Central Campus Neighborhood Study

April 12, 2017

UNIVERSITY OF CALIFORNIA, RIVERSIDE

HKS SPURLOCK

LANDSCAPE ARCHITECTS

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PROJECT OVERVIEW

PROJECT OVERVIEW

Study Overview

The University of California, Riverside (UCR) is undergoing a significant increase in student enrollment. As the physical campus expands to accommodate the population growth, strong physical connections are needed to link the new developments to the existing campus core.

UC Riverside's campus core has historically centered on the Belltower and Carillon Mall. These sites and areas surrounding the Highlander Union Building (HUB) and adjacent HUB plaza form the heart of the Central Campus neighborhood. In the Central Campus Neighborhood Study, the influence area extends north to the Student Recreation Center and Linden Street, east to Pentland Hills, and west on University Avenue to Interstate-215/CA-60 and beyond.

Improvement needs were identified from site observations and discussions with campus stakeholders. With multiple proposals in the area competing for limited resources, a multi-year plan will be required to prioritize and implement proposed public realm improvement projects, as proposed in the Physical Master Plan Study (2016).

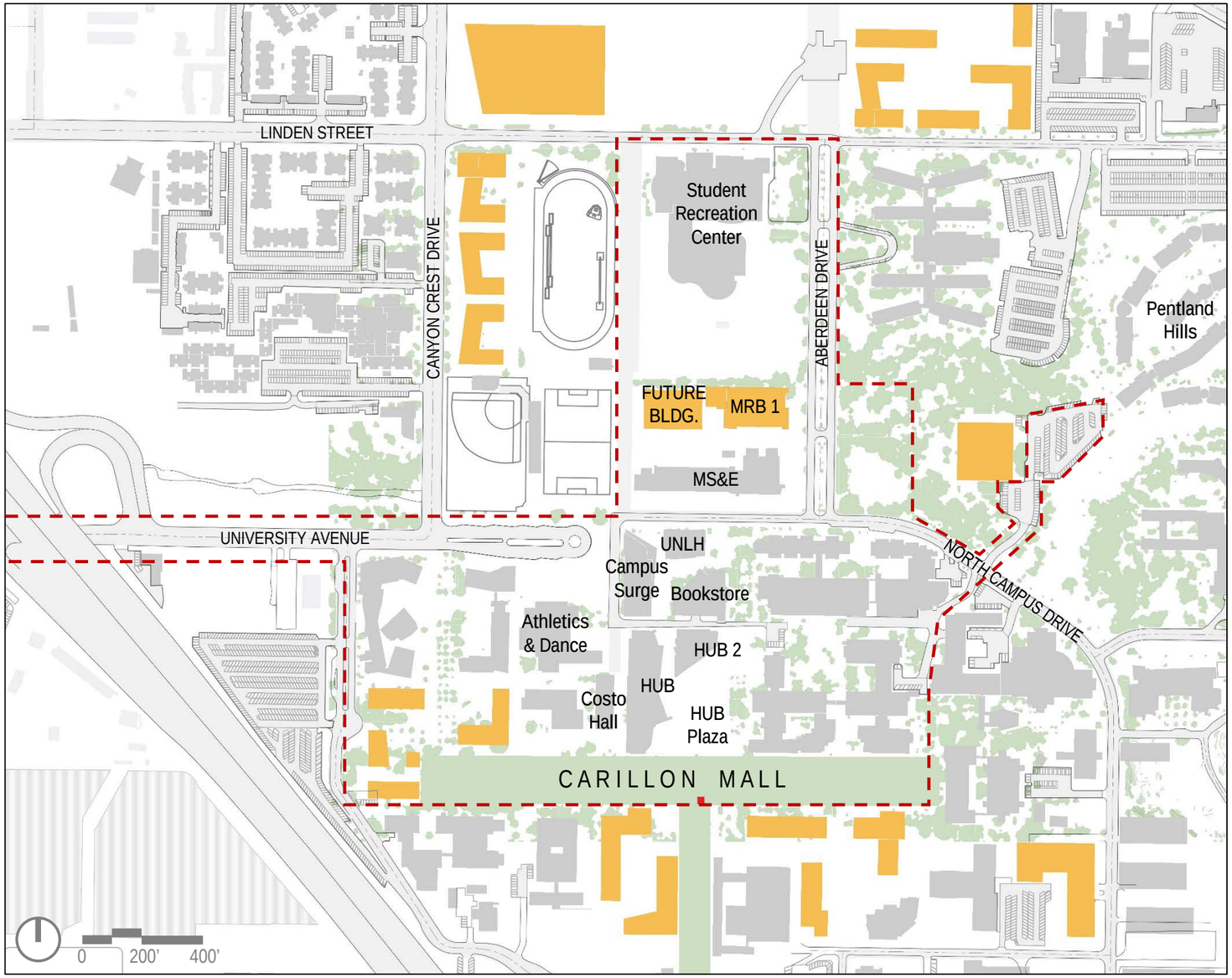

Figure 1.1 – Central Campus Neighborhood Study Influence Area

PURPOSE OF STUDY

Study Purpose

The Central Campus Neighborhood Study presents an overall vision for public realm improvements in the study area. The study proposes improvements that will be strategic in connecting existing and new developments to the campus core. Beyond the physical improvements, the study also examines how project components can be grouped for implementation.

The Central Campus Neighborhood Study aims to:

- Develop a detailed understanding of the study area – this is the first of numerous such studies proposed for different sections of campus
- Identify projects/priorities that are impactful at a modest/nominal cost to the campus
- Propose a recommended implementation sequence for these projects/priorities
- Articulate relevant site planning/design concepts that can be applied across the campus
- Propose campus improvements to promote bicycle use
- Recommend areas/priorities for future study

Previous Planning Studies

The Central Campus Neighborhood Study builds on concepts presented in previous planning studies. The Physical Master Plan Study (2016) identified Opportunity Sites for future campus growth while the UCR Mobility Hub Concept Study (2016) examined the feasibility of a new mobility hub at the east terminus of University Avenue. These components are served by the improvements proposed in the Central Campus Neighborhood Study.

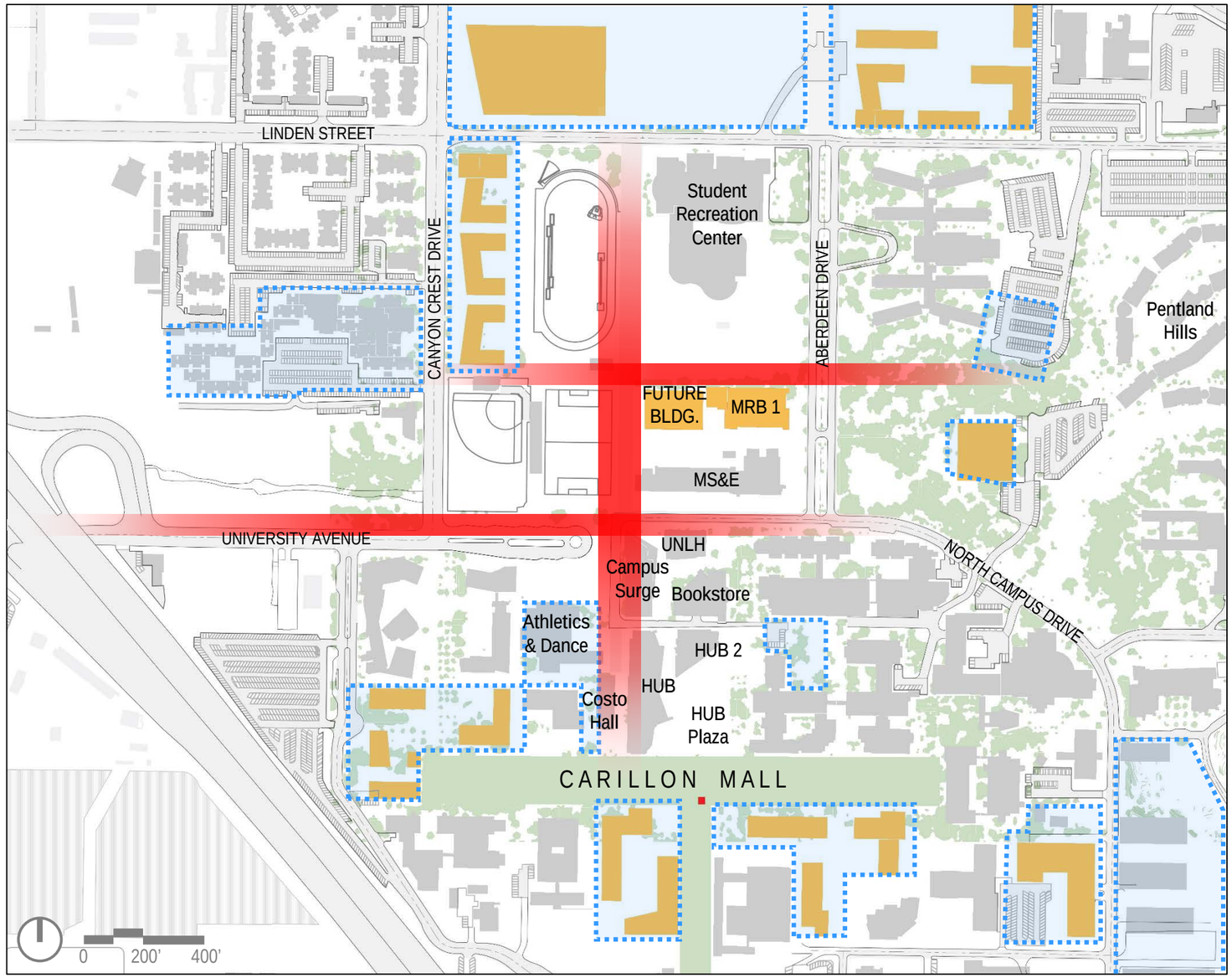

Figure 1.2 – Connecting Opportunity Sites

2.0

PROJECTS

PROPOSED MAJOR PROJECTS

Major Projects

In seeking to connect existing and new developments to the Central Campus Neighborhood, the campus needs to introduce a clear circulation framework extending from the center of campus at the Highlander Union Building, to areas of proposed new development. Providing added safe and convenience access, the improvements will support campus pedestrian, bicycle and transit modes and reduce dependence on vehicular travel. Further, these new campus malls will create distinctive public realm environments reflecting UC Riverside's growing stature as a top tier university.

As such, this study identified two east-west axis and one north-south axis that were essential in creating cross campus connections. The improvement projects further detailed herein are grouped into five major projects within the influence area of this study:

1. Mobility Hub to Aberdeen Drive Intersection
2. Recreation Mall
3. Student Housing Connection
4. Service Drive Improvements
5. Athletics & Dance Building and Costo Hall/Highlander Hall Building Improvements

LEGEND

- 1 Mobility Hub to Aberdeen Drive Intersection
- 2 Recreation Mall
- 3 Student Housing Connection
- 4 Service Drive Improvements
- 5 Athletics & Dance Building and Costo Hall/Highlander Union Building Improvements

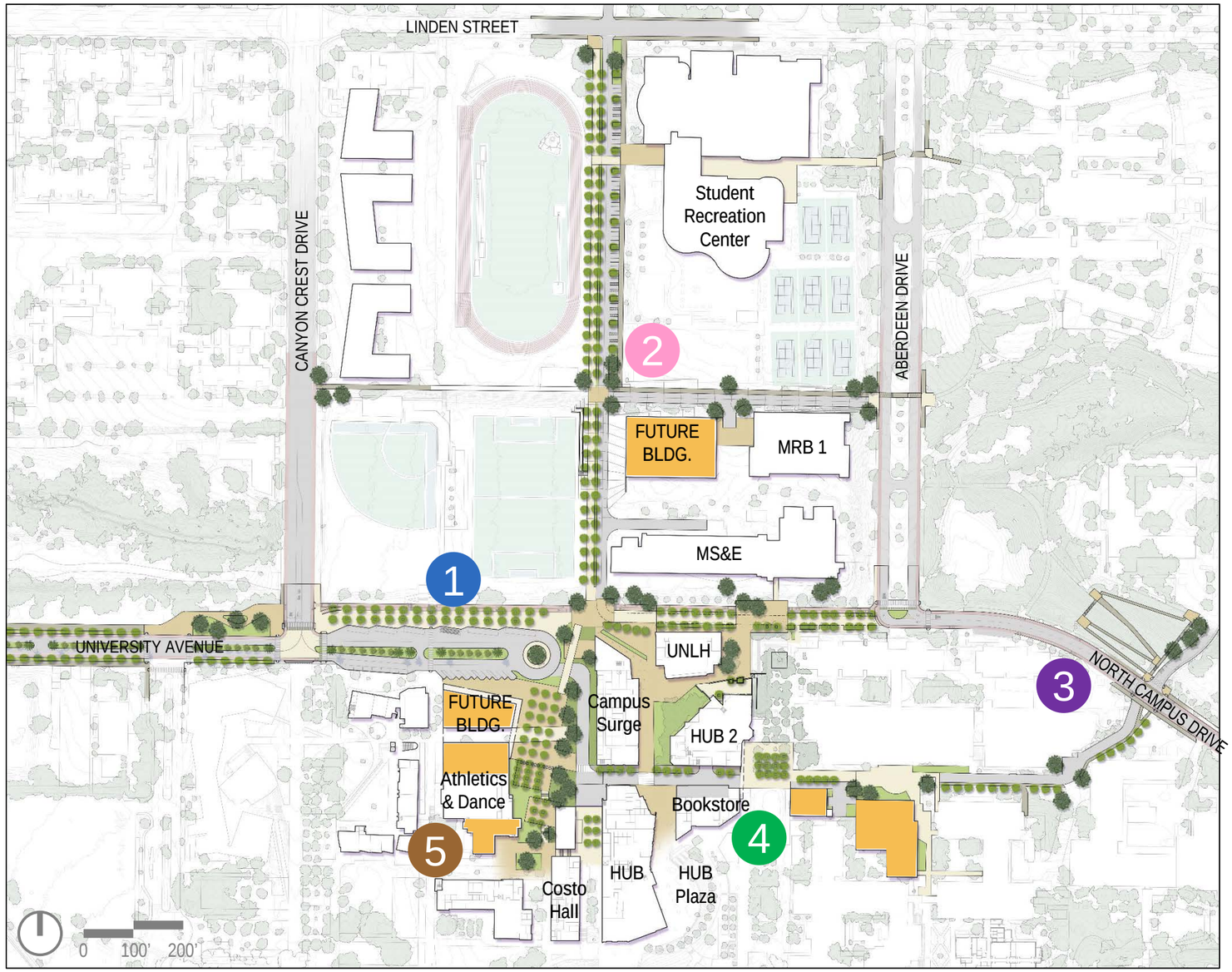

Figure 2.1 – Recommended Campus Improvements

PROJECT COMPONENTS OVERVIEW

Project Components

The five major projects are comprised of discrete project components to provide maximum flexibility for planning and implementation.

