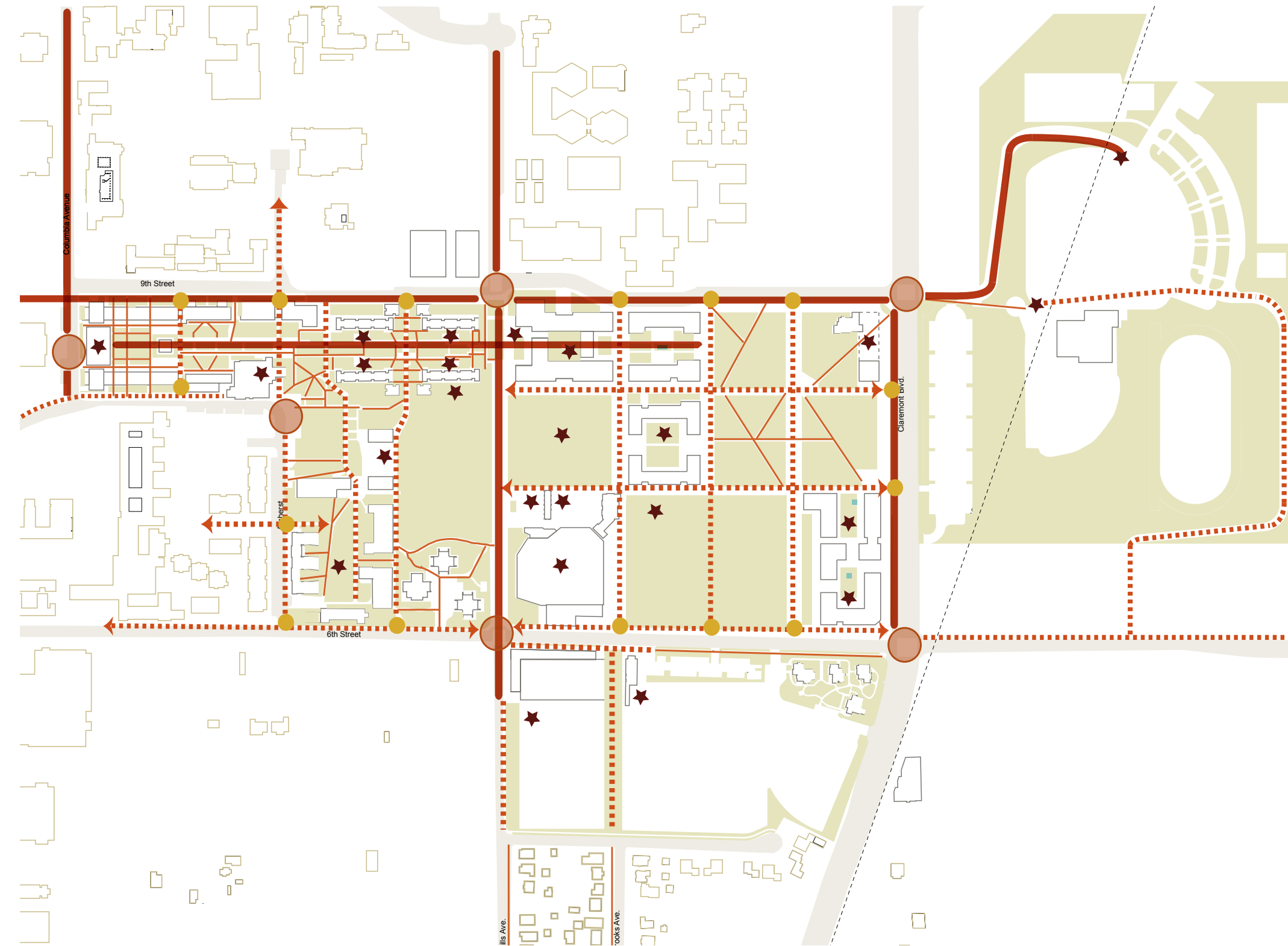
Pedestrian Mobility

Approximately 95% of students live on campus. As a result, the primary means of movement on campus and between other college campuses is walking. Bicycles, skate boards, and scooters are also used and shall be considered “pedestrian” for the purpose of this discussion.

The low-density campus combined with a relatively small student population fosters an uncrowded pedestrian environment. The Claremont Village, a popular destination with all the offerings of a small town, is a pleasant 15-minute walk through Pomona College’s lush landscape and Claremont’s beautiful tree-lined streets.

The garden setting combined with the temperate climate makes the campus an ideal pedestrian-friendly environment. Primary, secondary, and tertiary pedestrian pathways have been identified on the adjacent plan and within the cross-sectional options that follow. These pathways have a range of dimensional requirements depending upon the amount of pedestrian traffic. In some cases, the minimum dimension of the pathway will be determined by required emergency vehicle access. Additionally, the use and routing of environmentally appropriate electric carts and service vehicles will be factored in pathway dimensions.

The illustrated sections suggest a range of dimensions of walkways, landscape areas and required access.



primary pedestrian circulation
 secondary pedestrian circulation
 tertiary pedestrian circulation
 nodes of interest

campus gateway / primary pedestrian entry
 secondary pedestrian entry
 existing context
 open space



Mobility & Circulation

Pedestrian Crossings

The proposed East Campus Sports Complex, east of Claremont Boulevard and the parking structure and soccer field south of Sixth Street will increase pedestrian activity on Claremont Boulevard and on Sixth Street. Claremont Boulevard is a 4-lane arterial road.

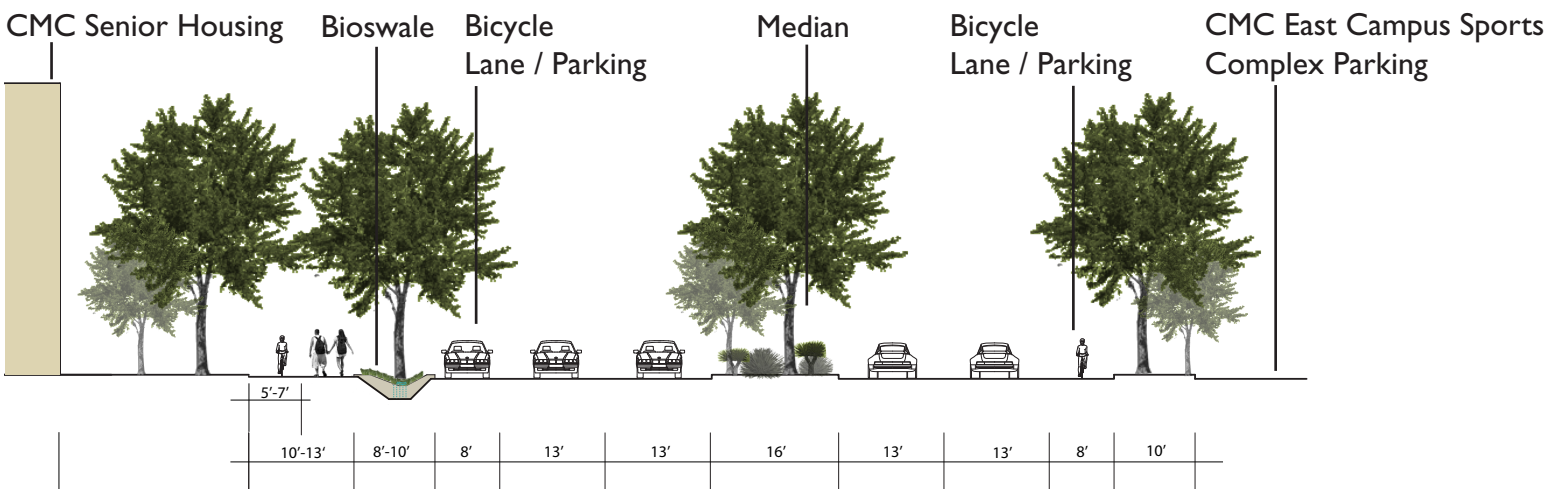
Strategies will be adopted to maintain pedestrian safety and traffic flow. Such strategies may include:

- Traffic signal installation.
- Pedestrian crossing lights and striping.
- Speed humps.
- Raised table intersections.
- “Bulb-outs” to reduce crossing distance.
- Creation of pleasant pedestrian and bike pathways.
- Barriers to discourage jay-walking.

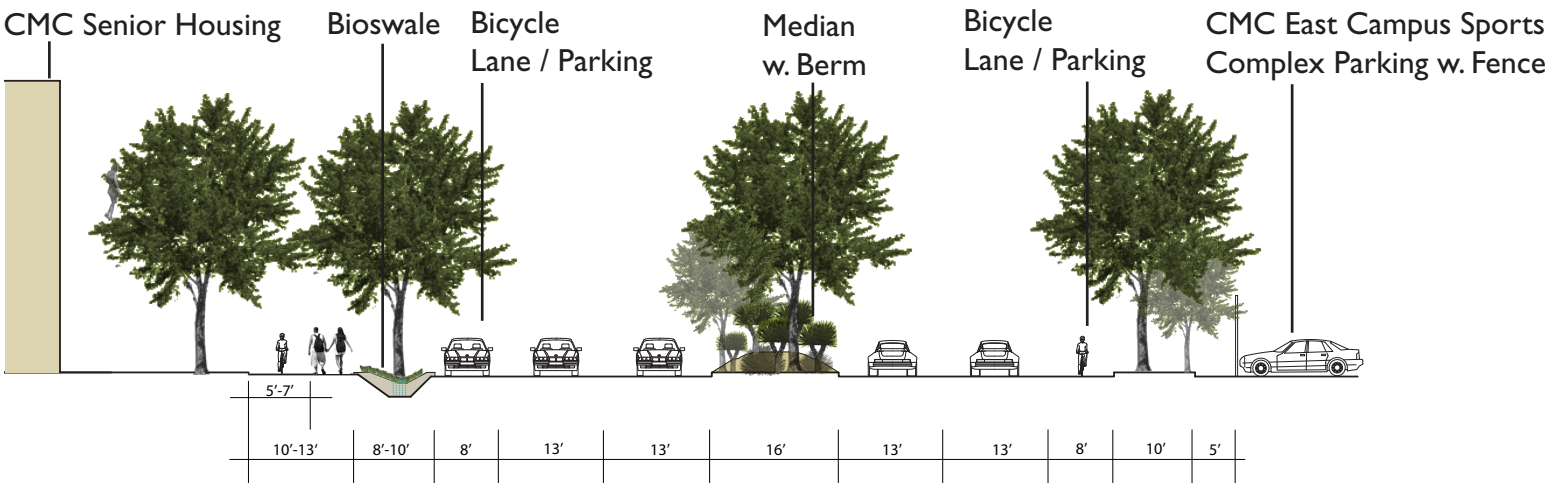
Possible implementations of some of these strategies are illustrated in the adjacent street sections. The pedestrian circulation options shown are provided for schematic purposes only and actual designs for specific locations may vary.

Primary Pedestrian Circulation Options - Claremont Blvd. (Section looking north)

Option 1

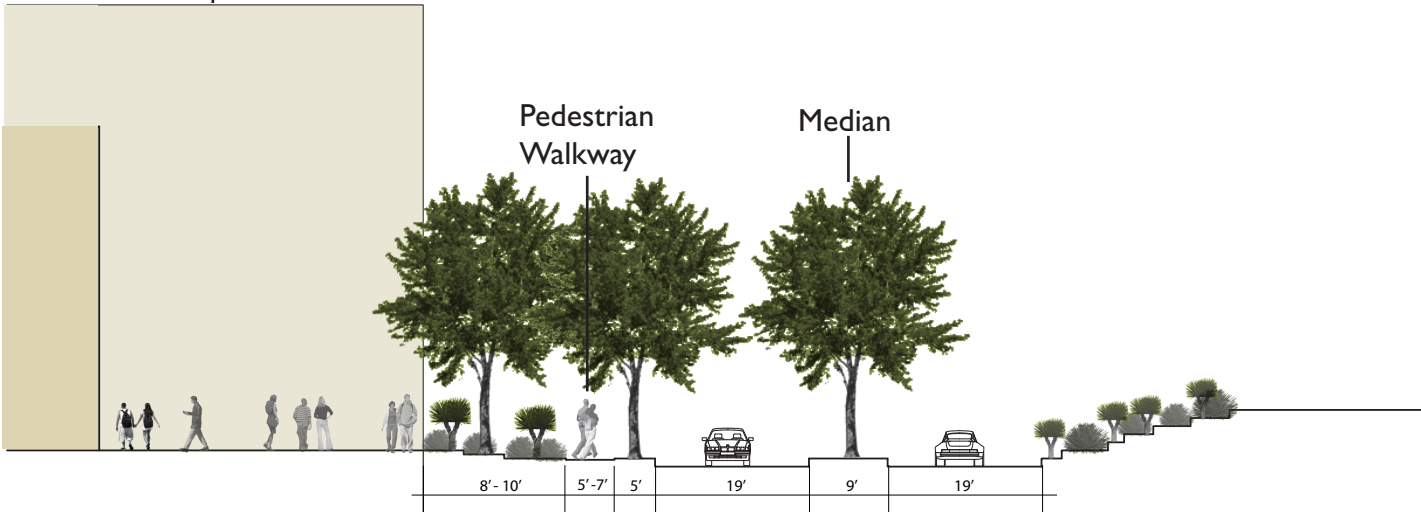


Option 2



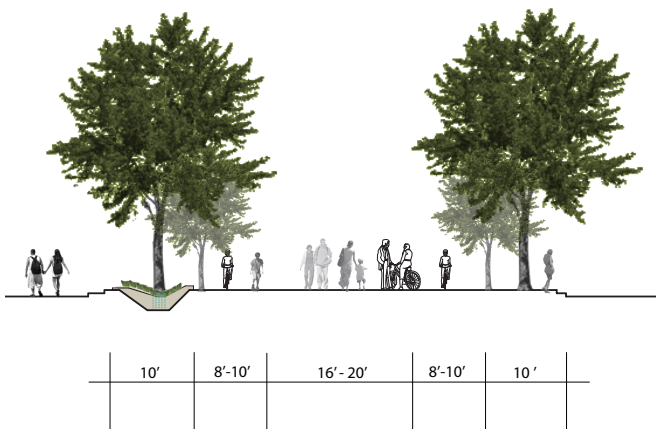
Primary Pedestrian Circulation Options - Ninth Street