1. **Mobility Hub to Aberdeen Drive Intersection**

   1a: Mobility Hub; University Avenue Streetscape
   1b: North Campus Drive / Mall and Aberdeen Drive Intersection
   1c: North Campus Drive / Mall
   1d: Campus Surge north corner activation

2. **Recreation Mall**

   2a: South Recreation Mall
   2b: North Recreation Mall
   2c: Gateway Plaza and Future Building

3. **Student Housing Connection**

   3a: Trail and Stairs
   3a ALTERNATIVE: Pedestrian Bridge

4. **Service Drive Improvements**

5. **Athletics & Dance Building and Costo Hall/Highlander Union Building Improvements**

   5a: Athletics & Dance Building renovations
   5b: Deck over HUB loading dock

LEGEND

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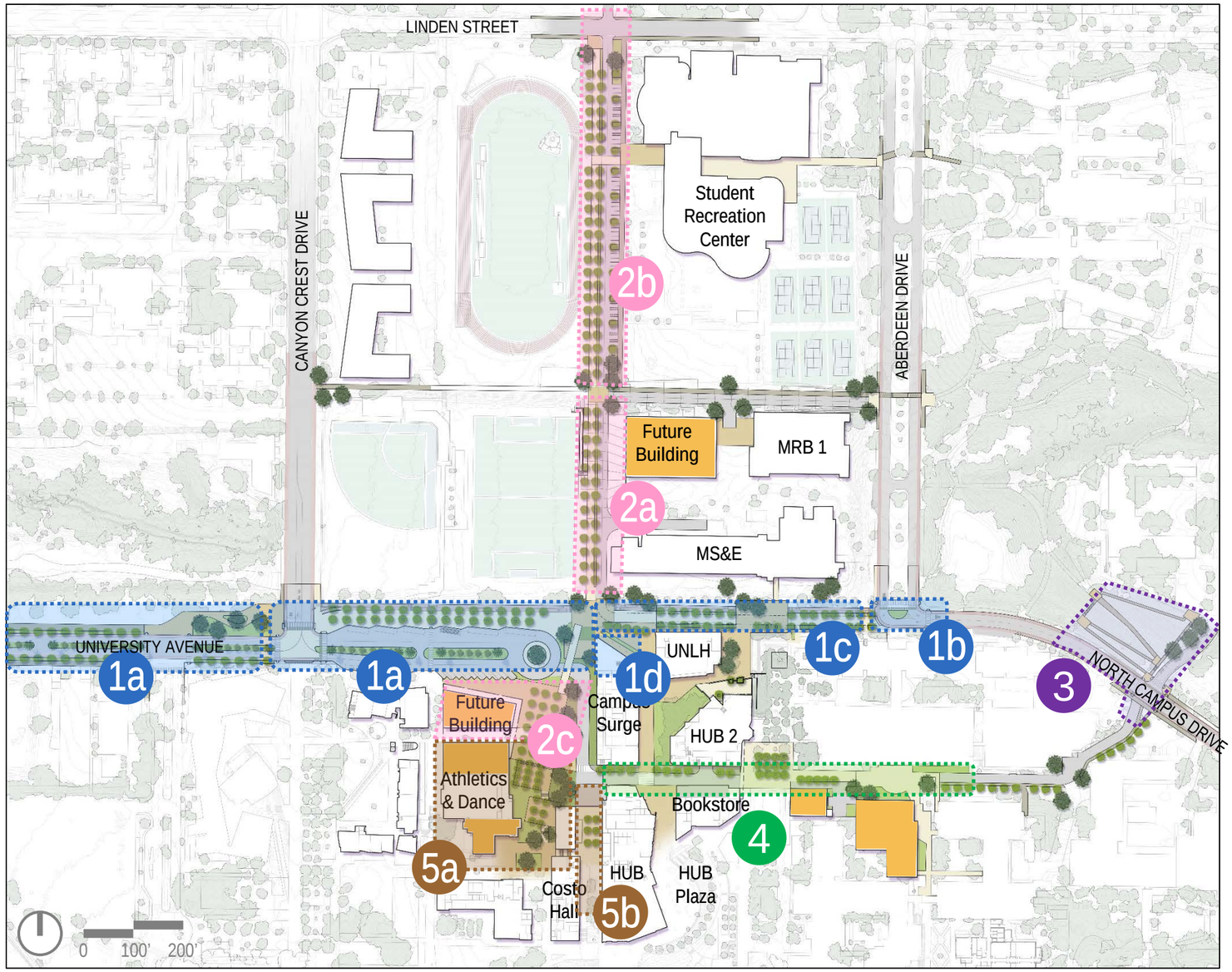


Figure 2.2 – Central Campus Neighborhood Study Components

1: MOBILITY HUB TO ABERDEEN DRIVE INTERSECTION

Existing Condition & Issues

UCR currently lacks a front door on the west side of the campus. There are no prominent signage welcoming pedestrians into the campus. Lot 19 is a non-descript surface parking lot at a campus gateway location lacking character, and is one of the first places pedestrians encounter as they approach the central campus. Beyond Lot 19, the pedestrian path terminates at North Campus Drive, which is frequently used by service vehicles resulting in pedestrian-vehicular conflicts. North Campus Drive also separates the core campus area to the south and newer campus developments to the north.

Issue: Campus gateway lacks character

Issue: Disconnected pedestrian path

Issue: Pedestrian and service vehicle conflict

Issue: Disconnected pedestrian path

1: MOBILITY HUB TO ABERDEEN DRIVE INTERSECTION

Goal

Articulate University Avenue as the primary campus gateway to UCR

Opportunities

Leveraging its prominent location, the Mobility Hub is a significant investment and partnership with Riverside Transit Agency that will create a new front door to campus:

- Create strong identity at new campus gateway with landscape, signage, and art
- Minimize pedestrian, bicycle and service vehicle conflicts
- Leverage proposed Campus public transit facility to create multi-modal hub
- Improve University Avenue streetscape, entry & approach
- Create Mobility Hub / service access / connectivity to Recreation Mall
- Pedestrian connectivity from the Mobility Hub to the core campus
- Identify opportunities for active ground floor uses at buildings facing Gateway Plaza

Figure 2.3 – Parking Lot 19 and current pedestrian approach

Figure 2.4 – Artist rendition of proposed Mobility Hub

1: MOBILITY HUB TO ABERDEEN DRIVE INTERSECTION

COMPONENT 1a: MOBILITY HUB, UNIVERSITY AVENUE STREETSCAPE

Proposed Improvements

The proposed Mobility Hub will be the new western gateway to the campus, supporting transit users and different modes of transportation at a central location. As part of a continuous pedestrian path extending from University Avenue, at the entrance to University Extension, underneath the freeway, and into the campus, at the northwest corner of the University Avenue and Canyon Crest Drive intersection. This key intersection is served by crosswalks that will enable pedestrians to safely cross University Avenue and Canyon Crest Drive into campus and the Mobility Hub.

The west end of the Mobility Hub where University Avenue terminates is an important opportunity to identify the campus with a gateway element. The proposed UCR Mobility Hub is organized to serve various modes of transportation. Along the south side is a passenger drop-off area approx. and a limited supply of accessible parking spaces.

A new plaza area south of the Mobility Hub, framed by a new building north of the Athletics & Dance Building and an activated ground floor Campus Surge north end, will lead pedestrians into the core campus through the Highlander Union Building and between Costo Hall and Student Services.

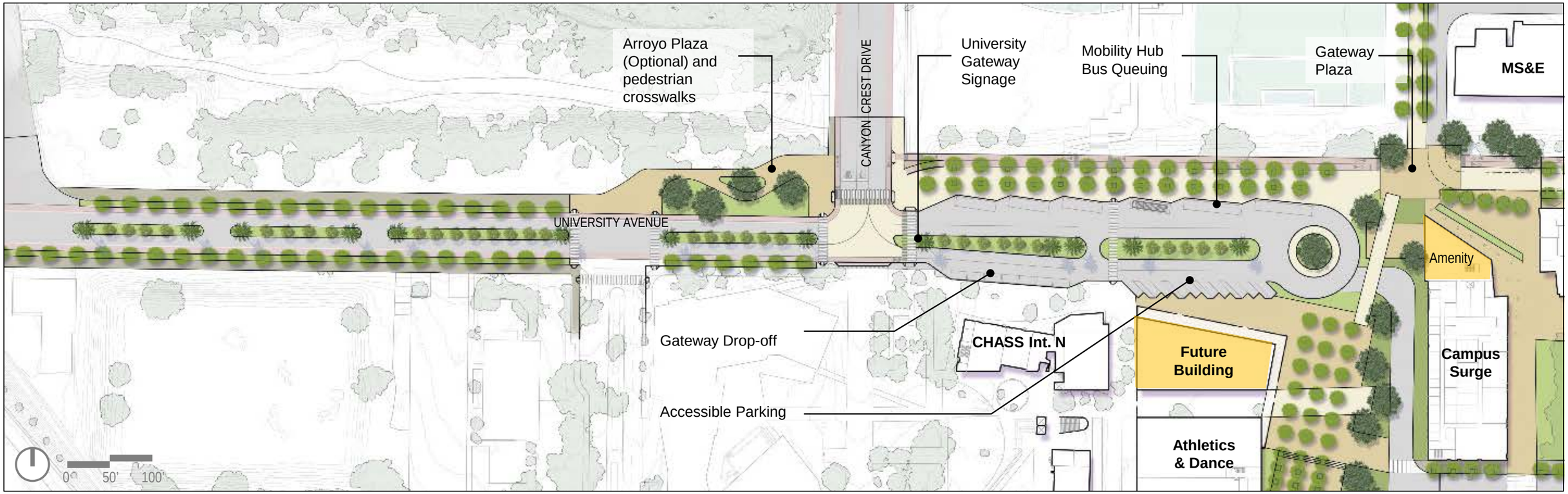


Figure 2.5 – Concept plan; Mobility Hub and University Avenue right-of-way improvements

1: MOBILITY HUB TO ABERDEEN DRIVE INTERSECTION

COMPONENTS 1b and 1c: NORTH CAMPUS DRIVE/MALL

Proposed Improvements

To provide a continuous pedestrian path and bicycle lanes into the campus core, North Campus Drive is proposed to be converted into a pedestrian mall, with vehicular access limited to emergency vehicles only. This landscaped North Campus Mall will establish safe pedestrian connections while eliminating pedestrian-vehicular conflicts at this central campus location. Pedestrians and bicyclists will have a dedicated east-west pathway from University Avenue, along the north side of the Mobility Hub, through the North Campus Mall, to Aberdeen Drive and the Pentland Hills residence halls beyond.

The following improvements are proposed at the Aberdeen Drive and North Campus Drive intersection to improve vehicular, pedestrian, and bicycle circulations:

- With the new North Campus Mall closed to vehicular traffic, vehicles traveling south on Aberdeen Drive will follow the newly aligned curb to make a left turn onto North Campus Drive.
- Dedicated bike lanes are provided on North Campus Drive to connect with existing bike lanes on Aberdeen Drive.
- In order to slow vehicles and bicyclists turning to/from Aberdeen Drive, the curb radii is reduced.
- A break in the landscape median allows a new, highly-visible crosswalk and green striped bike crossing to be installed, providing a safe way for pedestrians and bicyclists to cross Aberdeen Drive.
- At the east end of the the bicycle lane in the North Campus Mall, rumble strips are installed to slow down bicyclists in order to minimize conflicts with pedestrians.

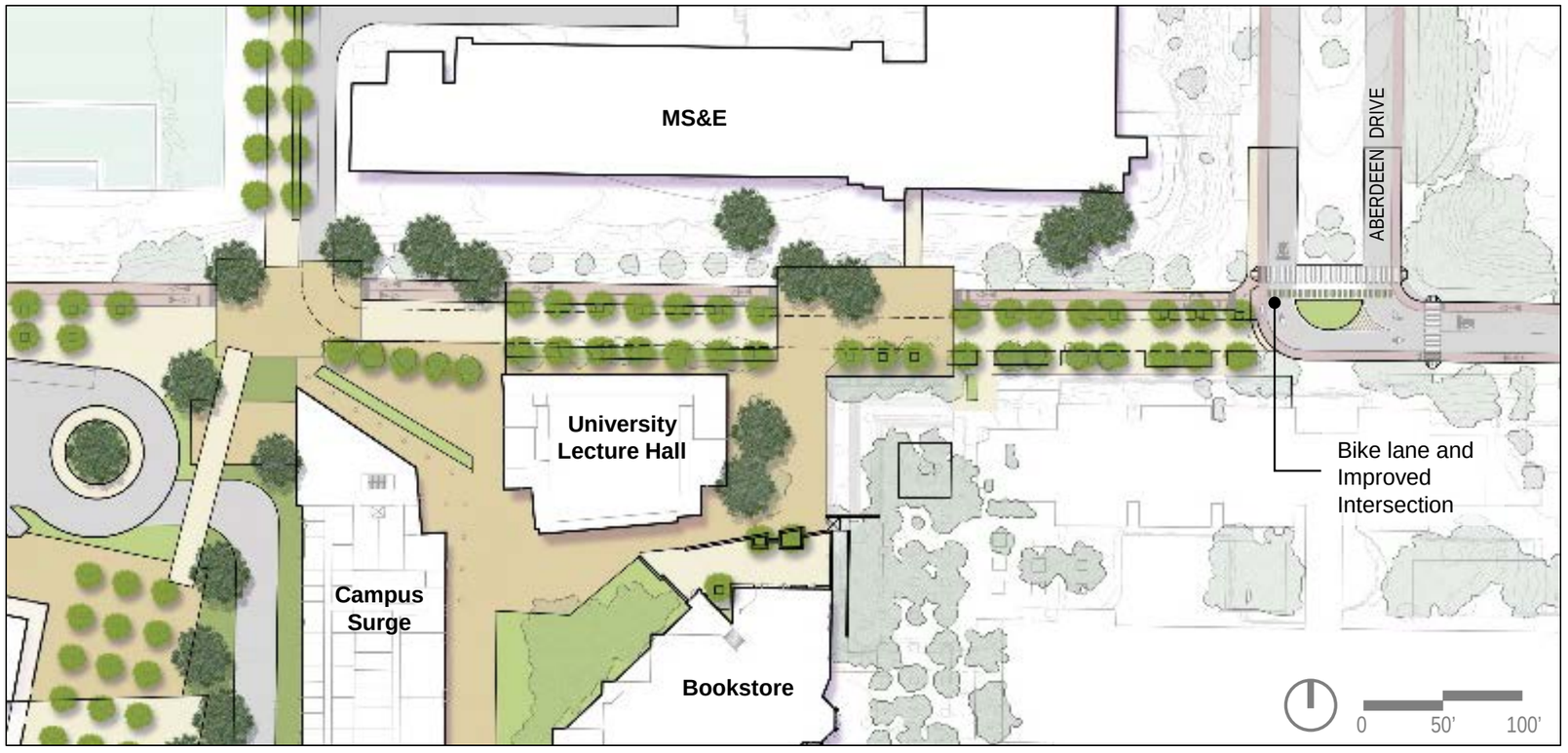


Figure 2.6 – Concept plan; North Campus Drive/Mall to Aberdeen Drive Intersection

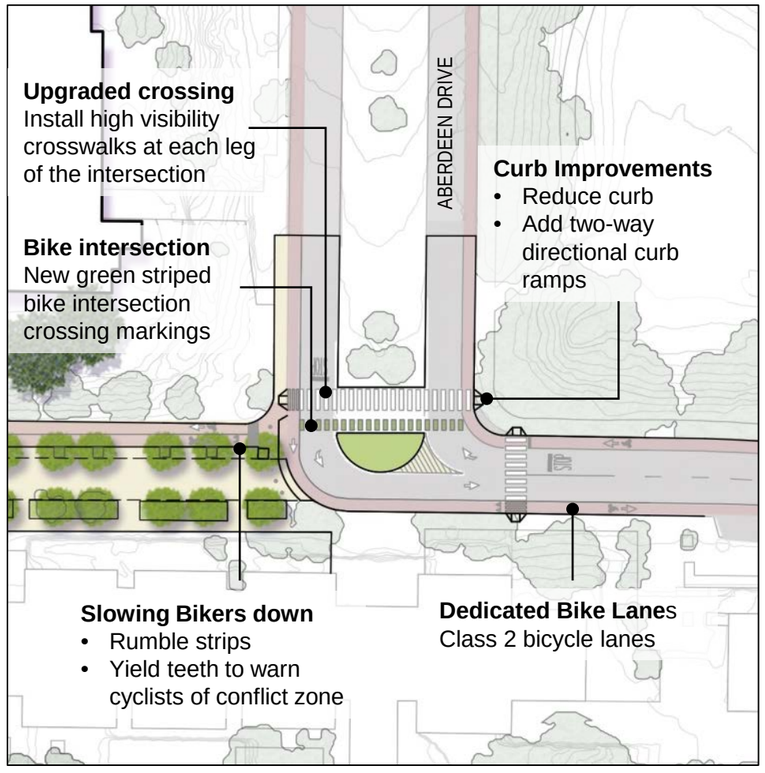


Figure 2.7 – Concept plan; Aberdeen/North Campus Drive Intersection Improvements

1: MOBILITY HUB TO ABERDEEN DRIVE INTERSECTION

COMPONENT 1c: NORTH CAMPUS DRIVE / MALL

Proposed Improvements

By converting North Campus Drive into North Campus Mall, pedestrians and bicyclists will have a safe path of travel without conflicts with vehicles. The existing 58’ right-of-way is organized into clearly defined paths for pedestrians and bicyclists. A 20’ wide tree-lined promenade serves as the main pedestrian path. Existing planters and sidewalks are used on the south side of the promenade while new trees will be planted on the north side of the promenade. A 12’ wide two-way bike path is located along the north side of the right-of-way.

Near the center of the mall is an open plaza directly across the pedestrian bridge to the MS&E. The south side of the plaza is integrated with the stairs leading to the plaza north of the Bookstore.

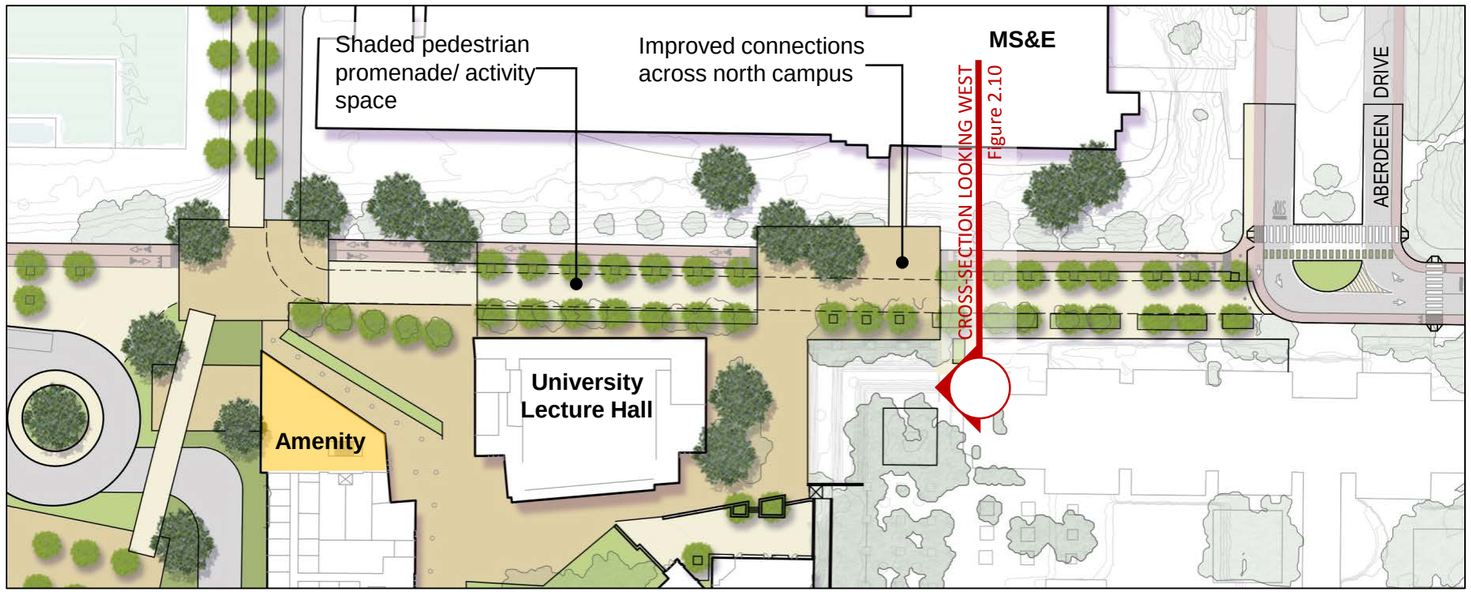


Figure 2.9 – Concept plan; Proposed North Campus Mall

Figure 2.8 – Artist rendition of North Campus Mall

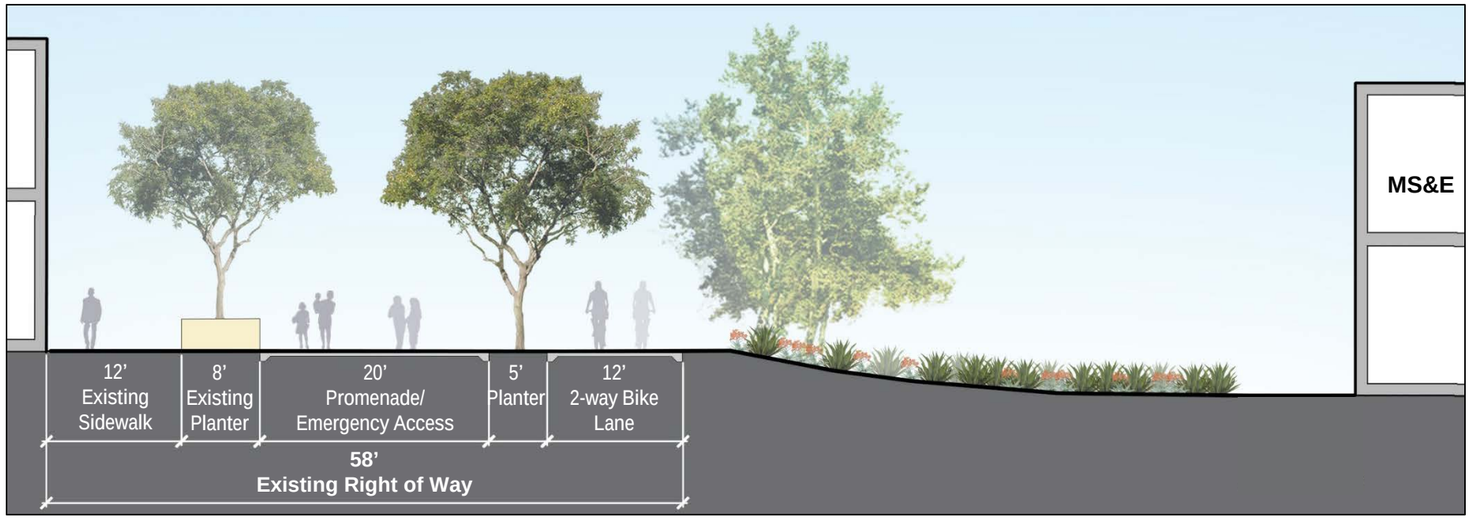


Figure 2.10 - Cross-section looking west through proposed North Campus Mall

1: MOBILITY HUB TO ABERDEEN DRIVE INTERSECTION

COMPONENT 1d: CAMPUS SURGE RENOVATION

Proposed Improvements

To reinforce the Mobility Hub as a welcoming campus gateway, renovations are proposed for the north end of Campus Surge to open and create a more welcoming lobby, potentially a double-height space that accommodates public amenities and/or services. The north and west facades are intended to be highly transparent, creating a visual connection between the adjacent Gateway Plaza and circulation spaces. Outdoor seating west of the building extend indoor activities into the Recreation Mall and Gateway Plaza. The seating area is shaded by specimen trees that create focal points and screen views of the existing service drive and Highlander Union Building loading area.

The amenity space might accommodate services that compliment the UCR Mobility Hub. Such services might include the following:

- Campus welcome center
- Transportation information kiosk
- Retail
- Grab-n-Go food/beverage
- Student lounge

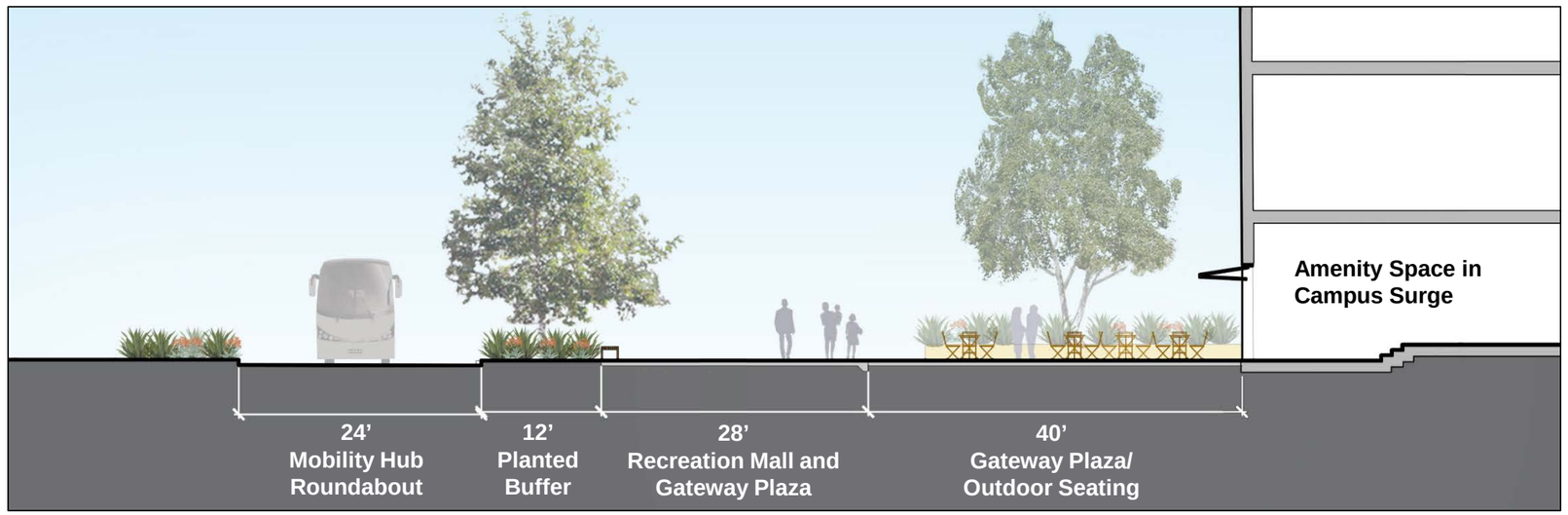


Figure 2.11 – CROSS-SECTION LOOKING NORTH through Mobility Hub turnaround and Gateway Plaza

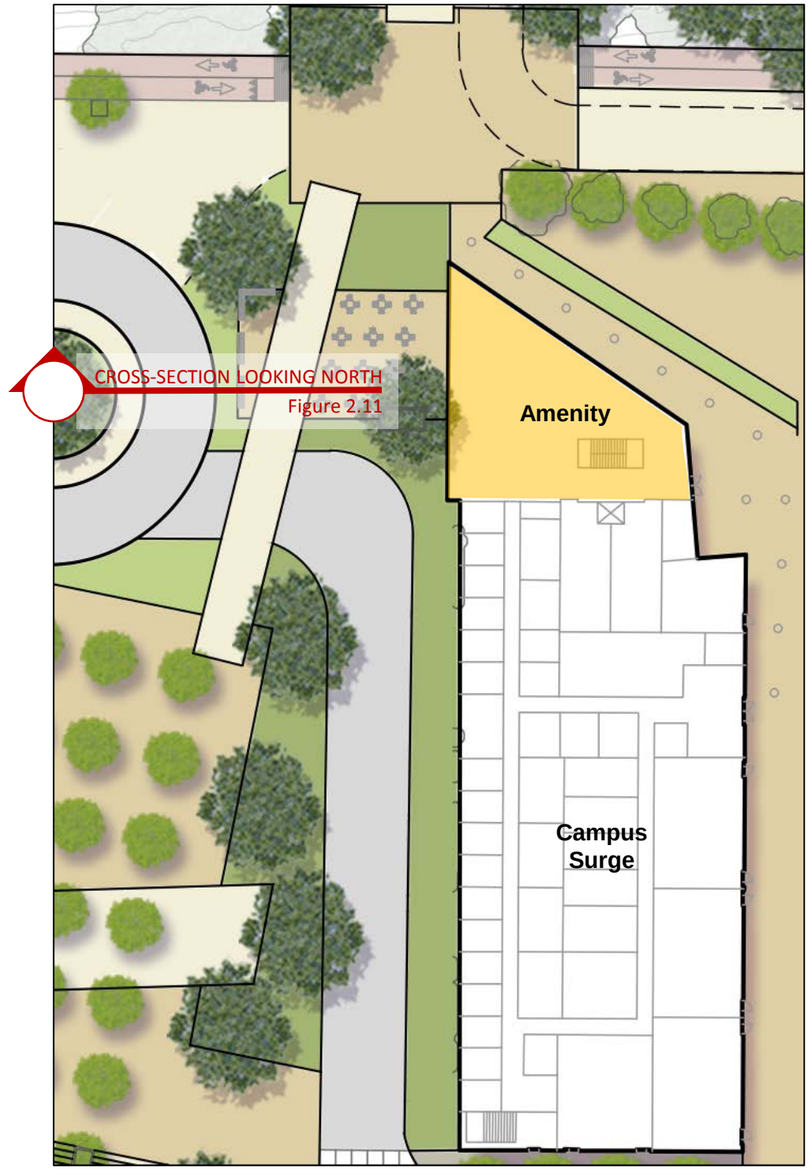


Figure 2.12 – Concept Plan detail; East end of Mobility Hub

2: RECREATION MALL

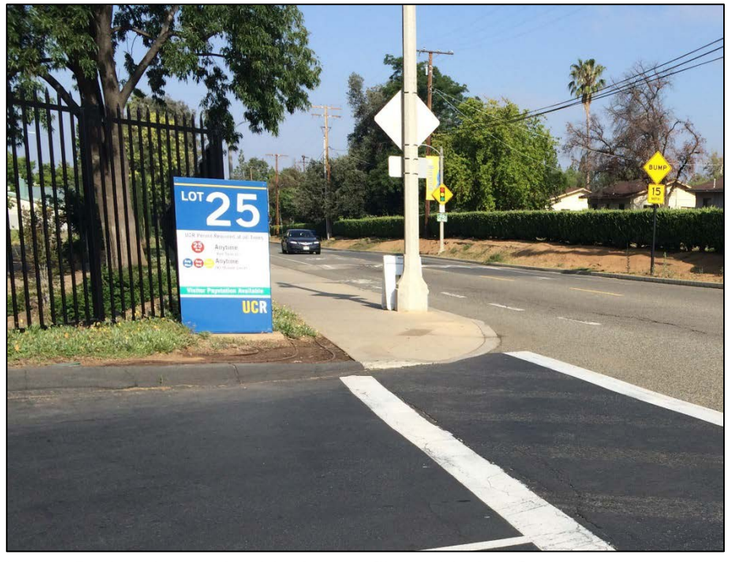
Existing Condition & Issues

Due in part to the challenge of a substantial grade change, there is no continuous north-south sidewalk between North Campus Drive and Linden Street. Pedestrians must walk north on Aberdeen Drive or Canyon Crest Drive, then east or west on Linden Street to reach the Student Recreation Center. There is a pedestrian and vehicular conflict at Linden Street where pedestrians and vehicles enter into the Student Recreation Center parking area in order to reach the building entry. The disconnected pedestrian path isolates the Student Recreation Center from the campus core.

Issue: Grade change

Issue: Disconnected pedestrian path

Issue: Service access to MS&E Building



Issue: Pedestrian and vehicular conflict at Linden Street

2: RECREATION MALL

Goal

Create a primary north-south campus connection

Opportunities

Connect campus core with existing and proposed campus developments to the north, including the Student Recreation Center, athletic fields, the proposed Event Center, and future student housing to:

- Create continuous pedestrian and bicycle path from Linden Street leading to Carillon Mall
- Mitigate grade changes at south end of the proposed Recreation Mall
- Minimize pedestrian and service vehicle conflicts; exposed service yard at Highlander Union Building

Figure 2.13 – View of proposed Recreation Mall corridor, looking north

Figure 2.14 – Artists rendition of proposed Recreation Mall

2: RECREATION MALL

Proposed Improvements

With grading and site preparation, a new pedestrian path incorporating drive/bike sharrow, plaza, and landscaping is proposed from Linden Street to the Mobility Hub and Carillon Mall. The Recreation Mall is envisioned as one of the primary north-south pedestrian thoroughfares for the campus, connecting north campus developments to the central campus. The path also creates a strong edge between the Student Recreation Center and athletics area, providing pedestrians views of the athletics fields and activities.

The Recreation Mall can be divided into two components: Mobility Hub to Multidisciplinary Research Building 1 (MRB1) service drive, and MRB1 service drive to Linden Street.

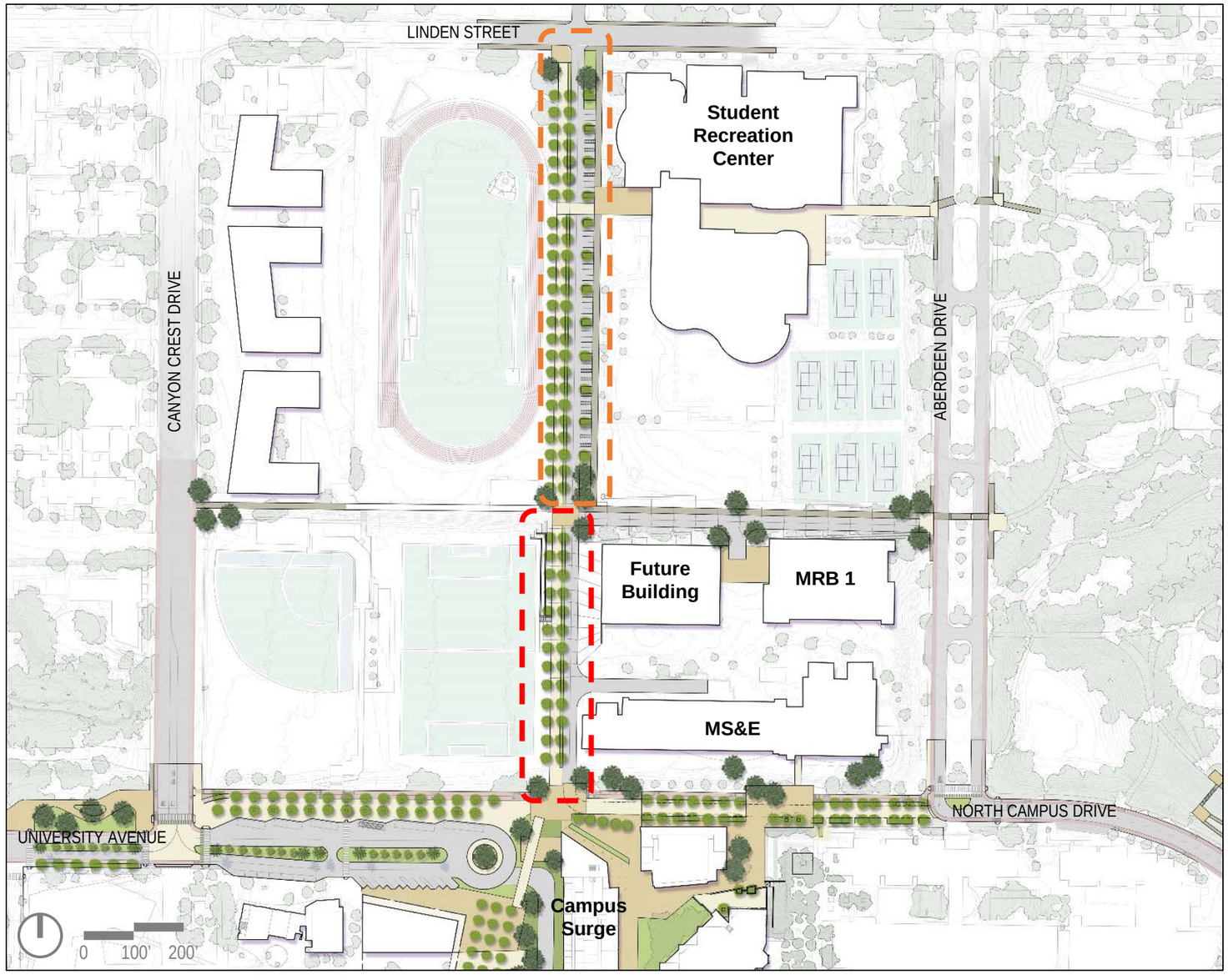


Figure 2.15 – Concept plan; Proposed Recreation Mall

2: RECREATION MALL

COMPONENT 2a: MOBILITY HUB TO MRB1 SERVICE DRIVE (SOUTH RECREATION MALL)

Proposed Improvements

The Recreation Mall is designed to be shared by pedestrians, bicyclists, and service vehicles with minimal conflicts among them. Pedestrians occupy the 16’ center path lined by trees on both sides. The trees not only provide shade, but also shield the 22’ service drive that runs parallel to the Recreation Mall. The Service Drive extends from Linden Street to the MS&E service dock at the northwest corner of the building. By routing service vehicle traffic from the north via Linden Street rather than the Mobility Hub, pedestrian-vehicular conflict at the Mobility Hub will be minimized. The Service Drive also serves as a continuous bicycle path, separating pedestrians on the Recreation Mall from all moving vehicles and bicycles.