Option 1 Campus Center

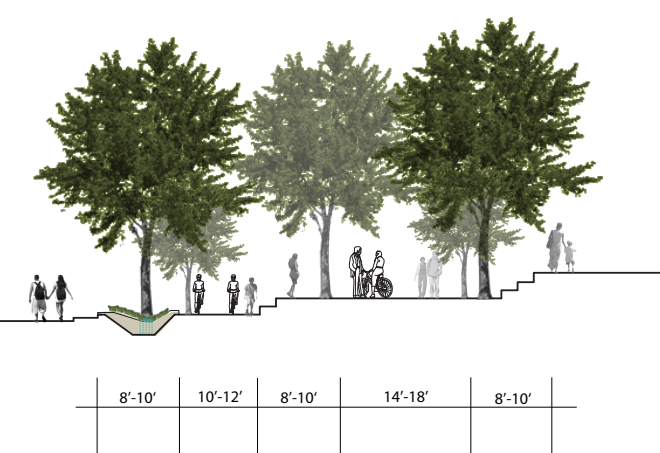


Primary Pedestrian Circulation Options - Mills Avenue

Option 1

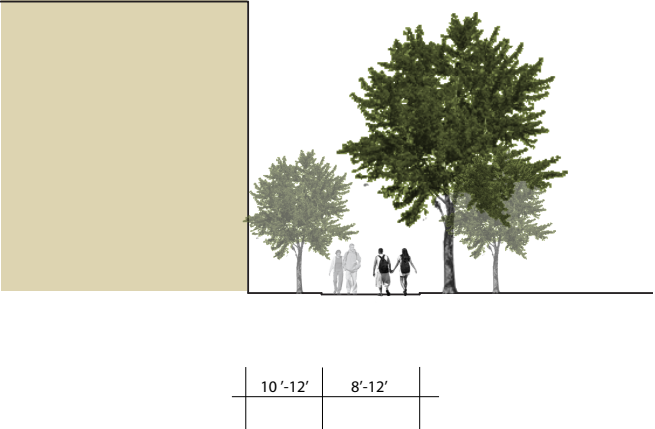


Option 2



Secondary Pedestrian Circulation Options

Option 1



Option 2



Tertiary Pedestrian Circulation Options

Option 1



Mobility on Campus

Mobility & Circulation

Bicycle Circulation & Public Transportation

Bicycles are an important part of life on the CMC campus. The benign climate and compact, bike-friendly community encourages the year-round usage of bikes by students, faculty and staff.

To further encourage the use of bicycles, CMC has created an on-campus bicycle shop that provides simple repairs and lends bikes to students, faculty and staff for free. Additionally, the shop will recycle bikes that would otherwise be abandoned, and employs a small number of students to serve as bike technicians.

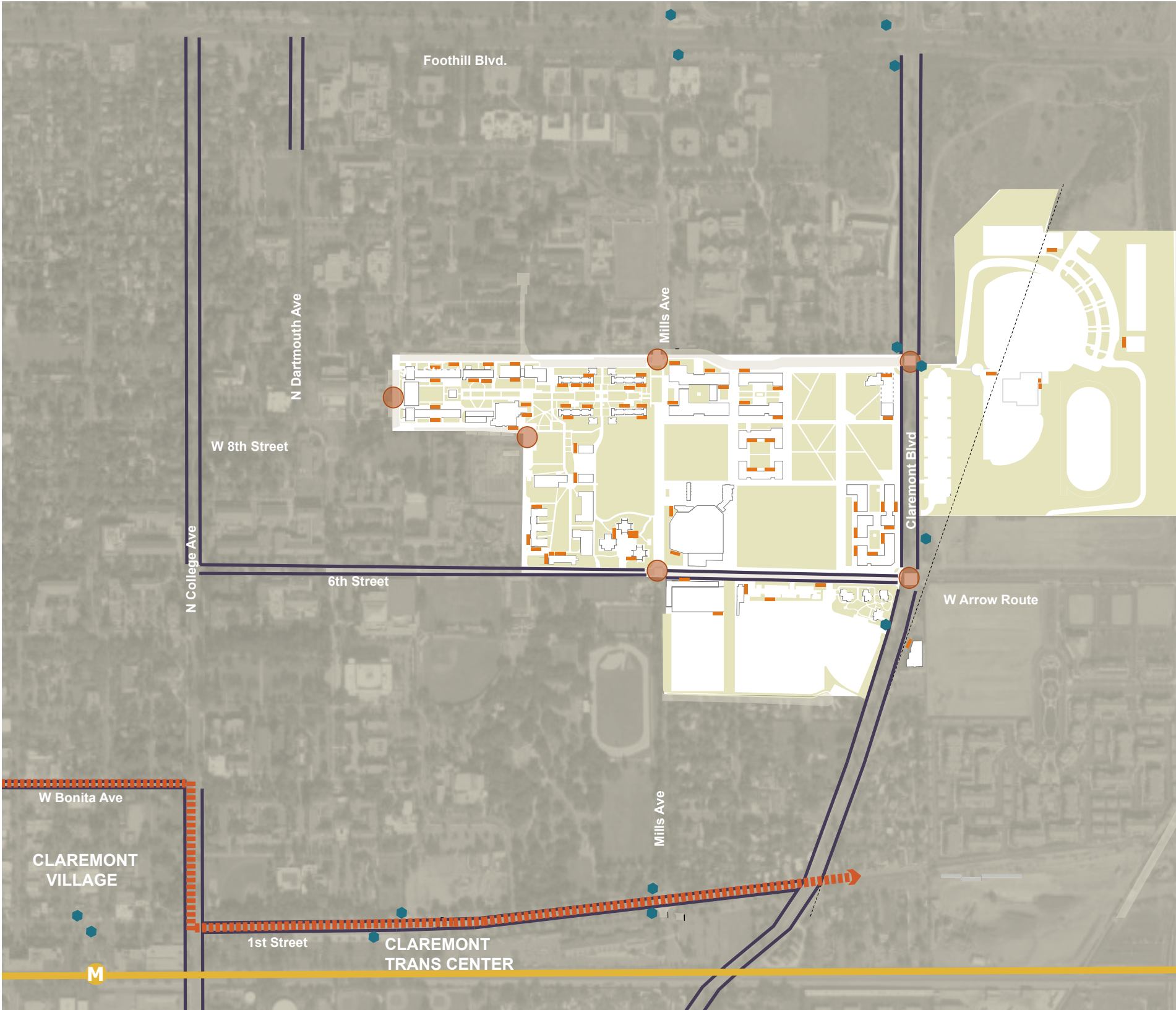
Class II bike paths linking to the larger community are accessible on Claremont Boulevard and on 9th Street. Bike parking/racks are provided at points of destination as described in the adjacent diagrams. The CMC Campus is linked to the larger community by public transportation via bus service provided by Foothill Transit and rail service provided by Metrolink and Amtrak. Bus stops are currently provided on the east side of Campus on Claremont Boulevard. Bus access to the Ontario International Airport provides global connectivity.

Metrolink and Amtrak stations located in the Village may be reached by bus, bike or foot. Metrolink connects the CMC Campus through a commuter rail system to metropolitan Los Angeles while Amtrak connects riders to a national rail system. The planned expansion of the Metro Gold Line will provide added rider access.

The Foothill Transit District Claremont Transit Center is located on 1st Street within three-quarters-of-a-mile from the CMC campus. Seven different bus routes are accessible providing ready transportation to local and regional destinations.

In an effort to further highlight and encourage use of transit by the CMC community, the College will propose to add benches, shelters, and other improvements to the transit stops immediately adjacent to the CMC campus.

The Class II bike path on Claremont Boulevard links to the Citrus Regional Bikeway at First Street.



Regional Bicycle Circulation & Public Transportation

- claremont metrolink & amtrak station
- CMC campus gateway / primary pedestrian entry
- public transportation stop
- san bernardino line / proposed metro gold line
- type II bike routes
- CMC bicycle rack locations
- citrus regional bikeway



Claremont McKenna College Proposed Bicycle Circulation & Public Transportation

type II bike routes
 public transportation stop
 bicycle rack locations



Parking Plan

CMC is committed to utilizing parking management and mobility best practices to minimize vehicular impacts on its campus and surrounding communities and campuses and to assure compliance with City Code.

The College engaged a traffic and parking consultant, Linscott, Law, and Greenspan (LLG), to conduct a parking inventory and demand study in 2009 (the 2009 Parking Study).The 2009 Parking Study was submitted to the City of Claremont and is available to members of the public. The 2009 Parking Study provided empirical guidance to CMC as it developed the parking and mobility components of this Master Plan.

The 2009 Parking Study and other related feedback from LLG includes the following key findings:

- CMC generally provides parking at convenient locations around the perimeter of the campus creating a pedestrian-friendly campus core, while minimizing impacts on CMC’s neighbors.
- Approximately 95% of the student body lives on campus. Because of the residential nature of the campus and the walkability of its surroundings, only about one-half of the students permitted to bring automobiles to campus do so.
- CMC’s current parking supply of 1,007 spaces exceeds relevant requirements under the City Code, which mandate 892 spaces before the application of parking demand management reductions authorized by the City and 838 spaces with the City-approved reductions. Moreover, CMC’s current parking supply of 1,007 spaces well exceeds the actual parking demand of approximately 800 spaces determined in the 2009 Parking Study. Additionally, the determination that CMC has an over-supply of more than 200 spaces was made prior to CMC’s implementation of a policy to restrict freshmen from parking on campus, which has resulted in a demand reduction of more than 117 parking spaces.
- CMC currently has a sufficient overall parking supply. However, CMC currently experiences some demand-location pressures, including a limited supply of parking for faculty and staff who work in the west academic campus along the North Mall, and a limited supply of parking for students who live in the North Mall Quadrangle. The Master Plan responds to existing demand-location pressures and anticipated future pressures.

Required Parking based on Current City Parking Code

| Description | Ratio Required | Existing ⁽¹⁾ | | Master Plan | |
|--|-------------------------------|-------------------------|--------|-------------------|-------------|
| | | Units | Spaces | Units | Spaces |
| Regularly Enrolled Students | 0.5 spaces per student | 1,173 | 587 | 1,400 | 700 |
| Parking Restriction for first year students | 20% student parking reduction | | -117 | | -140 |
| Faculty and Staff | 0.5 spaces per employee | 486 | 243 | 624 | 312 |
| Public Assembly Allocation ⁽²⁾ | 0.2 spaces per seat | -- | 179 | -- | 179 |
| Total Code Requirement (before managment reductions) | | | 892 | | 1,051 |
| | | Existing Supply: | 1007 | Potential Supply: | up to 1,652 |
| Plan Mitigation Approval by Planning Commission ⁽³⁾ | 6% reduction | | -54 | | -63 |
| Total Code Requirement (with approved reduction) | | | 838 | | 988 |
| | | Existing Supply: | 1007 | Potential Supply: | up to 1,652 |

[1] Per November 15, 2010 submittal for Fall 2010. Actual parking supply on the CMC campus now totals 1,038 spaces. Existing reported supply of 1,007 spaces does not include 31 CMC spaces in Lot 89 that by temporary agreement are now being used by Pitzer College faculty / staff.