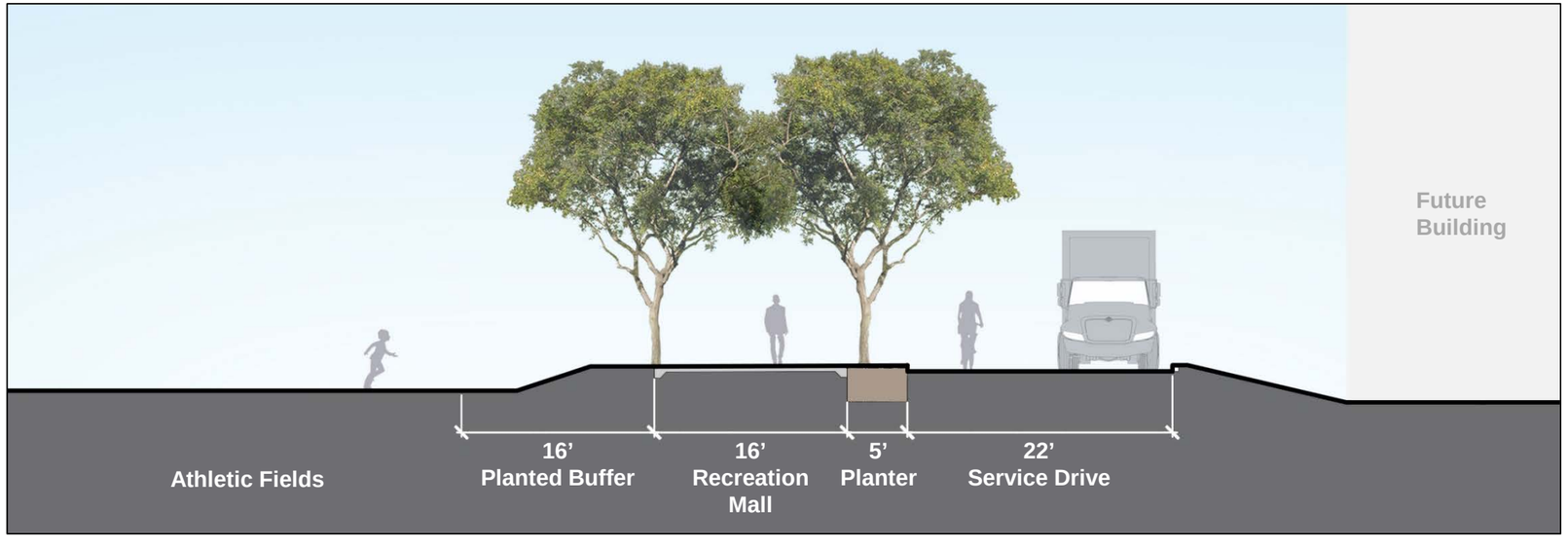


Figure 2.16 – CROSS-SECTION LOOKING NORTH through Recreation Mall

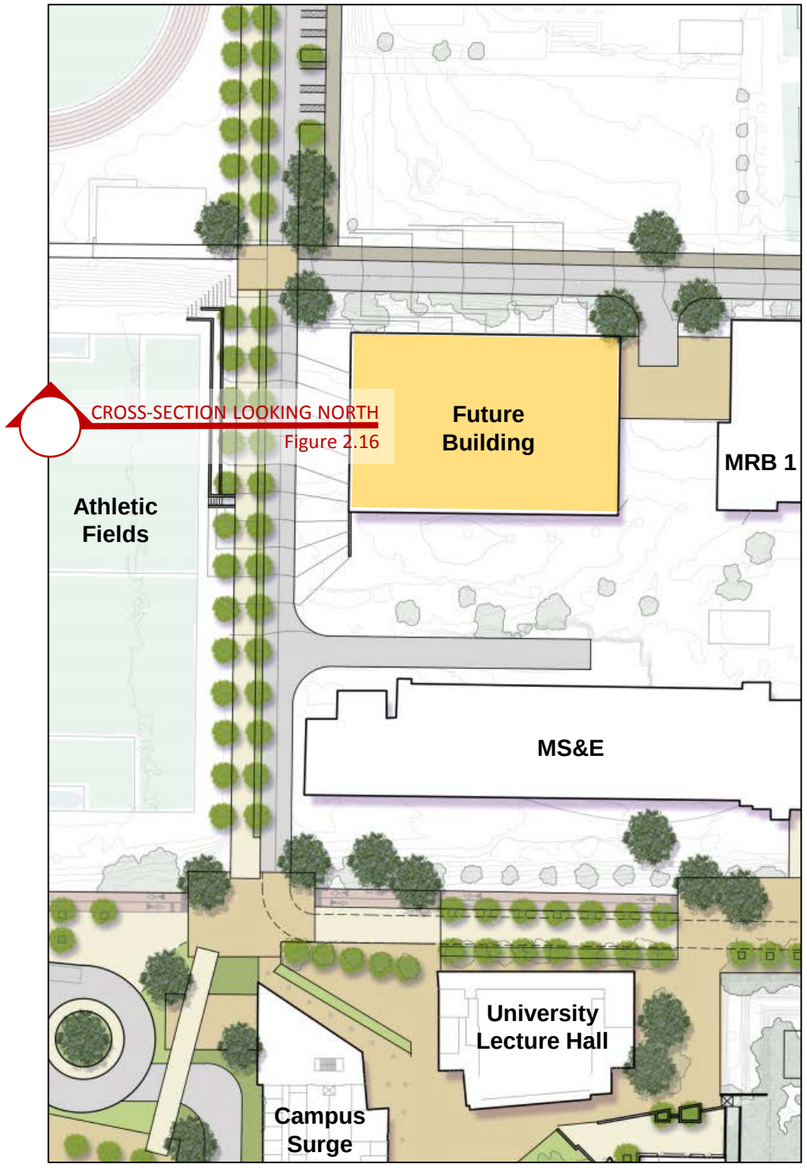


Figure 2.17 – South Recreation Mall

2: RECREATION MALL

COMPONENT 2a: MOBILITY HUB TO MRB1 SERVICE DRIVE (SOUTH RECREATION MALL)

Proposed Improvements

For the South Recreation Mall between Mobility Hub and MRB1 service drive, existing topography presents a challenge for creating an accessible pedestrian path. At the location just south of the MRB1 in particular, the existing grades slope steeply in two directions: north-south and east-west. By modifying the grade and adding tiered planters that serve as a retaining wall to mitigate the grade change to the athletic fields, a continuous path with gentle slope is provided.

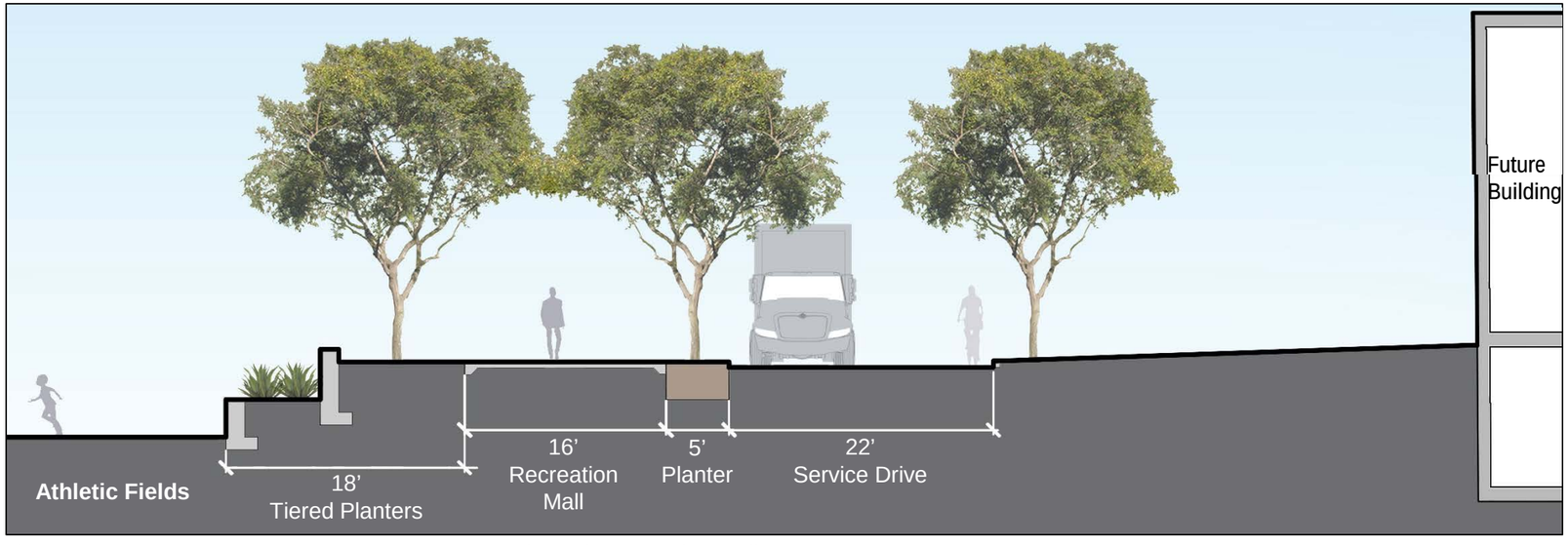


Figure 2.18: CROSS-SECTION LOOKING NORTH through Recreation Mall

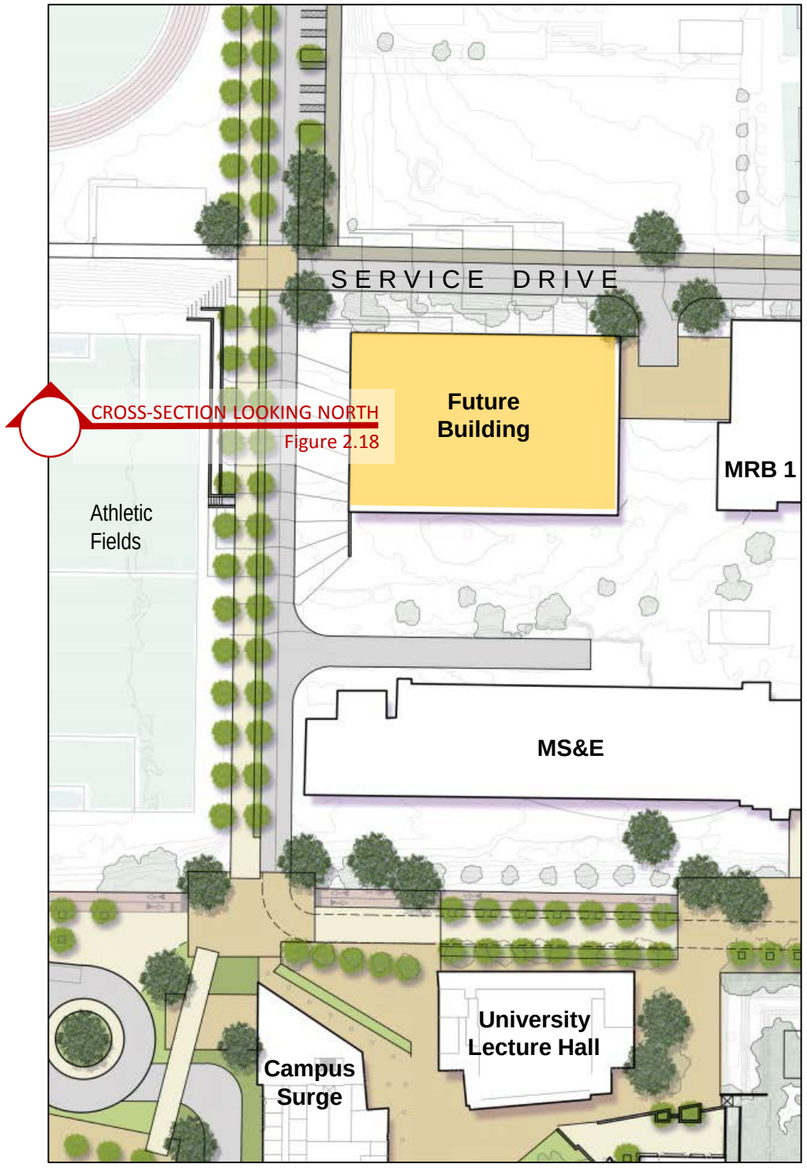


Figure 2.19 – Concept Plan detail; South Recreation Mall

2: RECREATION MALL

COMPONENT 2b: MRB1 SERVICE DRIVE TO LINDEN STREET (NORTH RECREATION MALL)

Proposed Improvements

The North Recreation Mall between MRB1 service drive and Linden Street, needs to also provide parking for the Student Recreation Center and additional accessible parking spaces to serve MRB1 and core campus. Currently, parking stalls in Lot 25 (both regular and accessible) only provide direct access to the Student Recreation Center. In the proposed Recreation Mall design, a two-way vehicular drive and perpendicular parking (east side only) is planned along the pedestrian mall. Vehicular and pedestrian paths remain separated to minimize circulation conflicts.

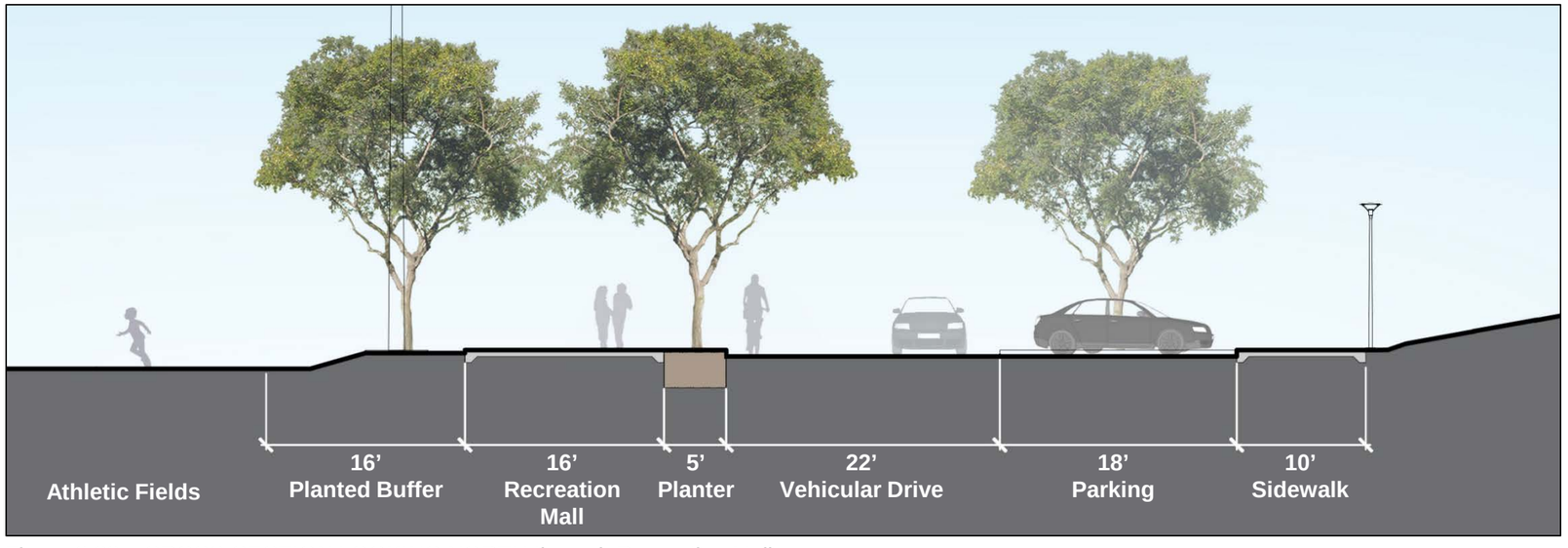


Figure 2.20 – CROSS-SECTION LOOKING NORTH through Recreation Mall

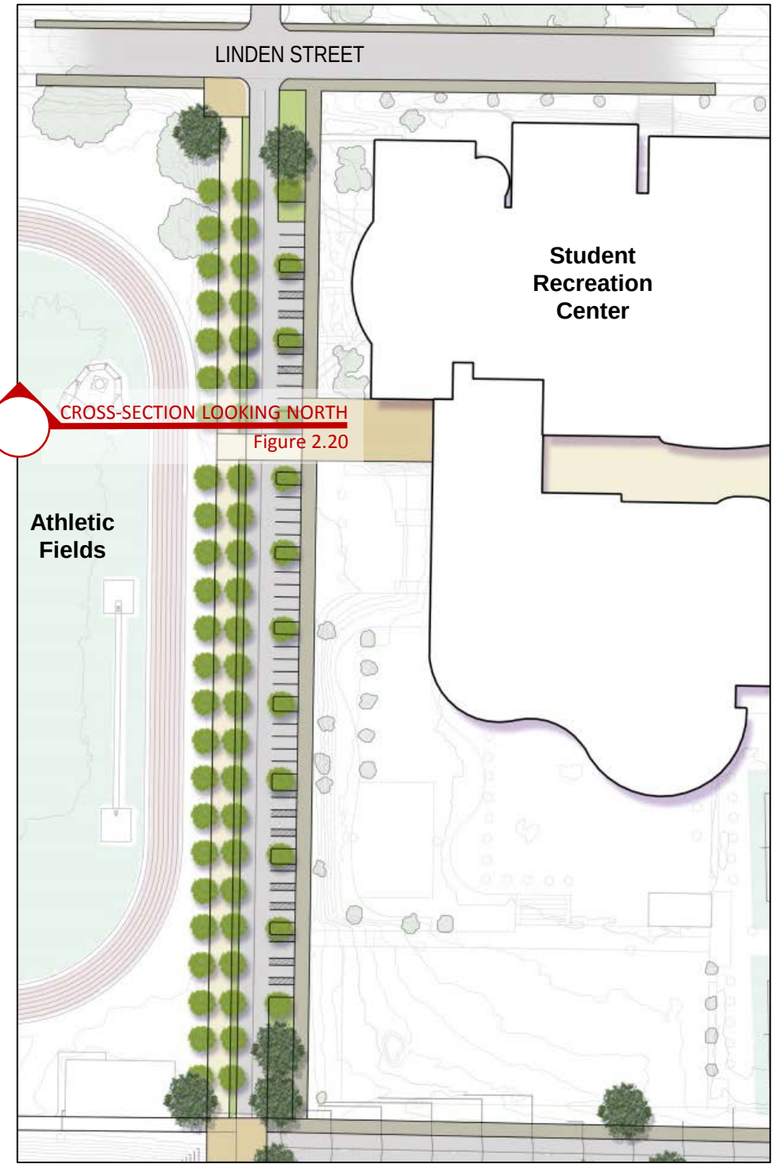


Figure 2.21 – North Recreation Mall

3: STUDENT HOUSING CONNECTION

Existing Condition & Issues

The Pentland Hills Residential Halls provide on-campus housing to a large student population. From the housing area, students walk, bike, and skateboard down a hill, crossing North Campus Drive to reach the central campus. However, the existing path to campus is narrow and unsafe. One side of the sidewalk is Lot 15 while the other side is an unprotected steep ravine. At the bottom of the hill where the sidewalk meets North Campus Drive, the intersection is an all-way stop. A high volume of pedestrians and bicyclists coming down the hill at high speeds cross paths with vehicles traveling on North Campus Drive, resulting in pedestrian and vehicular conflicts.

Issue: Narrow pedestrian path leading to campus

Issue: Narrow pedestrian path to Pentland Hills

Issue: Unsafe pedestrian path along arroyo

Issue: Pedestrian and vehicular conflict at North Campus Drive

3: STUDENT HOUSING CONNECTION

Goal

Create a safe and attractive connection from Pentland Hills Residential Halls to central campus

Opportunities

Supplement existing conditions with infrastructure improvements to enhance safety at the North Campus Drive intersection:

- Create wider pathway for large pedestrian volume
- Improve crosswalk markings and traffic signal at North Campus Drive intersection
- Install rumble strips to slow bicycle traffic
- Align crosswalk and entry to central campus

Figure 2.22 – Existing unsafe conditions at intersection with North Campus Drive

Figure 2.23 – Proposed improvements at intersection with North Campus Drive

3: STUDENT HOUSING CONNECTION

COMPONENT 3a: TRAIL & STAIRS

Proposed Improvements

To improve circulation and enhance safety, a system of trails and stairs with intersection improvements are proposed for connecting Pentland Hills Residential Halls and the central campus. The trails, designed as a wide, accessible pedestrian path, zigzags across the hill to mitigate grade changes. Stairs are also provided as a more direct path of travel up and down the hill.

As bicyclists approach the North Campus Drive intersection from the hill, rumble strips in the driveway will slow bicycle traffic. By installing traffic signals and crosswalks, vehicular and pedestrian traffic will be better managed for safety.

Figure 2.24 – Precedent Image from UCSD University Center Bike & Pedestrian Improvement Project

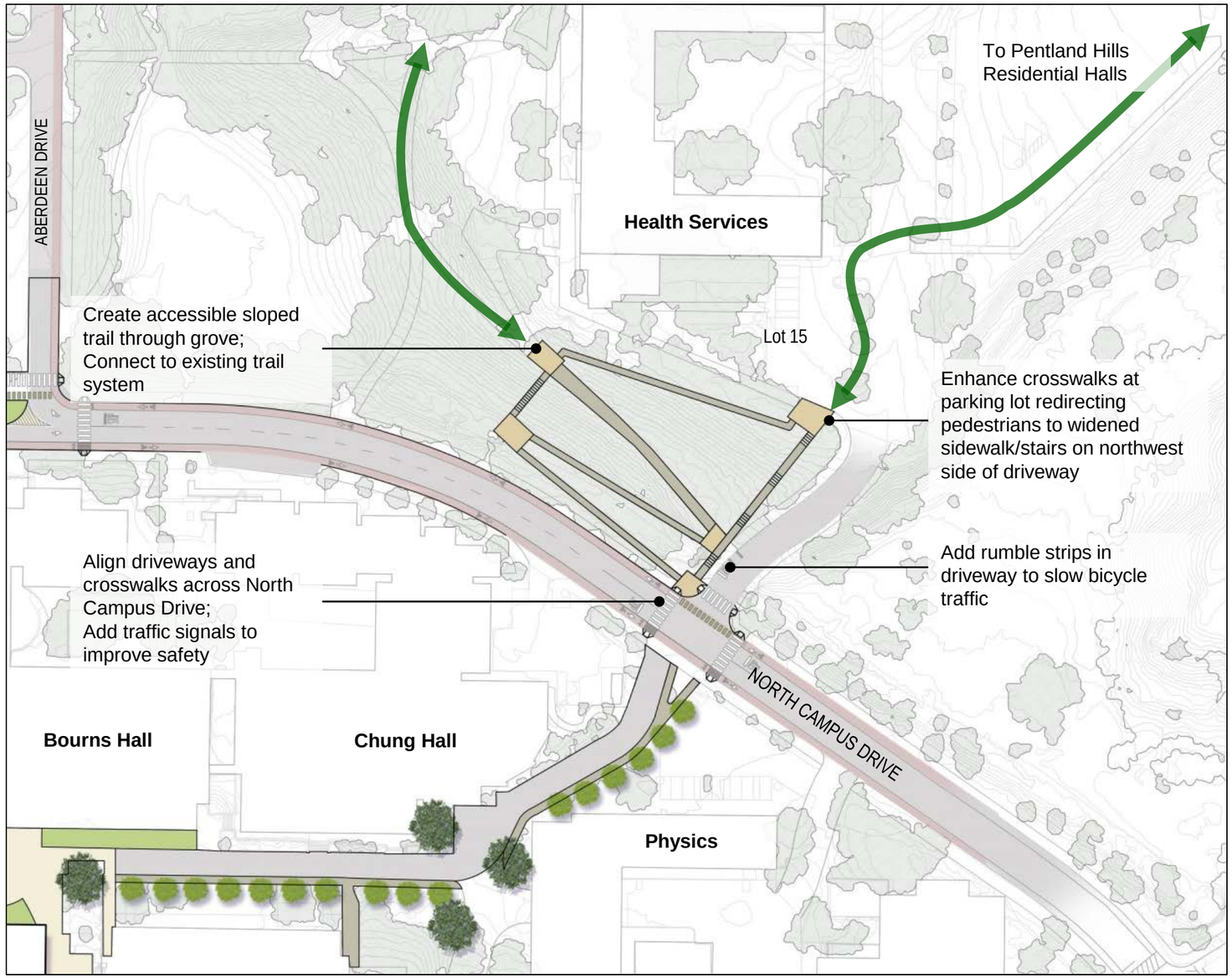


Figure 2.25 – Proposed Trail & Stairs through the wooded area

3: STUDENT HOUSING CONNECTION

COMPONENT 3a ALTERNATIVE: PEDESTRIAN BRIDGE

Proposed Improvements

An alternate proposal would be to connect Pentland Hills Residential Halls and core campus by a pedestrian bridge. Prefabricated bridges can be a cost-effective way to provide a safe path of travel over long distances for large volumes of people and bicyclists. From the south end of Lot 15, pedestrians enter the north end of the bridge on grade. The bridge, approximately 600’ long, spans over the slope and North Campus Drive, ramping down to meet the grade near Chung Hall at its south terminus. An elevator is provided south of North Campus Drive for accessibility.

Figure 2.26 – An example of a prefabricated pedestrian bridge at Jades Crossing (Courtesy of Nusteel Structures)

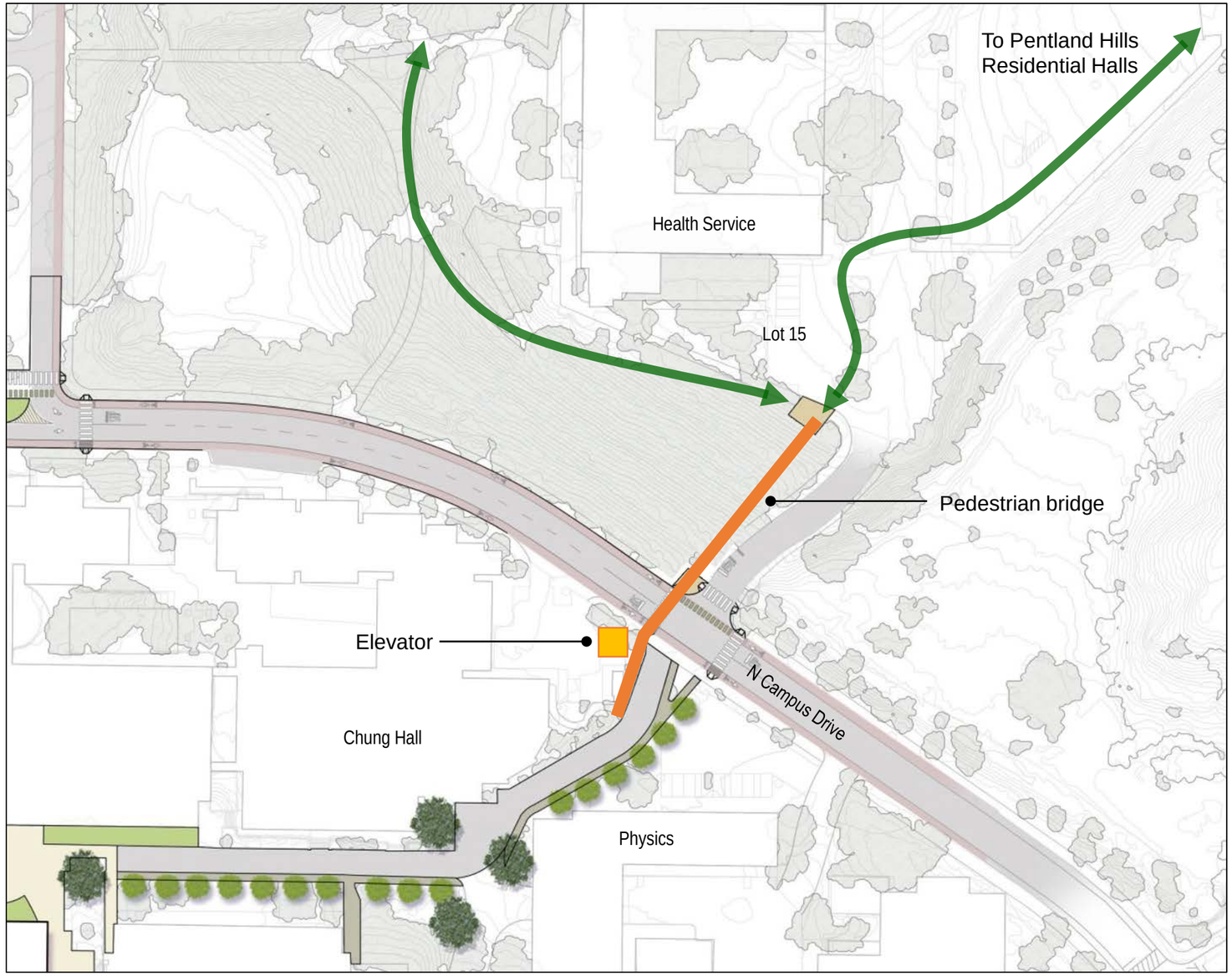
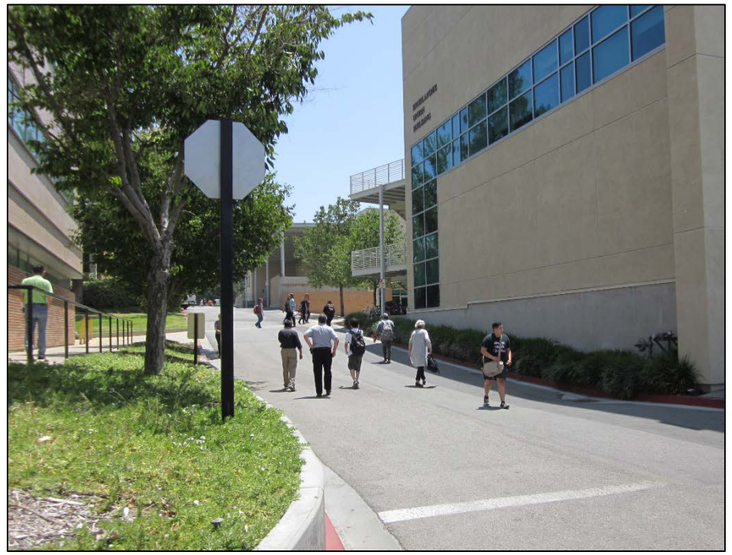


Figure 2.27 – Alternative approach; pedestrian bridge across North Campus Drive

4: SERVICE DRIVE IMPROVEMENTS

Existing Condition & Issues

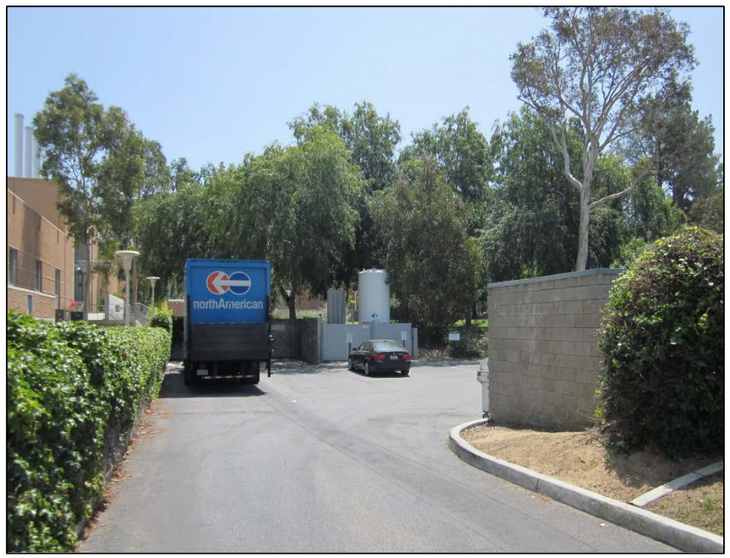
Significant pedestrian and vehicular conflict occurs at the east-west Service Drive from Lot 19 to the Pierce Hall loading area. This Service Drive is currently used by service vehicles to serve Campus Surge, Bookstore, HUB, HUB 2, and Pierce Hall. Pedestrians walking north-south cross paths with service vehicles traveling east-west in an unsafe manner. Additionally, the Service Drive is in alignment with a heavily travelled pedestrian connection extending from the student housing area in the east to the Athletics & Dance Building and beyond to the west. There is no separation of circulation between vehicles and pedestrians. Since the loading docks of the campus buildings are unlikely to be moved, improvements are needed for the service drive so service vehicles and pedestrians can safely share the path.