[2] CMC does not intend to expand its auditorium/public assembly space, so the public assembly parking allocation will remain constant

[3] Parking Management Reductions were approved by Planning Commission Resolution # 2008-20 adopted on June 17, 2008

Existing and Future Parking Inventory

| REFERENCE | TYPE | LOCATION | CMC EXISTING SUPPLY ¹ | POTENTIAL PARKING REVISIONS ² | POTENTIAL FUTURE SPACES ² |
|-----------|--------------|---|----------------------------------|--|--------------------------------------|
| 12A | Curb | Amherst Ave, East Side | 4 | - | 4 |
| 87N | Lot | North Lot of Keck Center - South Bay | 8 | - | 8 |
| 87S | Lot | South of Keck Joint Science (North Side) | 23 | -14 | 9 |
| | Lot | South Lot of Keck Joint Science (South Side) | 22 | -13 | 9 |
| 87E | Curb | Keck East of Keck Center | - | - | - |
| 88N | Curb | Ninth St. - Adjacent to Bauer Hall | 7 | - | 7 |
| 88 | Lot | Ninth St. - East of Bauer Hall | 50 | -50 | - |
| 89 | Lot | Ninth St. - East of Bauer Hall Lot Near Baseball Field | 139 | -139 | - |
| 100A | Curb | Ninth St. - Columbia Ave. to Amhurst Ave. | 15 | 5 | 20 |
| 101 | Lot | Ninth St. - by Heggblade Center | 2 | 2 | 4 |
| 101E | Lot | Wohlford Hall - just north of building | 8 | - | 8 |
| 104B | Curb | Columbia Ave,East Side | - | 11 | 11 |
| 106 | Curb | Eighth St. - North Side Near Seaman | 16 | -11 | 5 |
| 108B | Curb | Eighth St. - South Side of MMCA | - | - | - |
| 113 | Curb | Mills Ave. North of Sixth St. - West Side by Fawcett & Auen | 24 | -24 | - |
| 114 | Lot | Mills Ave. - North of Sixth by Ducey Gym | 36 | -36 | - |
| 114A | Lot | South of Ducey Gym | 16 | -11 | 5 |
| 115 | Lot | Mills Ave. & Sixth St. (Southeast Corner) | 149 | -149 | - |
| 115E | Curb | Mills Ave. - East Curb South of Sixth St. | 15 | - | 15 |
| 115S | Lot | 528-530 Mills Offices Ave. | 16 | -16 | - |
| 117A | Lot | CMC Apts. | 104 | -104 | - |
| 119 | Curb | Claremont Blvd. - Sixth St. to Ninth St., West Side | 41 | - | 41 |
| 120 | Curb | Claremont Blvd. - South of Sixth St. to Park, West Side | 21 | - | 21 |
| 121 | Lot | Children's School | 34 | - | 34 |
| 121B (F2) | Lot | Adjoining Children's School Lot (recently completed)) | 62 | - | 62 |
| 122 | Lot | Archery Range | 4 | -4 | - |
| 124 | Lot | 400 N. Claremont Blvd. | 70 | - | 70 |
| 125 | Lot | CMC East Lot - Off of Sixth St. by Tennis Center | 59 | - | 59 |
| 126 | Curb | Brooks Ave. - East Curb | 23 | -23 | - |
| 127 | Curb | Harwood Pl. - North Curb | 21 | - | 21 |
| 128 | Curb | Claremont Blvd. - South of Arrow Route, East Side | 18 | - | 18 |
| | | Subtotal | 1007 | -576 | 431 |
| F1 (104C) | Subterranean | Kravis Center (under contruction) | - | +55 | 55 |
| F3 | Lot | East Campus (adjoining Claremont Blvd.) | - | +214 | 214 |
| F4 | Subterranean | Academic 1 & 2 | - | +150 | 150 |
| F5 | Lot | Alumni & Admissions Gateway | - | +54 | 54 |
| F6 | Subterranean | Student Apartments | - | +200 | 200 |
| F7 | Structure | 6th St. (Absorbs Reference #115 Lot) | - | +375 | 375 |
| F8 | Lot | East Campus (adjoining sports field) | - | +154 | 154 |
| F9 | Curb | Mills Ave. East Curb (extends #115E Southward) | - | +5 | 5 |
| F10 | Curb | Harwood Pl. - North Curb (extends #127 Westward) | - | +14 | 14 |
| | | Subtotal | 0 | 1221 | 1221 |
| | | TOTAL | 1007 | 645 | 1652 |

[1] Per November, 2010 reporting

[2] Values are preliminary and correspond to a possible future menu of parking facility additions as well as adjustments to existing facilities based on full Master Plan implementation

[3] City Planning Staff has indicated that after the East Campus Sports Complex has been developed and the F3 lot has been made available, consideration may be given to prohibiting parking on Claremont Boulevard north of 6th Street. In the event that the City elects to prohibit parking as set forth in this footnote, CMC will continue to provide at least as many parking spaces as are required under City Code.

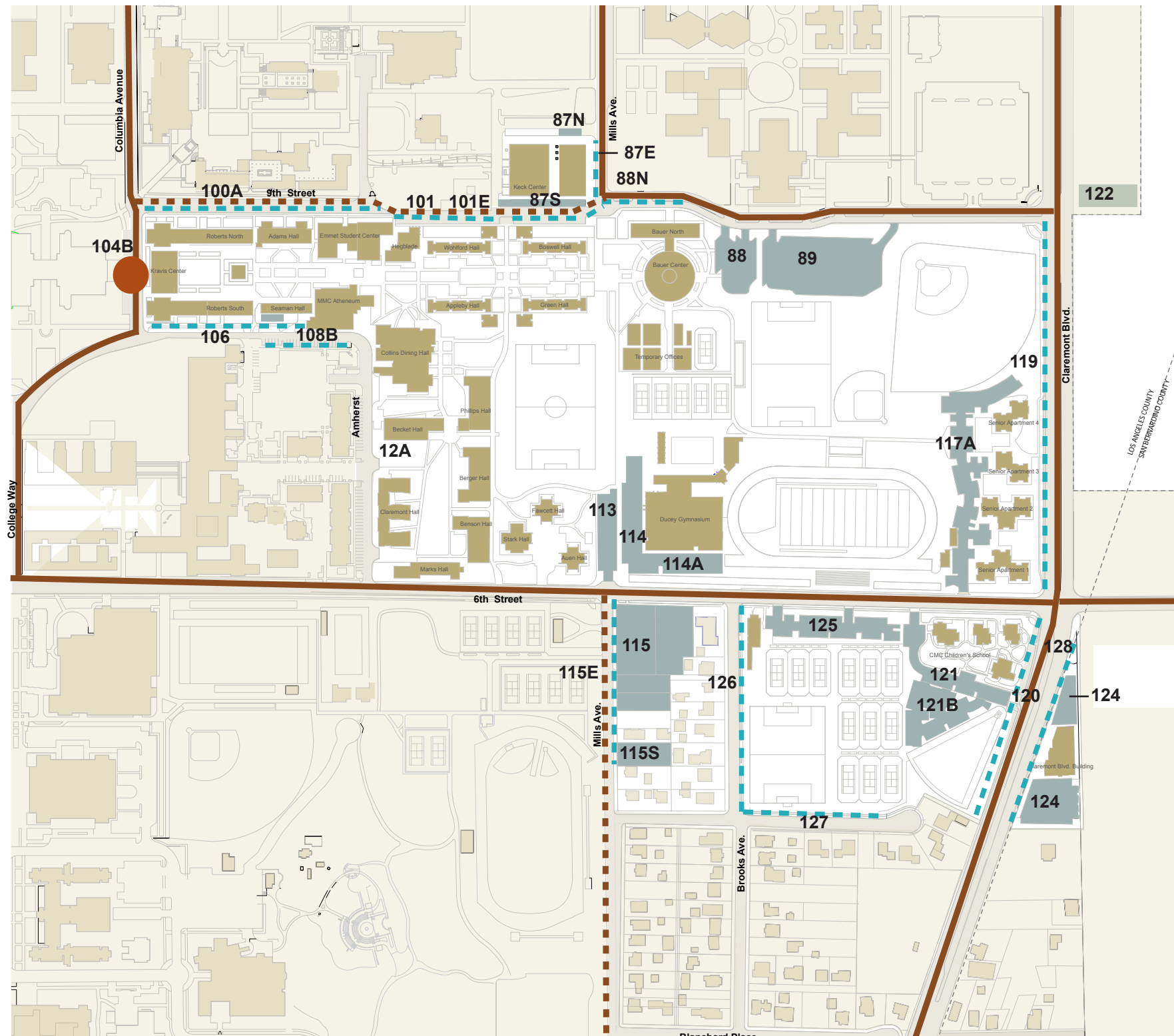
Parking Plan

As a result of the findings from the 2009 Parking Study, CMC has developed a Parking Management Plan and taken other steps to address parking needs on campus, including:

- The construction of the F2 (121B) surface lot south of Sixth Street, which was completed in the fall of 2010. The F2 lot provides 62 additional parking spaces to allow for additional student parking and for overflow event parking.
- The adoption of a parking policy that generally requires faculty and staff members to park in CMC-designated lots as their primary parking location. The purpose of this policy is to direct faculty and staff members in the west academic campus to park in the Bauer East lot or in other CMC-provided parking if parking is not available on the west campus in order to minimize parking impacts on other campuses and on the Claremont Village.
- The adoption of a policy that generally prohibits freshmen students from bringing an automobile to campus.

It is within this context that CMC developed the Parking Plan for the Master Plan. The Parking Plan provides flexible mobility solutions for the campus community and its neighbors utilizing the following means:

- Providing parking spaces in compliance with City Code requirements.
- Adopting parking management strategies that encourage alternative transportation choices.
- Providing, when economically feasible and warranted by demand, structured parking spaces in conjunction with other facilities.
- Adopting parking management strategies that minimize parking and traffic impacts on surrounding campuses and communities.
- Preserving a pedestrian-centered campus environment.
- Creating and maintaining automobile, pedestrian, bicycle, skateboard, and other flow patterns through and around the campus.
- Managing parking needs and traffic patterns during campus construction to minimize disruption and inconvenience for the campus and surrounding communities.



Existing Parking Layout

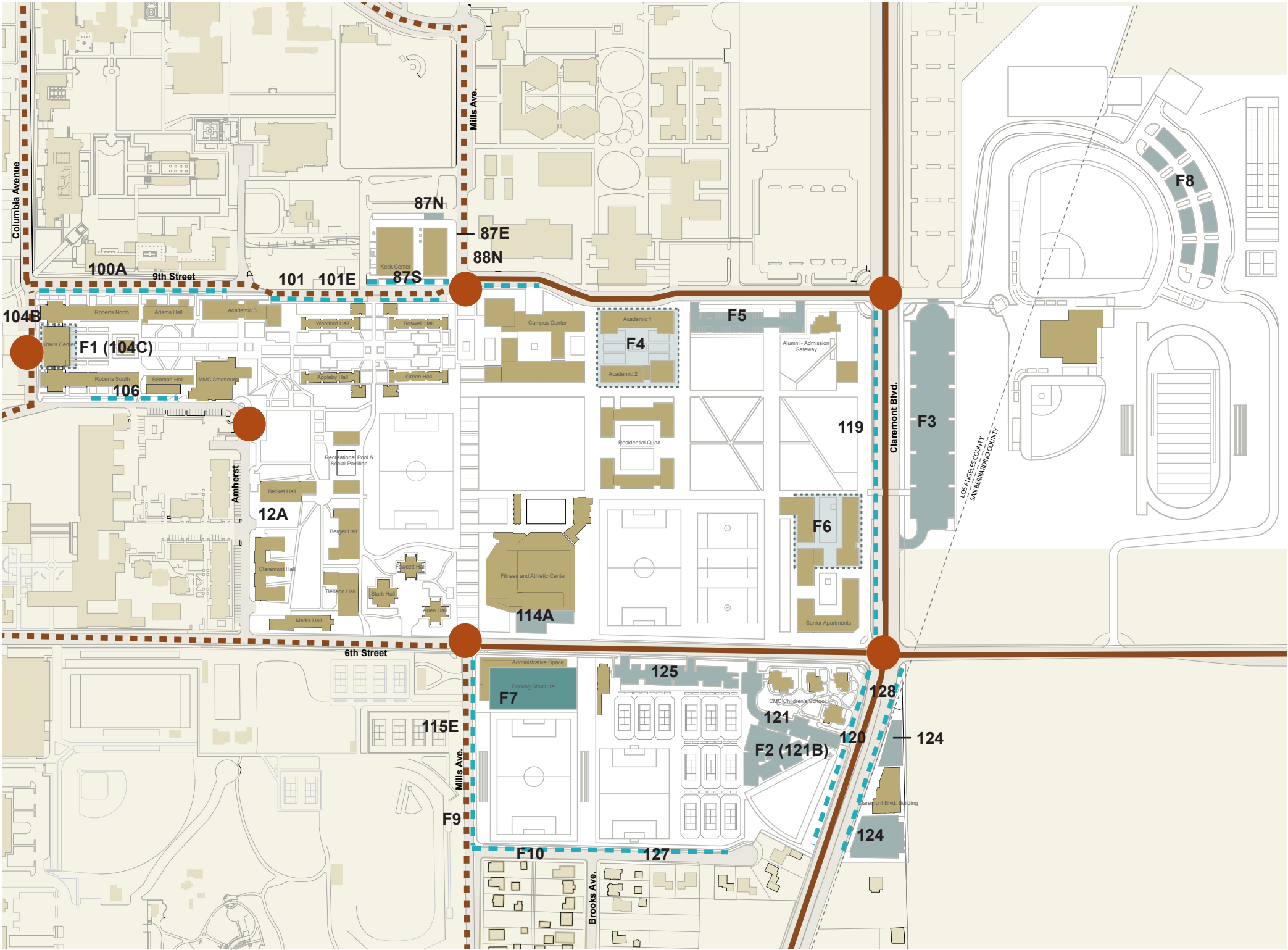
potential underground parking surface parking on-street parking CMC buildings existing context buildings
campus gateways primary vehicular circulation secondary vehicular circulation



Proposed Parking & Mobility Plan

Looking forward to the Master Plan, the proposed Parking Plan builds on the findings of the 2009 Parking Study in the following key areas:

- Faculty and Staff Parking:**
Collectively, the subterranean lot under the Kravis Center (F1), the subterranean lot under Academic Buildings 1 and 2 (F4), and the Ninth Street surface lot (F5), will provide the primary parking to support the College’s faculty and staff on CMC’s main campus. The addition of each of the potential parking facilities will be tied to the construction of the potential improvement that each facility is intended to serve. Although the College still anticipates demand-location pressures for faculty and staff in the west academic campus, the Master Plan and Parking Plan address this in several ways, including:
 1. The addition of the Kravis Center subterranean lot (F1) (being constructed at this time).
 2. The potential addition of the Academic Buildings 1 and 2 subterranean lot (F4) and adjacent Ninth Street surface lot (F5) to offset any loss of spaces in the Bauer Center lots.
 3. The Campus Center and Sixth Street Administrative Complex will enable a relocation of a significant number of staff from Collins Dining Hall, Story House, Heggblade Center, and the Emmet Student Center east to the Mills Avenue corridor, which is more convenient to related parking areas.
- Student Parking:**
Collectively, the F2 (121B) lot south of Sixth Street, the F3 lot along Claremont Boulevard, the potential Sixth Street Parking Structure (F7) and the potential Student Apartment Subterranean lot (F6) provide a range of options to address current and projected needs for student parking. New parking facilities will be added as needed to support specific components of the Master Plan.
- Events / Overflow:**
The potential East Campus Sports Complex lot (F8) will provide parking for potential athletic facilities in the East Campus. In addition, depending on the nature of the event, the potential Claremont Boulevard lot (F3), and Sixth Street Parking Structure (F7) together with the recently-completed (F2) lot south of Sixth Street would all provide additional parking that may serve events or other “overflow” conditions, and which could also be utilized for temporary parking or staging related to construction activities.



Proposed Parking Options

potential underground parking surface parking on-street parking CMC buildings existing context buildings
campus gateways primary vehicular circulation secondary vehicular circulation parking structure



When added to the existing spaces not planned for demolition, the menu of potential parking additions could result in an overall parking supply of up to 1,652 spaces (see Page 47). The actual number of new spaces constructed will depend on prevailing parking conditions as the Master Plan components are developed, City Code requirements and CMC's parking needs. The 1,652 space potential was calculated by adding together all of the potential new options and does not represent an aspirational goal or a required minimum.

Applying the current City Code to the expected Master Plan enrollment and staffing, plus a public assembly allowance (for overflow parking) of approximately 180 spaces, results in a potential Code requirement of 1,051 spaces, less City authorized parking reductions granted in response to the College's adoption of various demand reduction techniques. Currently, the College has been granted parking management reductions totaling 54 spaces, and the Code authorized parking reduction may rise to over 63 spaces based on the full master plan. However, even without these reductions, the Master Plan includes parking facilities to meet potential demand and City Code.

As demonstrated above, the parking plan component of the Master Plan assures that campus parking will be used by those it is intended to serve, and demand will not be increased for parking spaces in surrounding parking areas or result in spill-over parking in any surrounding residential neighborhood. Consequently, pursuant to Section 16.069.090.C.2 of City Code, neither provision of Section 16.069.090.C.1 of City Code (as it may be amended) shall restrict CMC from locating parking spaces in the manner described in the Master Plan in the service of buildings or facilities described in the Master Plan.

The figure on page 49 illustrates the parking and circulation aspects of the Master Plan including campus gateways, primary and secondary vehicular circulation elements, existing and future building elements, and expected on-street and off-street parking elements. Full implementation of the Master Plan could involve the absorption of existing surface parking lots into future building sites and/or structured parking elements, with the further addition of parking components in the East Campus Sports Complex.

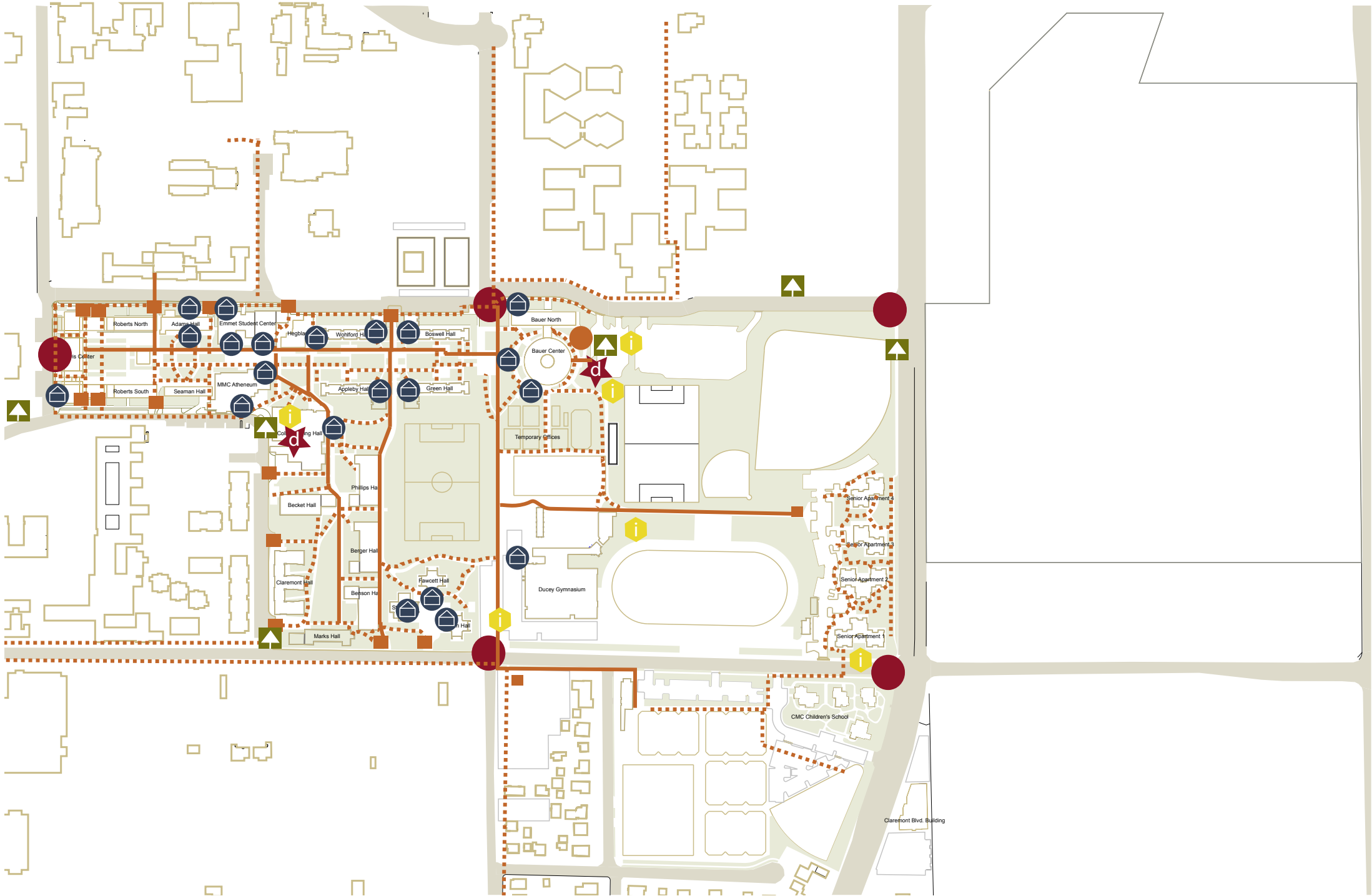


Exterior Campus Signage & Identity

One of the ways Claremont McKenna College will express its identity is through its campus signage. The design of the signage will be integrated with the campus architecture and landscape.

A “family” of related signs will be used to address the variety of way-finding needs. The size and detailing of each sign type will relate to the location where it will be installed and the type of information displayed.

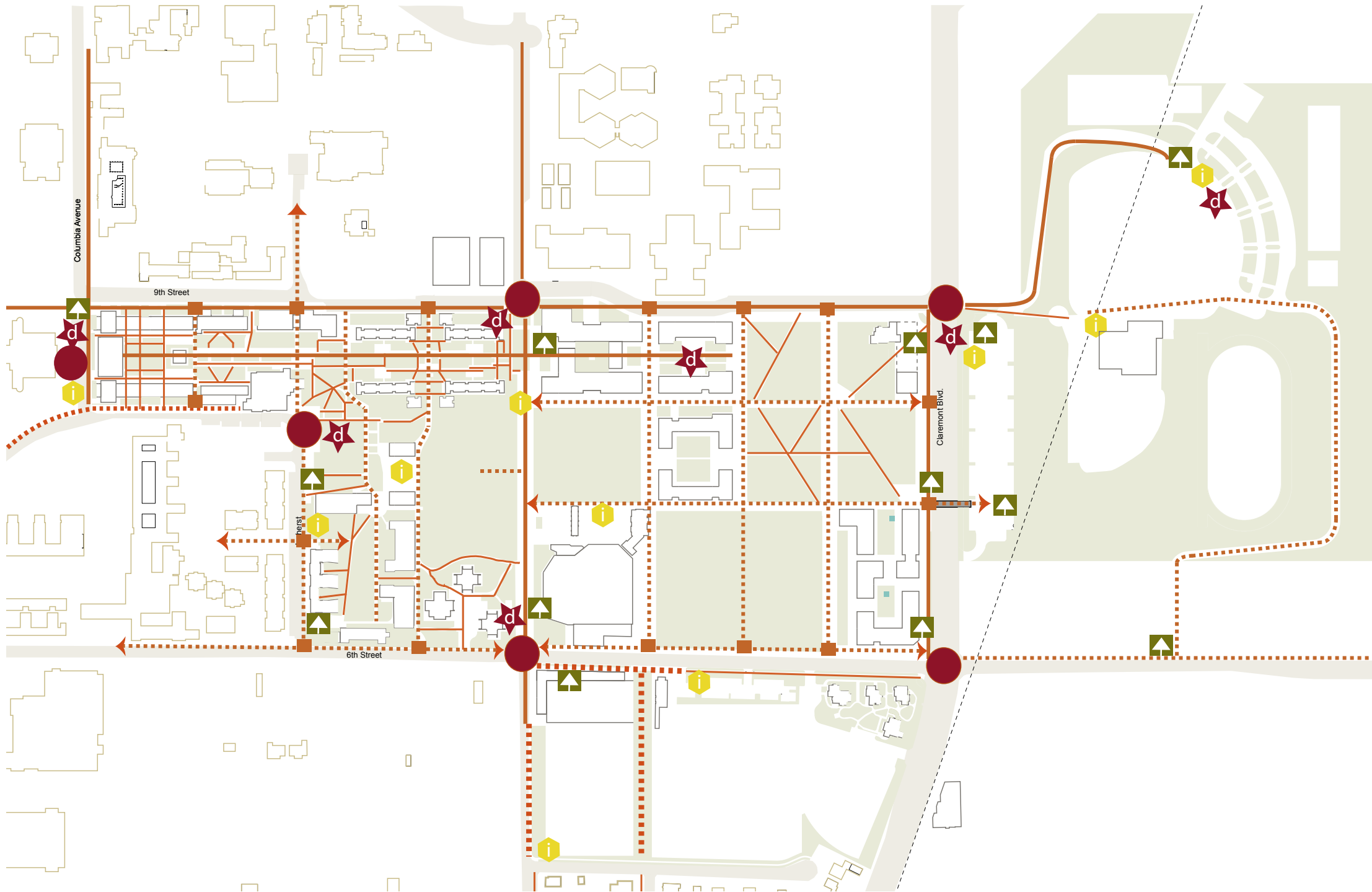
The signage will feature natural materials that are compatible with the campus landscape and will be designed in accordance with City of Claremont signage and lighting requirements. Claremont McKenna College will develop a comprehensive sign program for review and approval by the city.