Issue: Service drive is a popular pedestrian connection into campus

Issue: Service vehicles routinely enter Commons Mall to turn around

Issue: Pedestrian walkway narrows at its entrance to Commons Mall



Issue: Service yard to Pierce Hall is visually detracting

4: SERVICE DRIVE IMPROVEMENTS

Goal

Improve safety on east-west connection between HUB / Pierce Hall / North Campus Drive

Opportunities

Although constrained by existing service dock locations, the Service Drive can be improved for safety:

- Reduce pedestrian & service vehicle conflicts
- Create dedicated pedestrian sidewalk
- Install marked bike path

Figure 2.28 – Existing Condition

Figure 2.29 – Proposed improvements to service drive separating pedestrian and service vehicle movement

4: SERVICE DRIVE IMPROVEMENTS

Proposed Improvements

As a mixed circulation zone for service vehicles and pedestrians, the Service Drive can be improved by separating vehicular and pedestrian circulation. This is achieved by adding a sidewalk to encourage pedestrians to stay away from the 22’ driving lane. In addition, a row of trees buffer the sidewalk from vehicular traffic. In areas where pedestrians cross the Service Drive, such as between Campus Surge and the Gateway Plaza, crosswalks are provided for safety.

Trees are also used to separate the Pierce Hall loading dock driveway from the east-west pedestrian mall, which transitions into a pedestrian sidewalk toward North Campus Drive and the eastern student housing area beyond. The shared pedestrian path and Service Drive can be widened near the Future Building addition and loading dock reconfiguration.

At the southeast corner of the Bookstore, the covered walkway can be extended to the south to connect with HUB 2. The extended arcade provides a visual marker of the north-south pedestrian crossing to service vehicles traveling east-west.

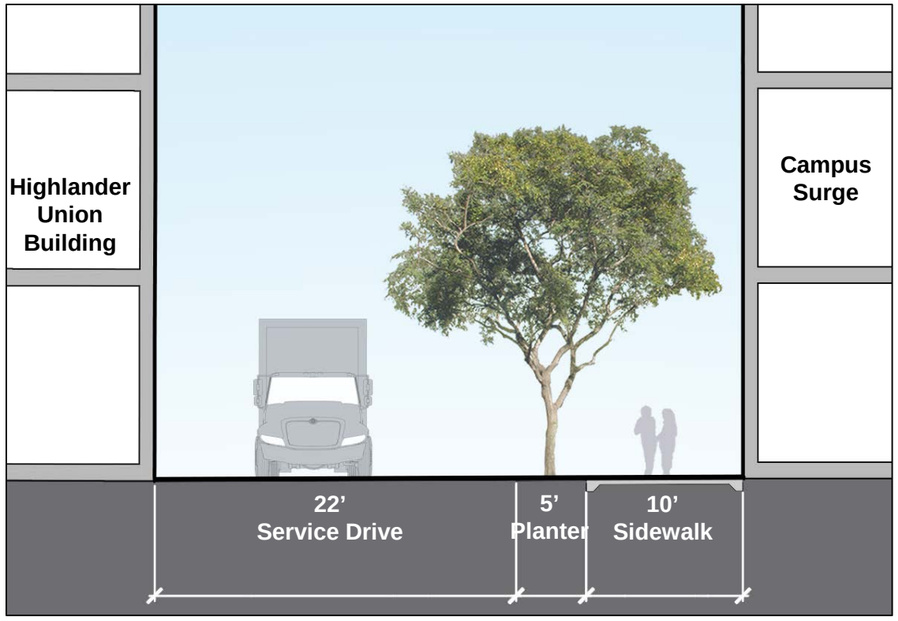


Figure 2.30 – CROSS-SECTION LOOKING WEST through Service Drive

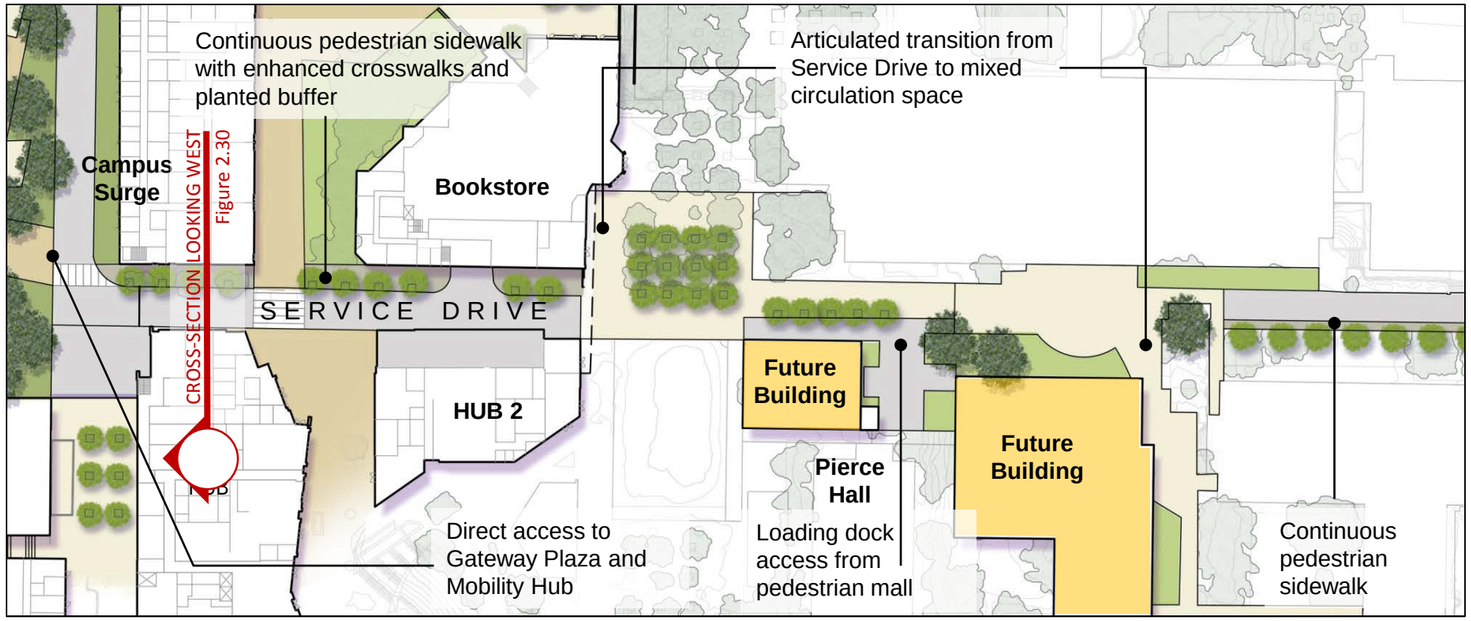


Figure 2.31 – Concept plan of improvements to existing service drive

5: ATHLETICS & DANCE BUILDING AND COSTO HALL/HIGHLANDER UNION BUILDING IMPROVEMENTS

Existing Condition & Opportunities

There are several existing elements obstructing north-south pedestrian circulation between North Campus Drive and Carillon Mall. The dysfunctional swimming pool and the west wing of the Athletics & Dance Building interrupt desired pedestrian circulation routes south of the proposed Mobility Hub. Circulation is further impaired by the 15’-20’ grade change between the Costo Hall/HUB elevation and the new Gateway Plaza off of the Mobility Hub. Currently, pedestrians are unable to navigate around the loading dock. Above the loading dock, circulation is pinched between Costo Hall and HUB. The combination of these factors create a major impediment to the north-south circulation to Carillon Mall.

Issue: Abandoned swimming pool prevents connection to campus core

Issue: Grade change between Costo Hall/Highlander Union Buidling and Campus Surge

Goal

Extend the Recreation Mall north-south campus connection south to Carillon Mall

Opportunities

Capitalize on the proposed Mobility Hub project to improve circulation in the area, strengthening connections to central campus:

- Create continuous pedestrian and bicycle path from Linden Street to Carillon Mall
- Mitigate grade changes at HUB loading dock
- Create new landscaped plazas off of Mobility Hub to enhance the gateway experience

Issue: No access to proposed UCR Mobility Hub from Costo Hall

Issue: Constrained circulation between Costo and HUB

5: ATHLETICS & DANCE BUILDING AND COSTO HALL/HIGHLANDER UNION BUILDING IMPROVEMENTS

Proposed Improvements

As the proposed Mobility Hub will transform the surrounding area into a campus gateway destination, pedestrian circulation can be improved with renovations to the Athletics & Dance Building, Costo Hall, and HUB. The north and south ends of the Athletics & Dance Building can be renovated into lobby spaces with ground floors that open onto the new Gateway Plaza to the north and existing entry plaza to the south . By removing the dysfunctional swimming pool and west wing, tiered plazas and stepped seating can be constructed to mitigate the grade change, creating a new north-south pedestrian path that extends from the Mobility Hub through the Gateway Plaza to Carillon Mall. A new elevator off of Athletics & Dance Building's north lobby provides access to the upper level of the tiered plazas.

By creating a new deck over the existing HUB service dock, there are opportunities to locate a Future Building and Overlook Plaza. Stairs between the Future Building and Costo connect the higher Overlook Plaza, on grade with Carillon Mall and HUB Plaza, with the tiered plazas below. The series of plazas complete the north-south connection that terminates at Carillon Mall.

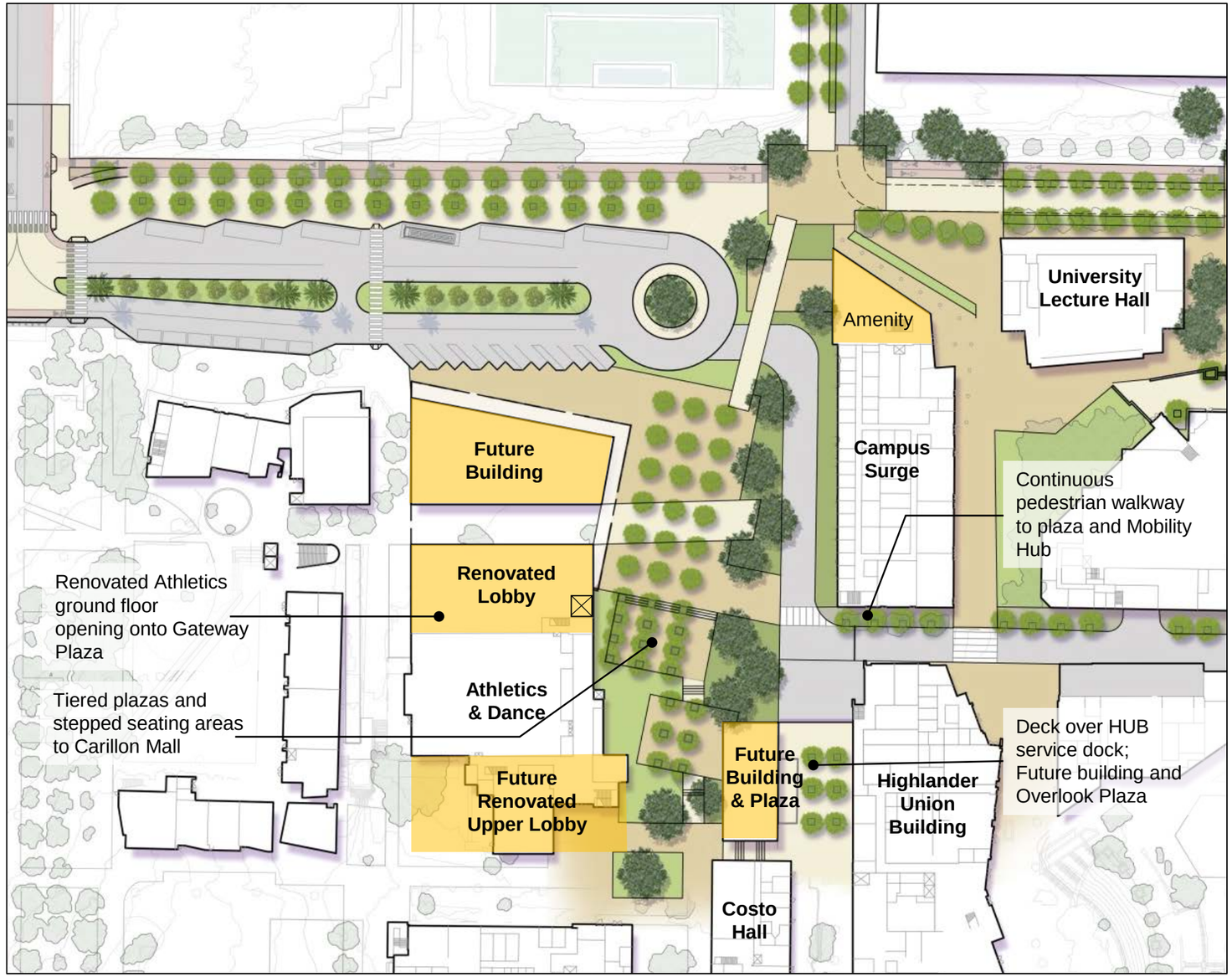


Figure 2.32 – Concept plan of area showing potential new buildings, building renovations and additions and the creation of Gateway Plaza