Existing Signage

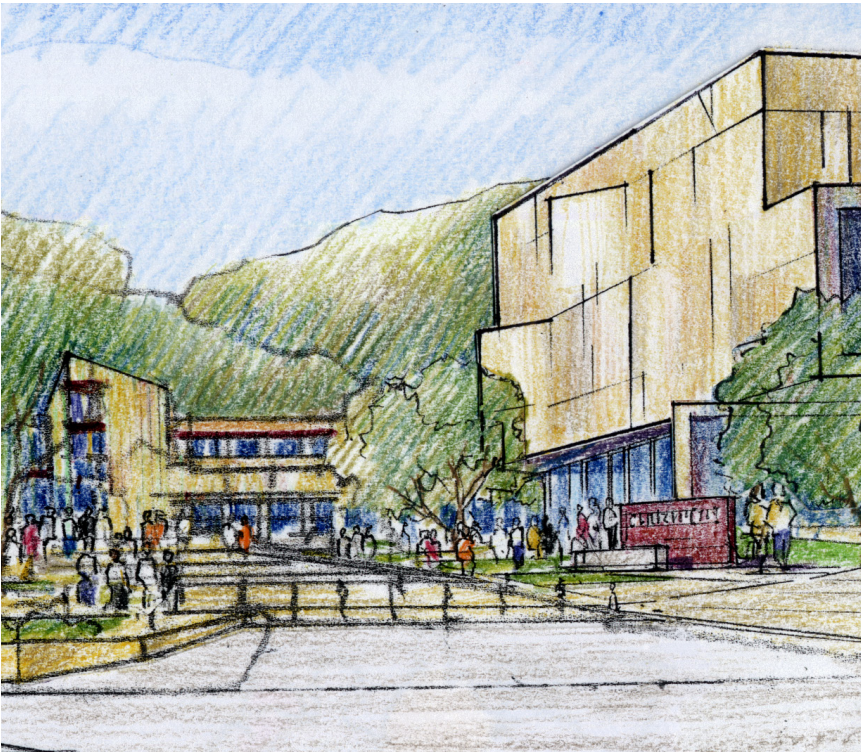
- monument / gateway sign
- directory
- directional / orientation sign
- building sign
- information sign
- primary pedestrian circulation
- secondary pedestrian circulation
- secondary pedestrian entrances





Proposed Signage

- monument / gateway sign
- directory
- directional / orientation sign
- building sign
- information sign
- secondary pedestrian entrances
- primary pedestrian circulation
- secondary pedestrian circulation



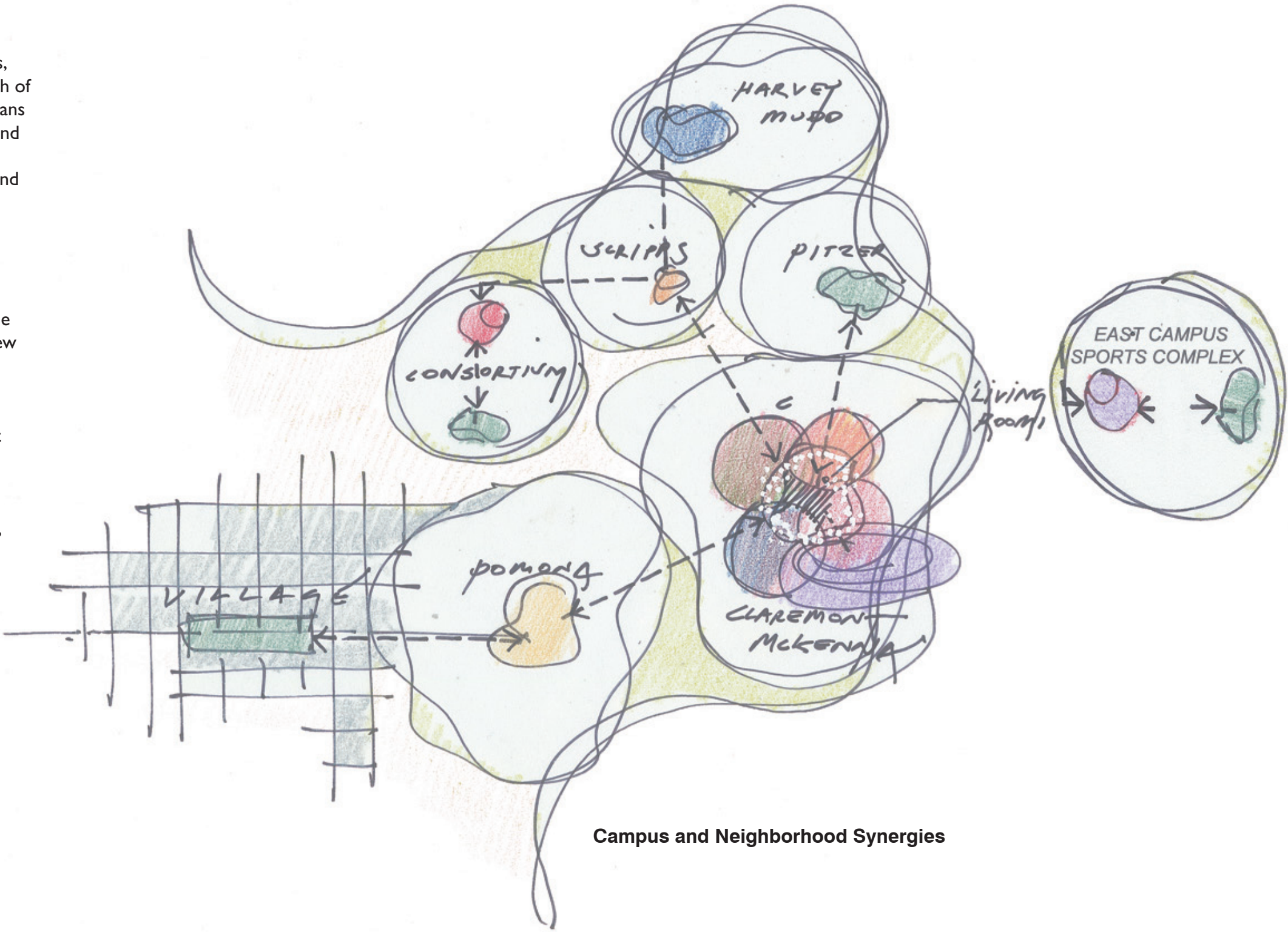
Proposed Campus Gateway at Mills Avenue and Sixth Street

East Campus and Related Projects

The area that will become the East Campus Sports Complex, located east of Claremont Boulevard, is currently owned by Claremont University Consortium (CUC). CUC is subdividing the East Campus Sports Complex from its inert landfill site, known as the East Campus, located south of Foothill Boulevard, west of Monte Vista Avenue, north of Arrow Route, and east of Claremont Boulevard. The East Campus spans the cities of Claremont and Upland and the counties of Los Angeles and San Bernardino and is located mostly in the City of Upland. The East Campus Sports Complex will be located in both the City of Upland and the City of Claremont.

Although the environmental impact of CMC's East Campus Sports Complex will be analyzed as part of the City of Claremont's environmental review of CMC's Master Plan, those environmental impacts will also be analyzed together with Pitzer College's uses of the East Campus as part of Upland's and Claremont's environmental review of the subdivision and usage of the entirety of the East Campus. The City of Upland will be the Lead Agency with regard to the Environmental review of the East Campus subdivision and has jurisdiction over any improvements to the Upland portion of the East Campus.

The master plans of other members of The Claremont Colleges and other nearby developments may be related projects requiring studies, but are not themselves part of this Master Plan.



Campus and Neighborhood Synergies

III. administrative procedures

Administrative Procedures

The following administrative provisions shall govern the implementation of the Claremont McKenna College Master Plan:

A. USES AND DEVELOPMENT PERMITTED WITHIN THE CLAREMONT McKENNA COLLEGE MASTER PLAN BOUNDARIES

- 1) Relationship of the Claremont McKenna College Master Plan to the Claremont Municipal Code Approval Process.

The permitted uses and development within the Master Plan boundaries are governed by the provision set forth in the City’s Municipal Code for the Institutional District and AV2 District (as such Code may be amended in accordance with this Master Plan), the City’s General Plan (as such General Plan may be amended in accordance with this Master Plan), this Master Plan, and any applicable development agreement.

- 2) Additional Uses and Development Which May Be Permitted Without an Amendment to the Claremont McKenna College Master Plan.

In addition to the permitted uses outlined in (1) above, special uses or development which are listed in 16.306 of the Municipal Code as permitted in an Institutional District subject to the issuance of a special use and development permit may be permitted within the Master Plan boundaries in accordance with the appropriate review procedures in the Municipal Code.

B. DEVELOPMENT REVIEW PROCEDURES

- 1) Review Requirements

Unless plans for buildings and structures and all signs, luminaries, landscaping, irrigation and other features of the site for buildings, parking lots, or other structures, have been approved pursuant to the review procedures established in the Municipal Code, no building permits will be issued.

- 2) Review Responsibilities

All new construction, modifications, and site changes shall be reviewed as set forth in Section 16.300 of the Claremont Municipal Code, as amended from time to time.

- 3) Scope of Review for Projects Implementing this Master Plan

The City’s review of specific projects implementing components of the Claremont McKenna College Master Plan (including parking) shall be limited to the projects’ architectural elements, layout, massing, landscaping, lighting, and compliance with Title 16 of the Claremont Municipal Code, the provisions of the Claremont McKenna College Master Plan, and any Development Agreement. Provisions of the Claremont McKenna College Master and any Development Agreement shall take precedence over the provisions of Title 16 of the Claremont Municipal Code in case of conflict. Environmental review of specific projects shall rely on the CEQA documents adopted with the Claremont McKenna College Master Plan. Any subsequent environmental review of a specific project shall be limited to impacts that would occur as a result of the project and which were not examined as part of the CEQA documents adopted with the Claremont McKenna College Master Plan or are more significant than described in the CEQA documents adopted with the Claremont McKenna College Master Plan.

C. ADMINISTRATION OF THE CLAREMONT McKENNA COLLEGE MASTER PLAN

- 1) Administrative Adjustments

The Director of Community Development may administratively approve the following minor adjustments to explicit provisions in the Claremont McKenna College Master Plan:

- a) The addition of new information to the Claremont McKenna College Master Plan maps or text that does not change the effect of any regulations or guidelines.
- b) Minor expansion in the boundaries of the Claremont McKenna College Master Plan, provided the area of the expansions does not exceed 5% of the total Master Plan area.
- c) Modifications in terms of layout or location of structures, fields, parking or other programmatic usages which changes do not have the effect of increasing student enrollment or staffing, creating environmental impacts greater than previously analyzed, the permitted uses, density or intensity of uses, or the maximum height or size of buildings.

- 2) Claremont McKenna College Master Plan Amendments

If an amendment does not qualify as an Administrative Adjustment, then this plan may be amended in accordance with the plan review provision of Municipal Code Section 16.069.030. Each amendment shall include all sections or portions of the Claremont McKenna College that are affected by the change. All amendments shall be required to be consistent with the General Plan.

- 3) Enforcement

The Claremont McKenna College Master Plan, and/or conditions of approval shall be administered and enforced by the City of Claremont, Community Development Department and subject to the administrative fines program of Chapter 1.14 of the Claremont Municipal Code.

4) Duration

The Claremont McKenna College Master Plan shall be valid 30 years from the date of Planning Commission approval. At the conclusion of the 30-year period, the Claremont McKenna College Master Plan will expire unless the approval of the Master Plan is formally extended.

Once the Master Plan expires, all planned improvements on private property which were not implemented prior to the Master Plan's expiration shall not be constructed unless such improvements are approved pursuant to a new Master Plan or other applicable City regulations in effect at the time. If there are remaining public improvements for which permits have been issued and bonds collected but not constructed prior to expiration, then these improvements shall be completed in a timely manner.



Appendix A

Utility Infrastructure

The purpose of this analysis is to address the existing utility infrastructure of Claremont McKenna College (CMC) in order to develop an accurate assessment of potential future system upgrades. All existing on-site utility information has been provided by the Claremont University Consortium (CUC), while the City of Claremont has provided as-built information for all off-site public utilities including sewer and storm drain.

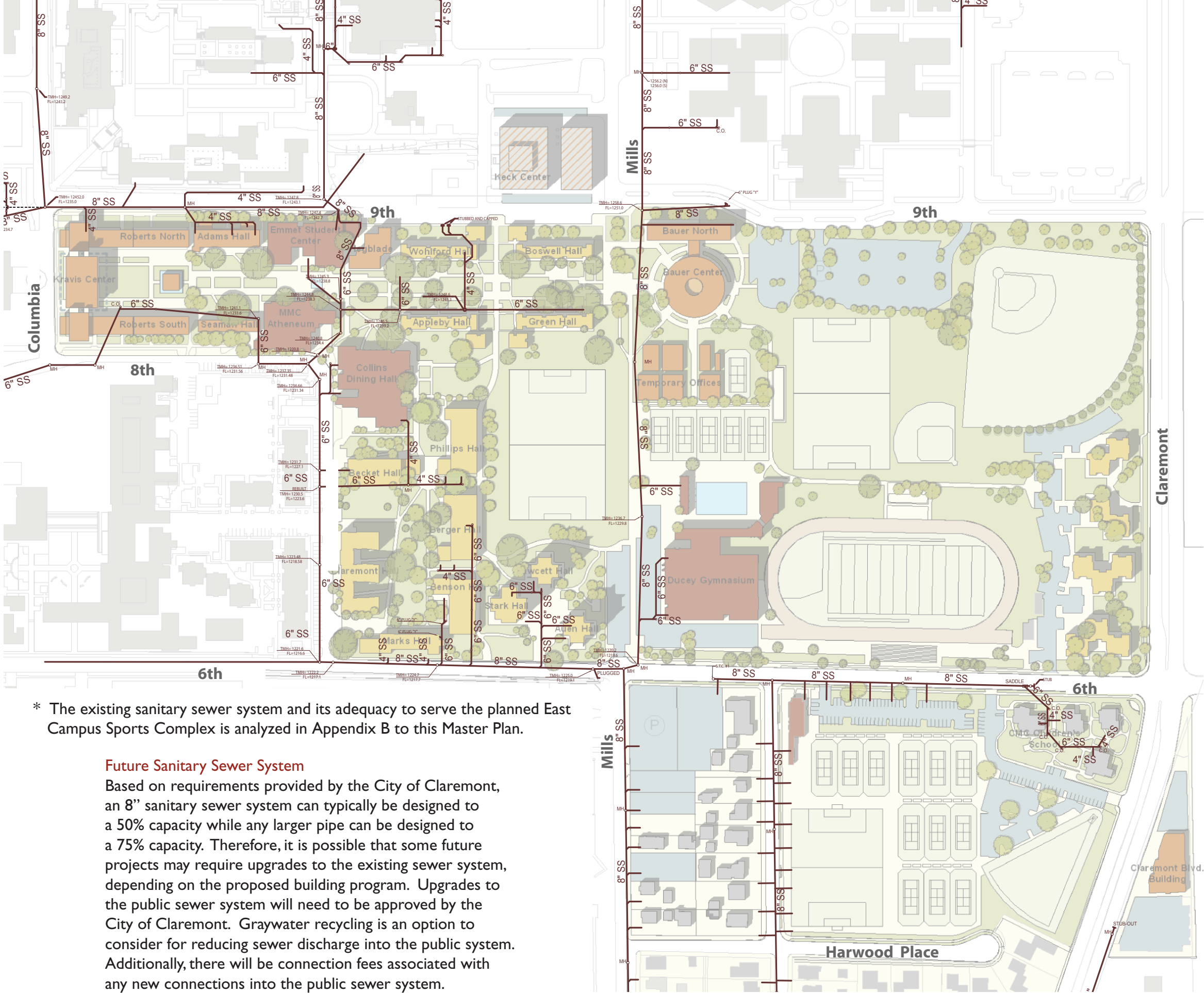
Sanitary Sewer System

Existing Sanitary Sewer System

Sanitary sewer service to the streets surrounding the Campus is provided by the City of Claremont Public Works Department. The main sewer trunks collecting discharge from the CMC campus are located in Sixth Street, Mills Avenue, and Amherst Avenue.

There is an 8” vitrified clay pipe (VCP) sewer line in Mills Avenue and Amherst Avenue, flowing north to south. Both these sewer lines start just south of Twelfth Street and at the downstream end connect to the 8” VCP sewer trunk line in Sixth Street, which flows from east to west. According to Campus records the sewer line connecting from Mills Avenue appears to bypass the intersection of Sixth Street and Mills Avenue. A bypass has been installed so that the Mills Avenue sewer line detours from the Sixth Street sewer trunk and continues south in Mills Avenue towards First Street.

Based on guidelines outlined in the City of Los Angeles, Bureau of Engineering Sewer Design Manual, the average daily flow was determined for each existing building as gallons per day (GPD) and then converted into cubic feet per second (CFS) for input into the Bentley Flowmaster program. Flow capacities for each sanitary sewer system were then determined using this program. Based on the available information, it is determined that the 8” sewer system in Amherst is currently flowing 24% full, and the 8” sewer system in Mills, 19% full. There are several residence halls that connect directly into the 8” sewer pipe in Sixth Street. As a result of the current discharge from the CMC campus buildings (plus additional ones to the north), the 8” sewer main in Sixth Street appears to be currently flowing approximately 35% full.



* The existing sanitary sewer system and its adequacy to serve the planned East Campus Sports Complex is analyzed in Appendix B to this Master Plan.

Future Sanitary Sewer System

Based on requirements provided by the City of Claremont, an 8” sanitary sewer system can typically be designed to a 50% capacity while any larger pipe can be designed to a 75% capacity. Therefore, it is possible that some future projects may require upgrades to the existing sewer system, depending on the proposed building program. Upgrades to the public sewer system will need to be approved by the City of Claremont. Graywater recycling is an option to consider for reducing sewer discharge into the public system. Additionally, there will be connection fees associated with any new connections into the public sewer system.

Domestic Water and Fire Service System

Existing Domestic / Fire Water System

Water service is provided to the CMC campus by Golden State Water Company (GSWC). GSWC currently maintains 8” water lines in Sixth Street, Amherst Avenue, and Ninth Street. There is also a 10” water main in Mills Avenue and a 12” main in Claremont Boulevard. Additionally, there is a 6” privately owned water main that runs north-south through the CMC campus.

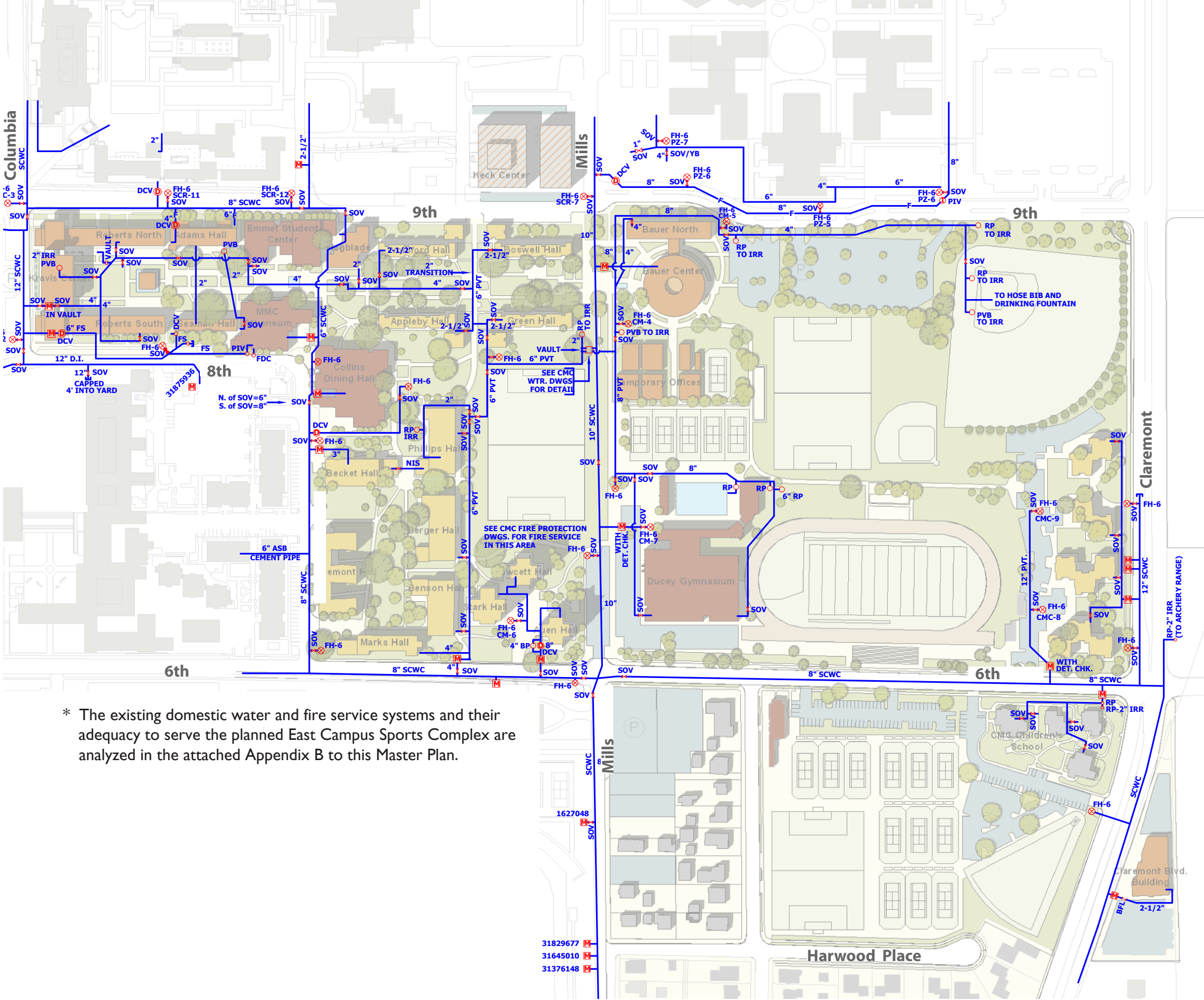
Based on campus utility records, it appears that the CMC campus is served by a looped domestic/fire water system. Fire flow tests have been performed on all existing hydrants on and neighboring the CMC campus. There are at least 14 existing hydrants servicing the CMC campus, 8 of which appear to be public hydrants. It is our understanding that the jurisdiction responsible for reviewing any future hydrant and access improvements is the County of Los Angeles Fire Department (LACFD).

Future Domestic / Fire Water System

Any future water systems shall provide adequate water supply for operation of the proposed building’s domestic water requirements, irrigation demands, fire sprinkler systems, and on-site hydrants (if required by LACFD). Additionally, GSWC requires that all proposed fire and domestic water lines include approved backflow prevention device.



Fire Water System Appurtenances



Storm Water Management and Storm Drain System

There are many options for storm water management on the Claremont McKenna College (CMC) campus. According to SUSMP regulations, the College is required to pre-treat the first ¾” of rain water prior to discharge into the public system. Additionally, based on geotechnical investigations, the existing soils are favorable for infiltration. Therefore, the implementation of an infiltration system is recommended to provide for the capture of on-site stormwater runoff.

Existing Site Hydrology

Site hydrology determines the amount of rainfall expected throughout the campus over a given period. The overall existing drainage pattern of the CMC campus is in the southwest direction. Storm water appears to collect in multiple drainage inlets throughout campus and is channeled through underground storm drain conduits to connect to the public storm drain system in Mills Avenue and Sixth Street. General drainage patterns for the campus have been determined from a study of available topographic information.

Existing Storm Drain Systems

There are three (3) main public storm drain lines collecting runoff from the CMC campus. There is a 51” reinforced concrete pipe (RCP) in Mills Avenue, which is owned by the Los Angeles County Flood Control District (LACFCD). However, based on the LACFCD record drawings, there does not appear to be any direct connections to this line within the boundaries of the campus. If proposed development requires future connections to this line, CMC will be required by the LACFCD to apply for an allowable discharge flow limit and provide retention of on-site stormwater in order to reduce the amount of outflow discharging into the public main.

On the west side of the CMC campus, there is a private 24” RCP storm drain in Amherst Avenue, maintained by the Claremont College Facilities. This storm drain line has been designed for connections from the CMC campus. At the southwest corner of the site is where the upstream end of the Sixth Street storm drain line starts. There is a 24” RCP storm drain line in Sixth Street, owned and maintained by the LACFCD.