5: ATHLETICS & DANCE BUILDING AND COSTO HALL/HIGHLANDER UNION BUILDING IMPROVEMENTS

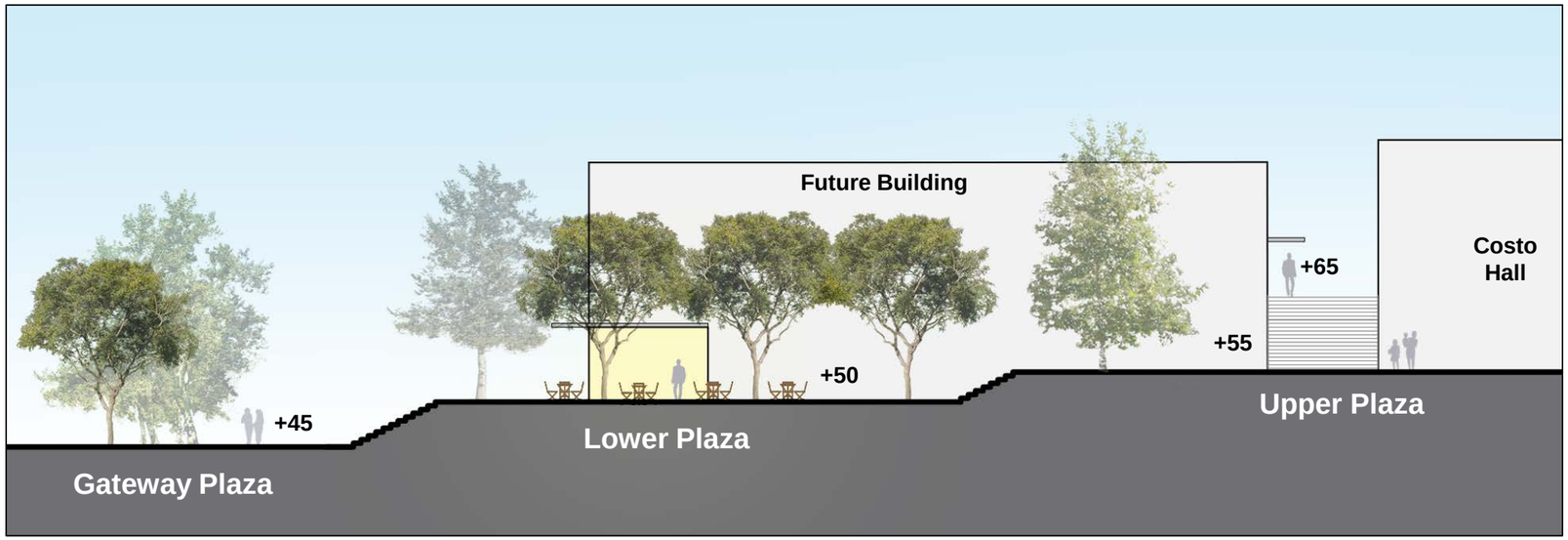


Figure 2.33 – CROSS-SECTION LOOKING EAST through Lower and Upper Tiered Plazas

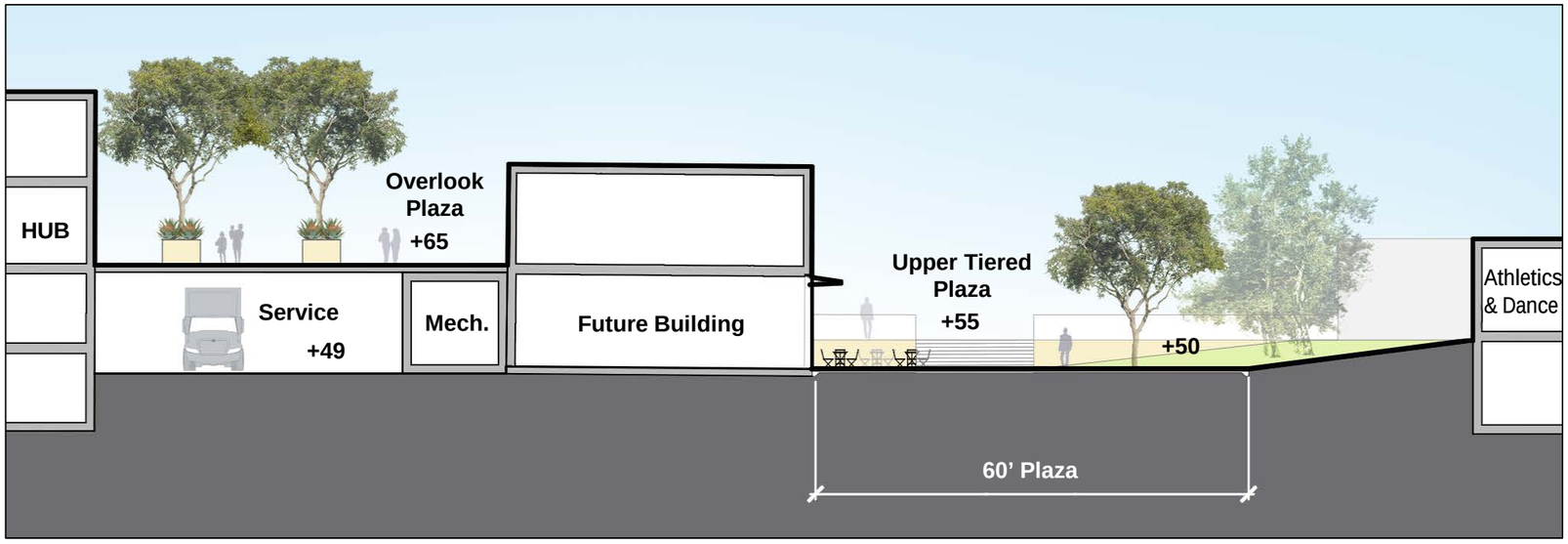


Figure 2.34 – CROSS-SECTION LOOKING SOUTH THROUGH Future Building and Overlook Plaza above HUB Service Dock

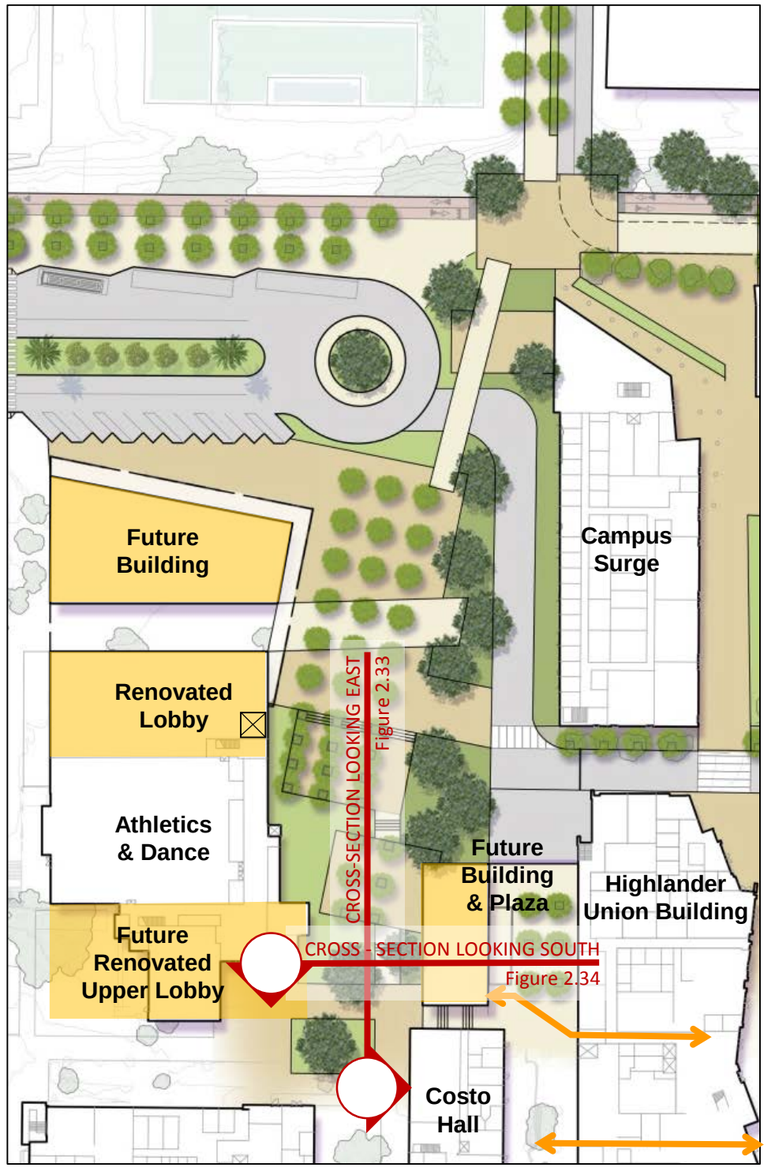


Figure 2.35 – Building Renovations & New Plazas

PROPOSED PROJECT COMPONENTS SUMMARY

2b: North Recreation Mall
- Addition of 16’ sidewalk with 5’ planting area
- Restriping of lanes for sharrow use
- Restriping of parking
- Allowance of 70 new trees
- Realign curb and driveway entry
- New tree planting islands in parking area

2a: South Recreation Mall
- New 22’ service and fire drive including major grading and sharrow markings
- 16’ sidewalk with 5’ planting area
- Two retaining walls (creating a tiered planting area)
- Allowance of 40 new trees
- Temporary graded transition at future building site

1a: Mobility Hub
- Six bus passenger waiting areas with site furnishings
- Improved crosswalks and bike markings on Canyon Crest
- Six bus spaces, 10 ADA parking spots, drop off area
- Plaza by Campus Surge and relocation of service drive entry to end of Mobility Hub
- Allowance of 50 new canopy trees, 10 new palms

1a: University Avenue Streetscape
- New planted median
- Widening of sidewalks on both sides
- Allowance of 75 new canopy trees and 25 new palms
- Restriping of car and bicycle lanes
- Gateway arroyo planting

1d, 2c: Campus Surge Renovation and Gateway Plaza with Future Building
- New deck over loading dock
- New plaza connecting lower level to upper level
- New future building
- Allowance of 60 new trees
- Opening of bottom floor of Surge to plaza level with glass

5: Athletics & Dance Building and Costo Hall/Highlander Union Building Improvements
- Interior renovation of existing athletics building
- Demo of athletics building/pool
- New deck over HUB loading dock

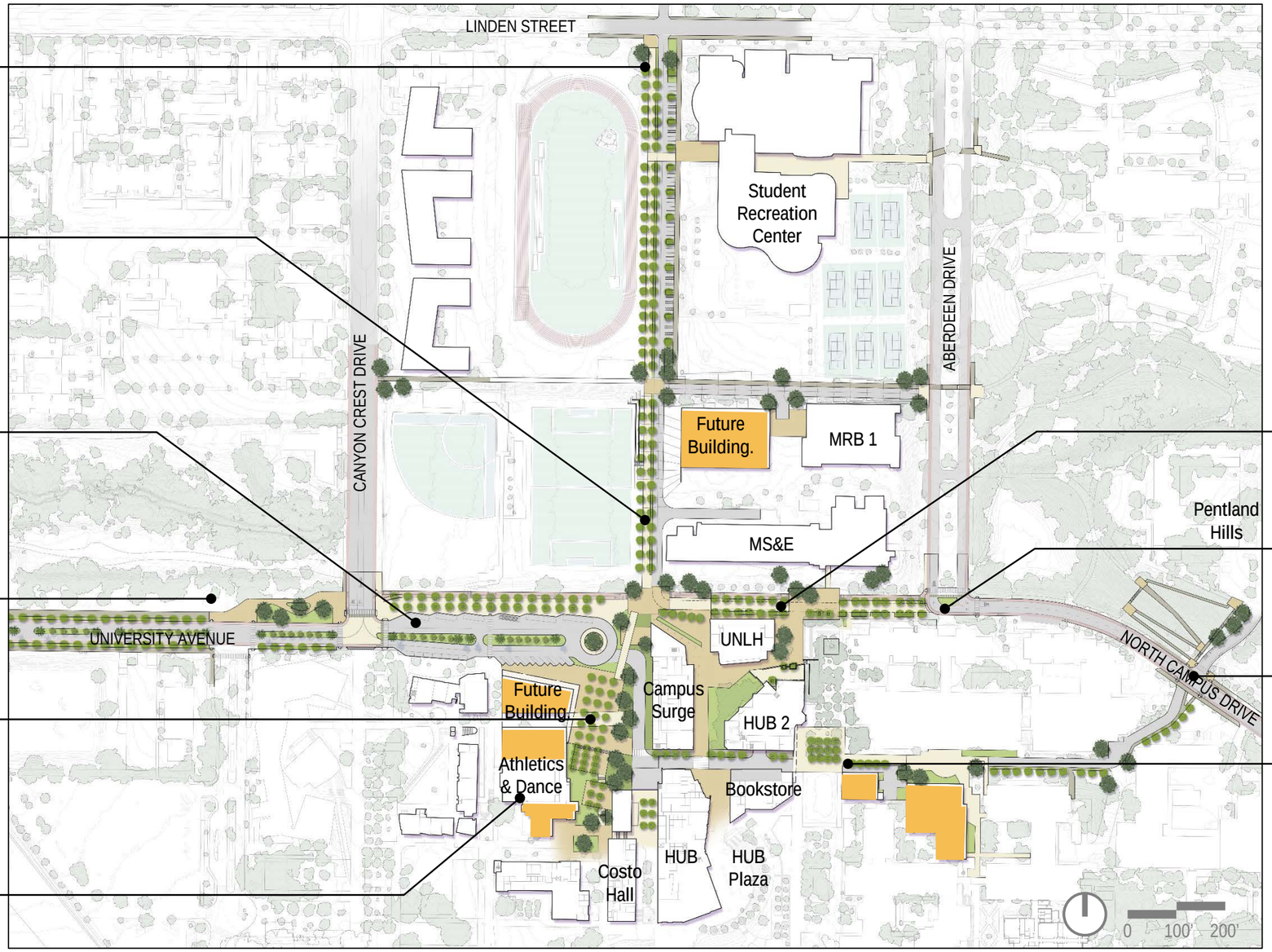


Figure 2.3 – Project Components Summary

1c: North Campus Drive / Mall
- Move curb and add paving enhancements to create a woonerf
- Dedicated bike route with painted markings
- Allowance of 30 new trees with grates
- Extension of paved area at plaza
- 1 exterior elevator (2 doors)

1b: North Campus Drive / Mall to Aberdeen Intersection
- New intersection crossing markings
- Allowance of 20 bollards
- Curb extension at median to tighten turning radii

3: Student Housing Connection
- New pedestrian connection to proposed housing
- Upgraded crosswalks and bike lane markings

4: Service Drive Improvements
- New sidewalk south of Surge and Bookstore
- New sidewalk on south side of service drive from North Campus Drive to Pierce Hall
- Breaking through of Bookstore arcade wall to connect sidewalks
- Enhanced paving at crosswalks

3.0

CIRCULATION

SERVICE VEHICULAR CIRCULATION

A primary goals of re-routing service vehicle circulation is to minimize conflicts with pedestrian circulation. As much as possible, service vehicle routes are kept away from areas with heavy pedestrian traffic and separated from pedestrian traffic in other areas. The proposed Recreation Mall has been designed to allow pedestrian and vehicular traffic. Service vehicles enter from the north on Linden Street to access the MS&E and the MRB1/Future Building shared service docks. This route reduces service vehicle traffic on Aberdeen Drive and pedestrian-vehicular conflict at the Gateway Plaza adjacent to the Mobility Hub, and eliminates all service vehicle traffic on North Campus Mall.

Understanding that the service dock locations for Campus Surge, HUB, HUB 2, Bookstore, and Pierce Hall are fixed, a second service route enters from University Avenue and Mobility Hub into the service drives located west and south of Campus Surge. Continuous sidewalks lined by trees buffer the pedestrian traffic from service vehicles.

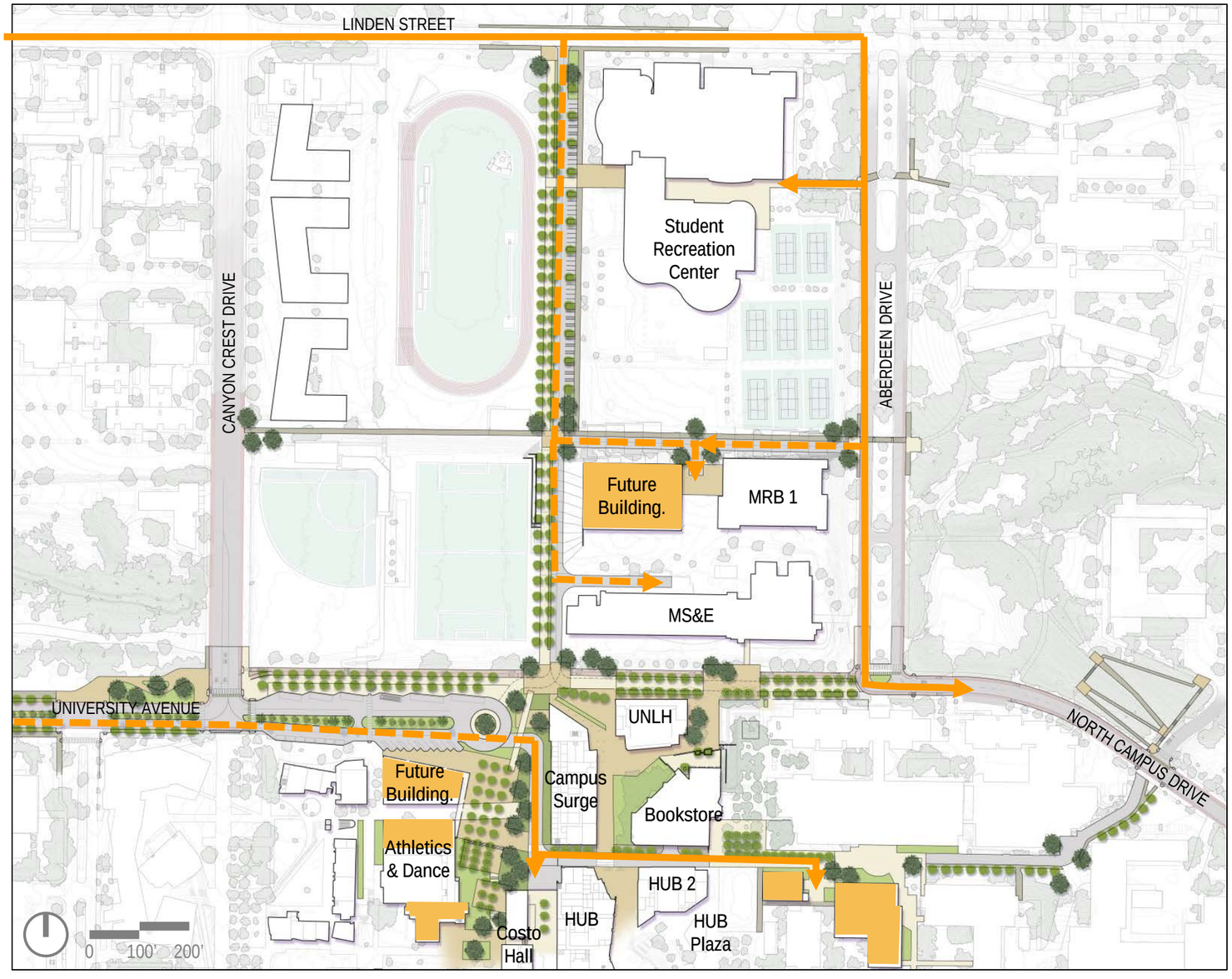


Figure 3.1 – Existing and proposed service vehicle circulation routes

EMERGENCY VEHICLE CIRCULATION

Emergency vehicles primarily use service drives along the Recreation Mall and west/south of Campus Surge. In addition, removable bollards at the east end of the North Campus Mall allow emergency vehicles to drive on the pedestrian path when necessary while keeping all other vehicular traffic away from the mall.