Future Storm Drain Systems and Proposed Storm Water Treatment Systems

Storm water treatment – Based on guidelines outlined in the National Pollutant Discharge Elimination System (NPDES) Permit, the Regional Water Quality Board requires that all new projects develop and implement the Best Management Practices (BMP’s) for storm water management within the County of Los Angeles. All future developments at the campus that fall within one of the nine prescribed thresholds will be subject to these requirements, including developing a Standard Urban Stormwater Mitigation Plan (SUSMP) which justifies proposed BMP’s for the project. The State of California Regional Water Quality Board (CRWQB) is considering revisions to the statewide permit that will require among other things, project developments to limit their stormwater runoff to predevelopment condition levels, potentially requiring more detention/retention. KPFF will review all opportunities to treat/capture and infiltrate stormwater where feasible.

Proposed BMP systems shall be designed to the level of sustainability desired by CMC. A combination of underground and surface level BMP systems is recommended for the CMC campus, including implementation of bioswales and underground infiltration trenches.

Existing storm drain systems will not be drastically affected by the proposed development to the CMC campus. CMC would like to implement BMP systems that detain/retain the on-site stormwater runoff collected from surface and building runoff prior to discharge into the public storm drain system. Any overflow drains will connect into the public system, in the event of a large storm event.

* The storm water management for the East Campus Sports Complex is discussed in Appendix B to this Master Plan.”



Parkway drain to bioswale application

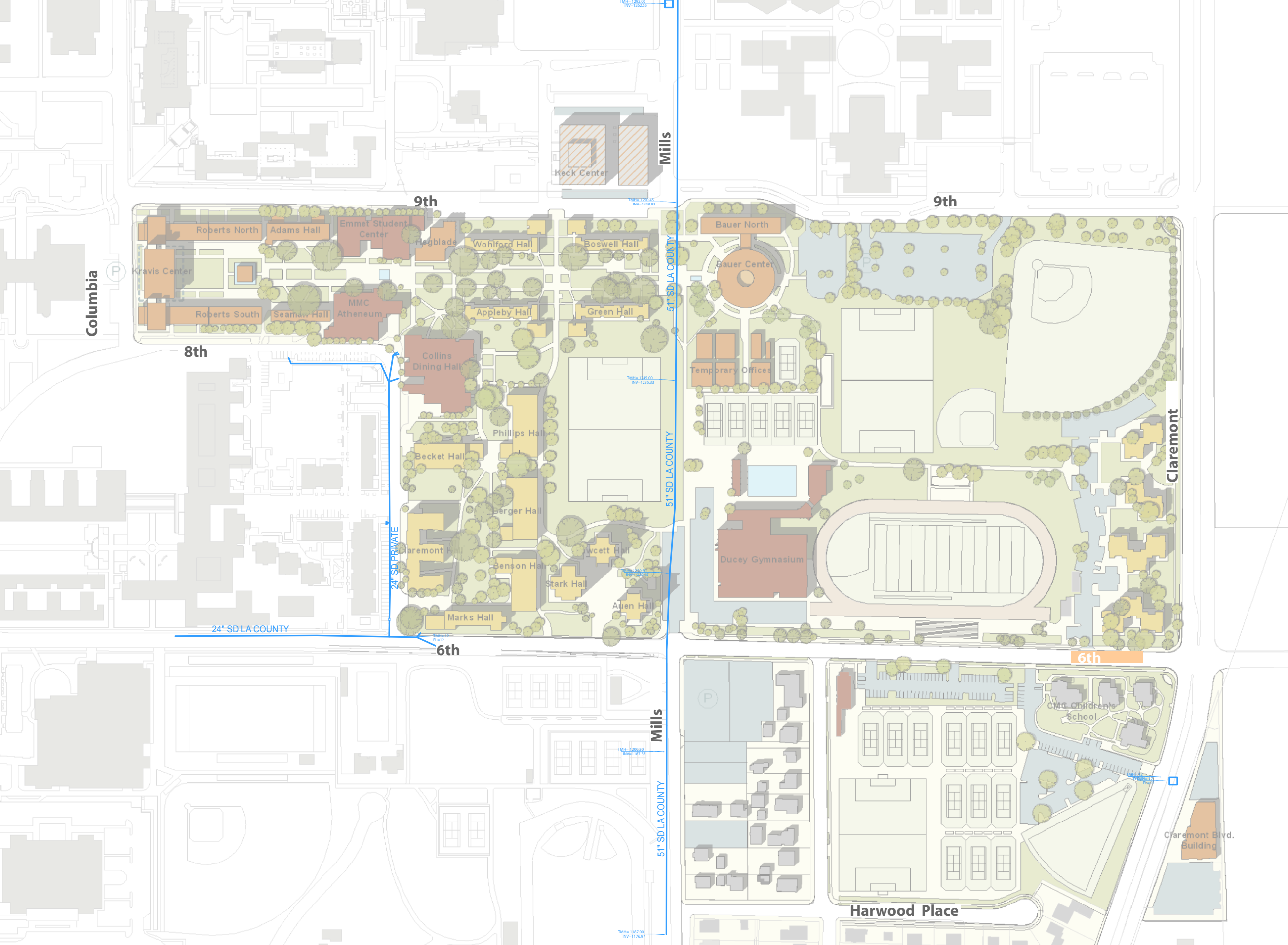


Bioswale in parking lot application



Concrete gutter bioswale application

Existing Storm Drain System



- administrative / academic buildings
- student life buildings
- residential buildings
- CMC parking
- existing CMC buildings
- CMC recreation
- open space

Storm Water Management and Storm Drain System (cont.)

Proposed Hydrology

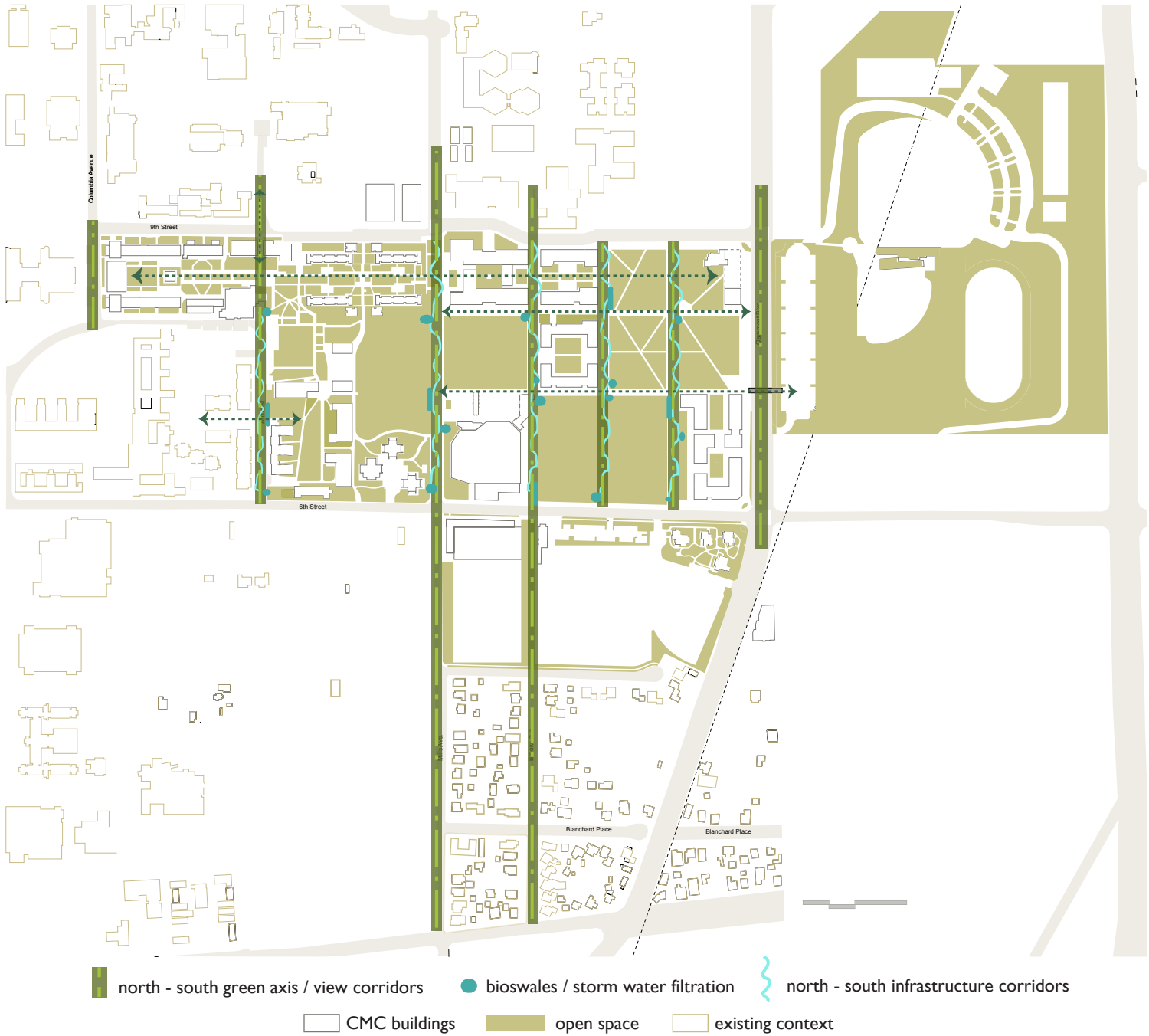
Site hydrology affects the amount of runoff to the site by the site slope and grading and runoff coefficients. CMC desires to implement storm water treatment systems including infiltration within the campus in order to utilize the existing soils which are favorable for infiltration as a storm water management solution. Geotechnical investigations in the area have indicated a high percolation rate in the existing soils. CMC would like to set storm water goals such as on-site storm water detention and infiltration. Such goals can be achieved by utilizing the permeable existing soils for infiltration, as well as utilizing the proposed landscaping for use as a bioswale system and also possible irrigation reuse via graywater treatment system.

Bioswale

A bioswale is a landscape element designed to collect stormwater surface runoff and “treat” that water by removing its sediments and silts. It is a type of stormwater filtration system. The proposed development of CMC’s campus allows for the implementation of multiple bioswale systems throughout the campus due to the future open space design combined with the existing soil conditions. The landscape design shall be integrated with the bioswale component as a way to utilize the site’s natural elements and implement a sustainable feature to the campus.



Proposed bioswale



Existing Site Hydrology



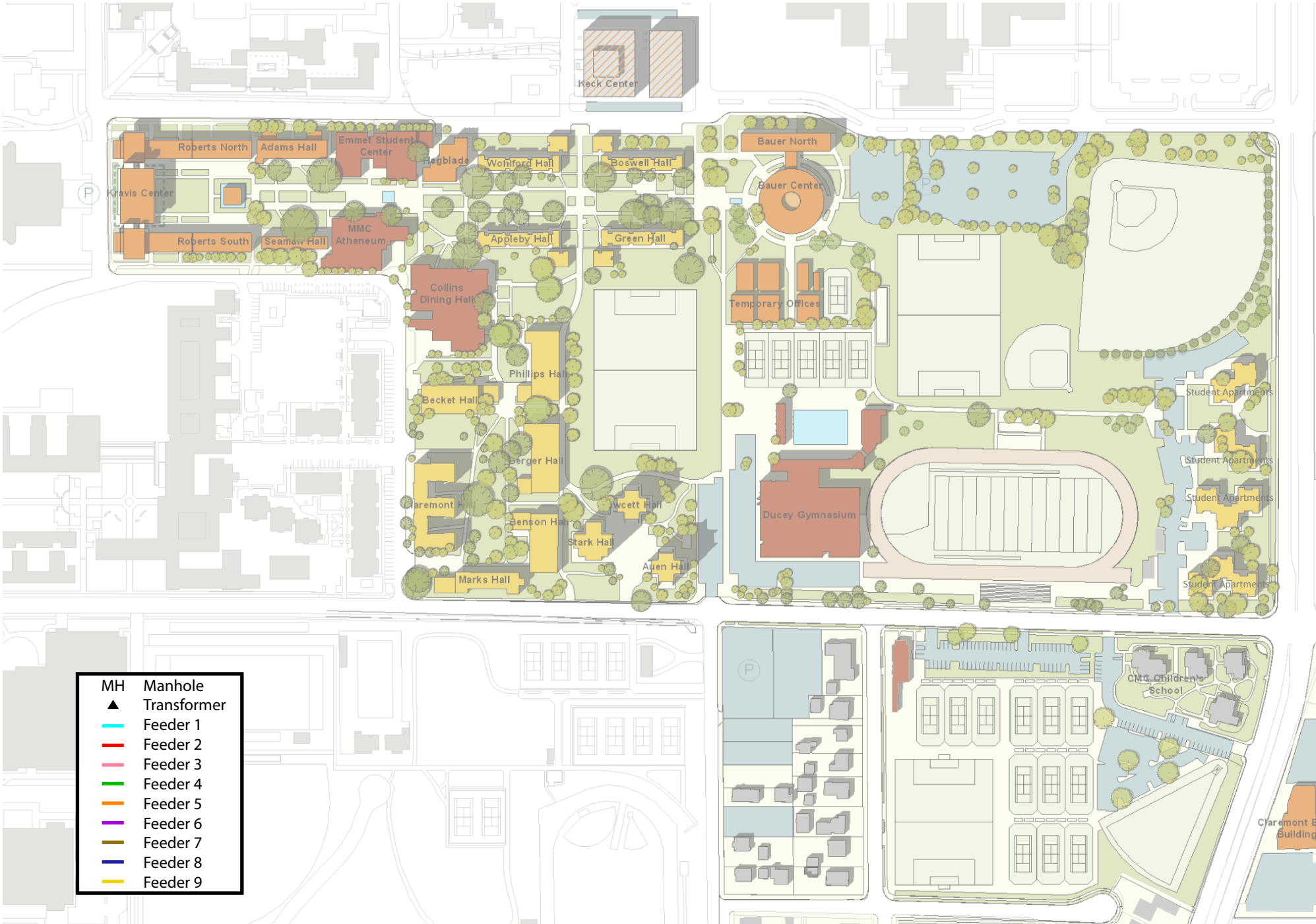
* The existing site hydrology for the East Campus Sports Complex is discussed in Appendix B to this Master Plan.