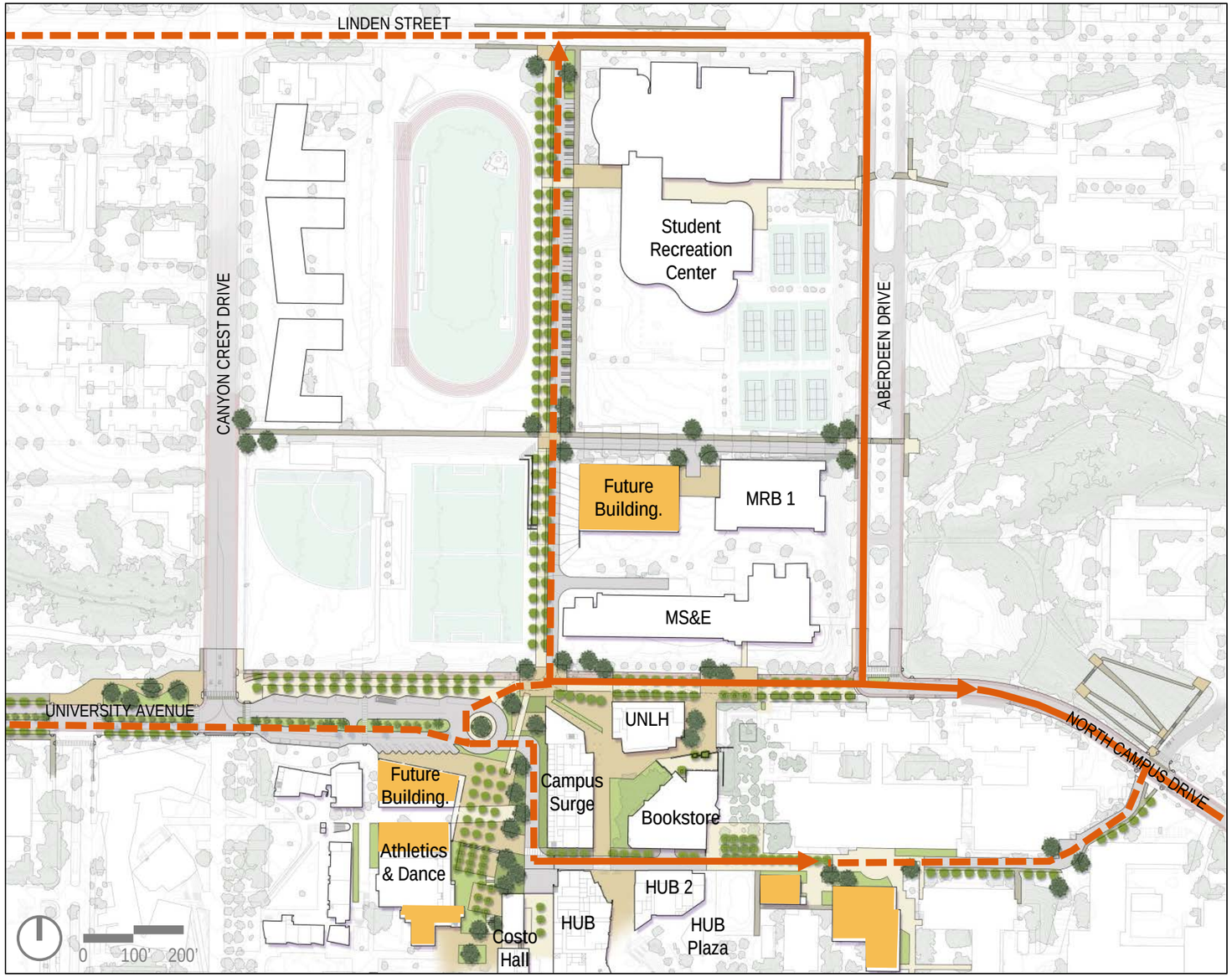


Figure 3.2 – Emergency Vehicular Circulation

BICYCLE CIRCULATION

Proposed bicycle routes connect with existing bicycle routes, enhancing the overall bicycle circulation system for the campus. New pedestrian connections such as the Recreation Mall and North Campus Mall are designed with dedicated bicycle paths separated from pedestrian paths, minimizing conflicts. New bicycle racks are placed along the proposed route and at the Mobility Hub to support the bicycle network.

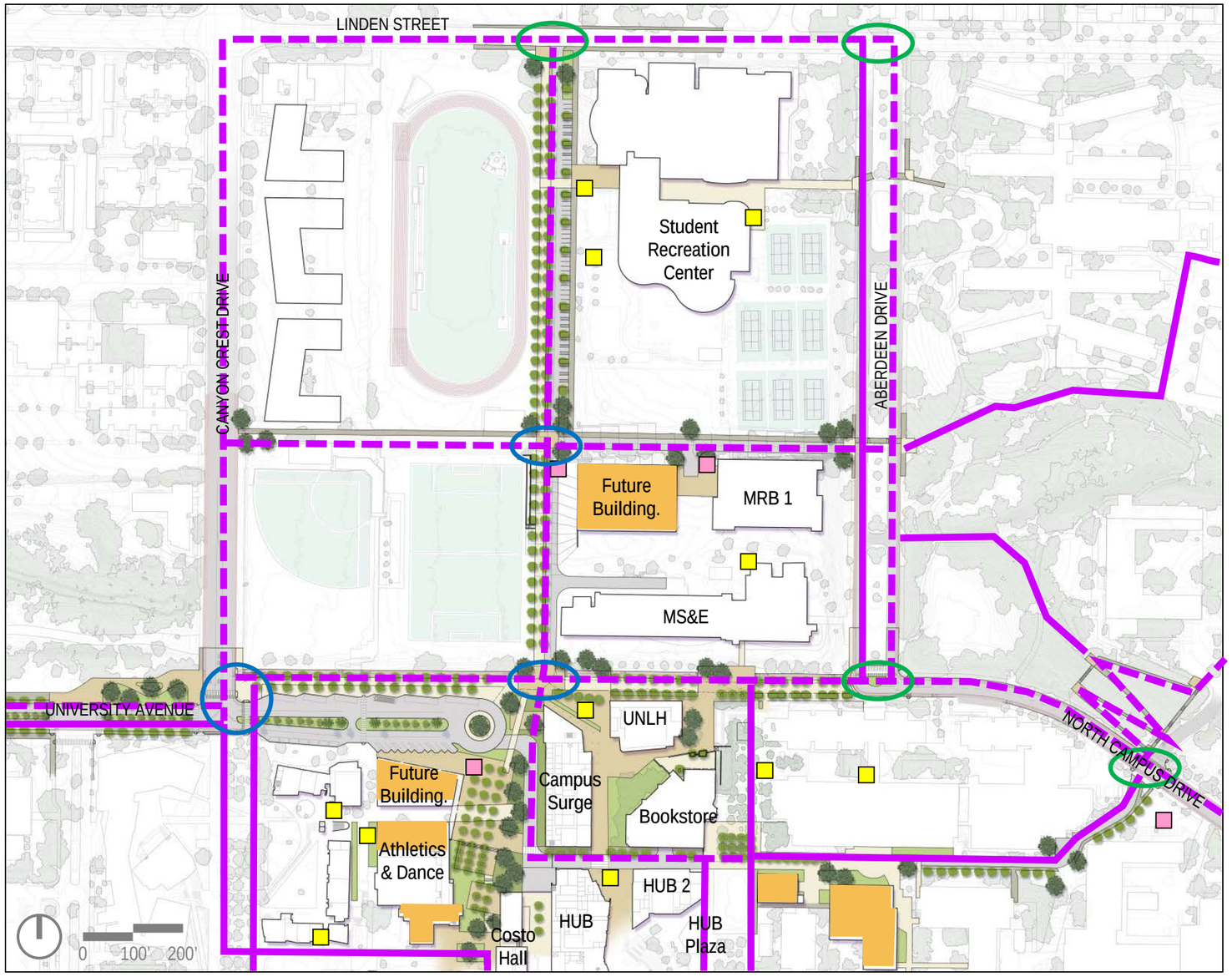


Figure 3.3 – Bicycle Circulation

4.0

CONCEPTUAL COSTS

PROJECTED COSTS

1. **Mobility Hub to Aberdeen Drive Intersection: $15,090,000**
   - 1a: Mobility Hub with University Avenue Streetscape
   - 1b: North Campus Drive / Mall to Aberdeen Intersection
   - 1c: North Campus Drive / Mall
   - 1d: Campus Surge Renovation

2. **Recreation Mall: $6,720,000**
   - 2a: South Recreation Mall
   - 2b: North Recreation Mall
   - 2c: Gateway Plaza with Future Building

3. **Student Housing Connection: $4,760,000**
   - 3a: Trail and Stairs
   - 3b: Pedestrian Bridge

4. **Service Drive Improvements: $2,050,000**

5. **Athletics & Dance Building and Costo Hall/Highlander Union Building Improvements: $28,500,000**
   - 5a: Athletics & Dance Building renovations
   - 5b: Deck over HUB loading dock

LEGEND

- 1 Mobility Hub to Aberdeen Drive Intersection
- 2 Recreation Mall
- 3 Student Housing Connection
- 4 Service Drive Improvements
- 5 Athletics & Dance Building and Costo Hall/Highlander Union Building Improvements

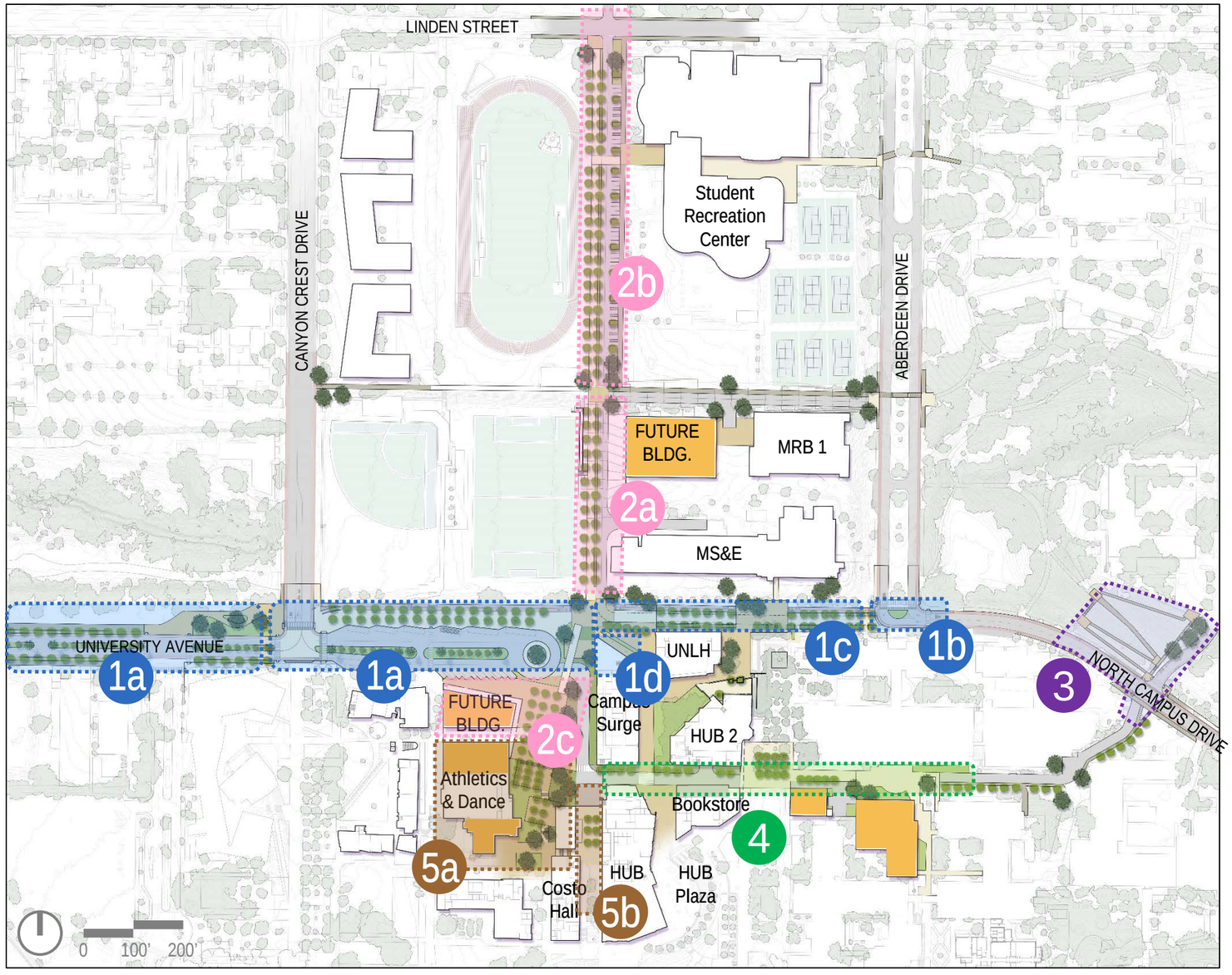


Figure 4.1 – Project Components

PROJECTED COMPONENT COSTS

PROJECTS & COMPONENTS	CONSTRUCTION COST	PROJECT COST
1 – MOBILITY HUB TO ABERDEEN DRIVE INTERSECTION	**$12,060,000**	**$15,090,000**
1a – Mobility Hub	$4,250,000	$5,320,000
1a - University Avenue Streetscape	$3,120,000	$3,900,000
1b – North Campus Drive / Mall to Aberdeen Intersection	$190,000	$240,000
1c – North Campus Drive / Mall	$2,320,000	$2,900,000
1d – Campus Surge Renovation	$2,180,000	$2,730,000
2 – RECREATION MALL IMPROVEMENTS	**$5,370,000**	**$6,720,000**
2a – Middle Recreation Mall Added Sidewalk to Service Drive	$1,500,000	$1,880,000
2b – North Recreation Mall Service Drive / Pedestrian Connection	$1,640,000	$2,050,000
2c – Gateway Plaza (not including Future Building)	$2,230,000	$2,790,000
3 – STUDENT HOUSING CONNECTION	**$4,040,000**	**$4,760,000**
3a - Pedestrian Trail and Stairs	$330,000	$420,000
3b - Pedestrian Bridge	$3,710,000	$4,340,000
4 – SERVICE DRIVE IMPROVEMENTS	**$1,640,000**	**$2,050,000**
New Sidewalk South of Campus Surge and Bookstore	$1,640,000	$2,050,000
5 – ATHLETICS & DANCE BUILDING AND COSTO HALL/HIGHLANDER UNION BUILDING CONNECTION	**$22,790,000**	**$28,500,000**
5a – Athletics & Dance Building Renovation	$21,060,000	$26,330,000
5b – New Deck Over HUB Service Dock (not including Future Bldg.)	$1,730,000	$2,170,000
TOTAL	**$45,900,000**	**$57,120,000**

October 2016. Construction Cost includes design contingency, escalation for a 5-year implementation window (2017-2021), site requirements, general conditions, fees, bonds & insurance, and phasing costs; Project Cost includes UCR costs.

5.0

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ACKNOWLEDGEMENTS

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Kim Wilcox - Chancellor
Paul D'Anieri – Provost and Executive Vice Chancellor
Maria Anguiano – Vice Chancellor of Planning and Budget
Ron Coley – Vice Chancellor Business and Administrative Services

UCR Stakeholders

Lindy Fenex – Director, Recreation/Student Recreation Center
Irma Henderson – Director, Transportation and Parking Services
Toshio G. Ishida – Assistant Director of Landscape & Refuse Service, Physical Plant Grounds
Rob Gayle – Campus Architect (Retired)
Tamica Smith Jones – Director of Athletics
Jacqueline E. Norman – Principal Architect
Andy Plumley – Assistant Vice Chancellor, Housing Services
Andrew Stewart – Superintendent, Transportation & Parking Services
James Sandoval – Vice Chancellor, Student Affairs

UCR Capital Asset Strategies

Jeff Kaplan – Associate Vice Chancellor, Capital Asset Strategies
John O. White – Assistant Vice Chancellor, Capital Planning
R. Umashankar – Principal Physical Planner
Jaime Engbrecht – Planner
Jon Harvey – Principal Planner
Tricia Thrasher – Principal Environmental Planner

Consultant Team

HKS – Campus Planning + Project Management
Crystal Barriscale – Principal Planner
Fai Chong – Senior Planner

SPURLOCK – Landscape Architecture
Leigh Kyle – Principal Landscape Architect

TBD Consulting – Cost Estimating
Michael Teggin – Construction Cost Estimator