Infrastructure

Electrical Infrastructure

Electrical power originates from The Claremont Colleges substation located at the southwest corner of Sixth Street and Mills Avenue which supplies power to the five undergraduate colleges. There are nine feeder lines distributing power between the colleges. The campus is predominantly fed from three feeders at 4160 V. The proposed buildings will largely be fed from the existing feeder lines where buildings are being replaced. New construction may require feeder upgrades to accommodate increased capacity needs.

* The current electrical infrastructure and its adequacy to serve the East Campus Sports Complex is analyzed in Appendix B to this Master Plan.



Existing Site Electrical Distribution

Appendix B

East Campus Sports Facilities

Claremont Colleges East Campus Project Description

The Claremont University Consortium (CUC) East Campus project site consists of approximately 75 acres, with 30 acres in the City of Claremont and the remaining 45 acres in the City of Upland. The site is located south of Foothill Boulevard, east of Claremont Boulevard, north of Arrow Route and west of Monte Vista Avenue. The jurisdictional boundary, between the City of Claremont in Los Angeles County and the City of Upland in San Bernardino County, transverses the project site diagonally (northeast to southwest) from Foothill Blvd. to Arrow Route.

Formerly a aggregate quarry, the CUC East Campus site currently contains the Claremont McKenna College archery range along the western edge of the site. The remainder of the site is being used for construction parking and a landfill.

The CUC site is being subdivided into three (3) parcels in Claremont and six (6) parcels in the City of Upland in order to provide land for Pitzer College (17 acres) and Claremont McKenna College (41 acres) uses. Uses for the remainder of the site will be determined at a later time.

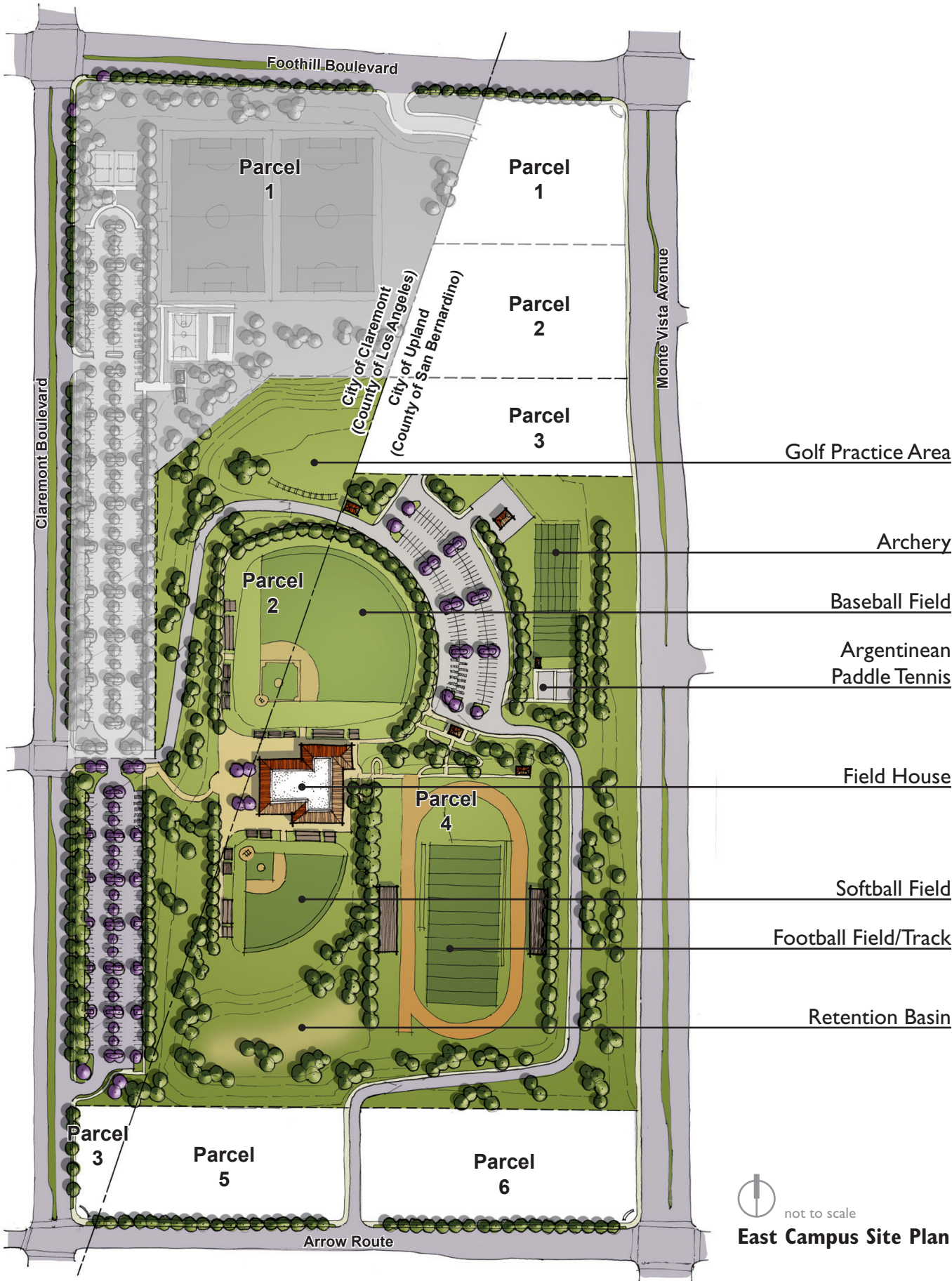
Claremont Mckenna College (CMC) East Campus Project Description

The portion of the site being allocated for CMC use sits astride the boundary line between the two cities and is thus on two parcels: Parcel 2 of Parcel Map 70243 in the City of Claremont and Parcel 4 of Parcel Map 18989 in the City of Upland. The CMC parcels will be developed with the following uses:

- NCAA regulation size baseball field with bleachers to hold 500 spectators.
- Softball field with bleachers to hold 500 spectators.
- Football field and track with bleachers to hold 3,500 spectators.
- Archery range.
- Argentinean paddle tennis court.
- Golf practice area.
- A 30,000 square foot field house containing offices, locker rooms, classrooms, restrooms, equipment storage rooms, and a concession stand.
- A 207 space parking lot along Claremont Boulevard and a 141 space parking lot at the field level.
- Field Lighting.

The baseball field, softball field, football field and track, and the archery range are all facilities that are being relocated from other areas of the CMC campus.

The East Campus Site Plan has been designed, where possible, to utilize the existing topography and land forms of the former quarry, in order to minimize cut and fill operations and to take advantage of the natural grade elevations to develop the athletic fields and spectator areas.



East Campus Utility Infrastructure

Sanitary Sewer Services (Wastewater Services)

City of Upland

The City of Upland Public Works Department maintains sewer mains within its jurisdiction. Existing off-site sewer mains in the project vicinity include an 8-inch vitrified clay pipe (VCP) under Monte Vista Avenue between Foothill Boulevard and Arrow Route and a sewer stub for an 8-inch VCP to the project site under College Park Drive to the north side of Arrow Route. Per the City of Upland Public Works Department, the sewer line was designed with the intent that it be utilized by the new development “at the Quarry site.” Wastewater treatment is provided to Upland by the Inland Empire Utilities Agency (IEUA).

City of Claremont

The City of Claremont Engineering Division maintains sewer mains within its jurisdiction. Two sewer mains currently exist within the project vicinity. One is located on the Pitzer College campus immediately west of the project site. The other is located under 6th Street, approximately 2,000 feet from the southwest corner of the project site. Either sewer main has capacity to serve the project site. Wastewater treatment is provided by the Los Angeles County Sanitation District (LASD) No. 21.

Cross-Jurisdictional Wastewater Treatment

Development of the East Campus site may benefit from cross-jurisdictional wastewater treatment services from either IEUA or LASD. The entire build-out of the project is estimated to discharge 3,253.5 gallons per day (GPD). This would be less than one percent of the current and planned treatment capacity of capacity of servicing IEUA treatment plants. 3,253.5 GPD is also less than one percent of the Pomona wastewater treatment plant (WRP) treatment capacity. Based on this analysis, should wastewater treatment services be provided to the project site singularly by the IEUA or LASD, there is sufficient capacity in both systems without the need for either operator to expand treatment capacity.

Domestic Water Service

City of Upland

The City of Upland provides water to customers within its jurisdiction. The City of Upland maintains a 10-inch steel water main under Arrow Route between College Park Drive and Monte Vista Avenue with a stub that connects to the north side of Arrow Route. The existing water main located under Arrow Route was constructed with a stub for connection to the project site. Similarly,

the sewer main under College Park Drive was constructed with a stub for connection to the project site. The project public utilities report indicates that these service lines were installed with the intent to serve the project site; therefore, expansion of these facilities is not anticipated in order to serve the project site. Recycled water is available in portions of the City of Upland and may be available at such time of development.

City of Claremont

Golden State Water Company (GSWC) provides water to the majority of the City of Claremont, including the project site. GSWC maintains an 8-inch polyvinyl chloride (PVC) water main under Foothill Boulevard between Claremont Boulevard and Monte Vista Avenue. The project utilities report indicates that GSWC confirmed that the 8-inch main will have adequate capacity to serve project water demand and fire flow requirements. Recycled water is not available in the Claremont System.

Cross-Jurisdictional Water Service

Development of the East Campus site may benefit from cross-jurisdictional water service from either the City of Upland or GSWC. The entire build-out of the project is estimated to use 204.09 AFY of water. This would be 0.4 percent of the City of Upland’s total water supply in 2025. 204.09 AFY is approximately one percent of GSWC’s future total supply. The urban water management plans (UWMP) for both water purveyors indicate that sufficient water supply is available to serve each district over the long-term. Should water service be provided to the project site singularly by the City of Upland or GSWC, neither purveyor will need to increase or expand their water supplies.

Storm Water and Storm Drain System

The project vicinity is completely urbanized with a fully developed storm drainage system. Curb and gutters are constructed on all streets around the perimeter of the project site to convey drainage to multiple side inlets in the area and eventually to subsurface storm drains. In addition, the proposed subdivision and Conceptual Master Site Plan include a retention basin in the southwest portion of the site. This retention basin will be designed to retain all on-site drainage from the future sports facilities up to and including the 100- year flood (1% annual flood).

Solid Waste Services

City of Upland

The City of Upland contracts with Burrtec Waste Industries for commercial and residential solid waste disposal. The majority of Upland’s solid waste is disposed of at the Mid-Valley Sanitary Landfill (SLF). Other landfills serving Upland include Colton SLF, Puente Hills SLF, San Timoteo SLF, and Victorville SLF.

City of Claremont

The Claremont Colleges currently contracts with the City of Claremont for solid waste disposal services. The City of Claremont is primarily served by Puente Hills Sanitary Landfill (SLF). Other landfills serving Claremont include Colton SLF, Lancaster Landfill and Recycling Center, Mid-Valley SLF, and Victorville SLF.

Cross-Jurisdictional Landfill Service

Most of the landfills that serve Claremont also serve Upland. The combined remaining capacity of the landfills serving Upland is 410,217,733 CY, approximately 60 percent of total capacity. This is comparable to remaining capacity serving Claremont. With remaining capacity between 60 and 61 percent between the respective jurisdictions, adequate capacity remains to serve the long-term disposal needs of the project.

Electrical Infrastructure

Southern California Edison Company provides both the City of Claremont and the City of Upland with electrical service. Southern California Edison’s office in San Dimas provides service to the City of Claremont, while the Ontario office provides service to the City of Upland. Existing Southern California Edison Company power poles and lines surround the site.

