



# 2

## Urban Design

## 2.1. Campus Geometry

The geometric configuration of the project shall reflect the prevailing geometry of the precinct (whether buildings or building groups are of a picturesque, classical or other arrangement) while also respecting the geometry of the campus as a whole and those elements which cross or tie together the various precincts. This is affected by orienting buildings and spaces along existing or extended axes and/or cross-axes and by protecting important vistas or viewsheds created by the geometric arrangements of adjacent portions of the campus.

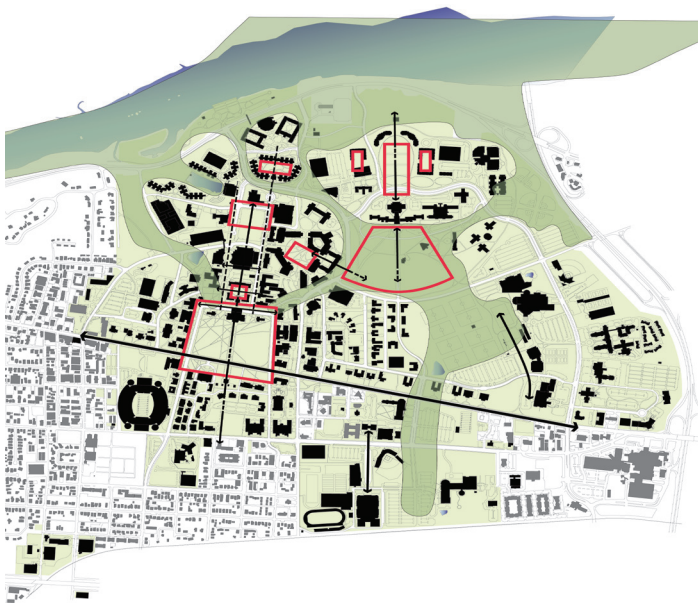


Figure 2: Campus Geometry

## 2.2. Open Space and Preservation

The following guidelines are intended to properly shape the creation of open spaces and improvement of existing spaces within the campus and to guide the treatment of natural areas within and at the edges of the campus. Buildings create edges for the open spaces by being carefully planned and designed around build-to lines.

## 1. Plazas and Courtyards

Plazas and courtyards represent those open spaces, other than lawns and quads, which are directly related to a building or group of buildings, generally serving as an entryway or gathering space. Plazas tend to be hardscaped, in contrast to lawns and quadrangles. Courtyards may be either hardscaped or softscaped and tend to have more enclosure provided by the building or buildings they serve. Plazas and courtyards shall include plantings to soften the space and provide scale and shade.



## 2. Lawns

Lawns vary in size depending on location and should be of a relatively continuous depth along a block. Additional lawn depth may be required where a vista is to be provided.

## 3. Quadrangles

Quadrangles shall be lined with background buildings and shall have a foreground building along one edge to create a visual focus to the space (see also §2.3).

#### 4. Streetscapes and Paths

Streetscapes and paths shall be designed to accommodate multi-modal circulation, landscaped to provide shade and comfort, and properly lighted for safety. Refer also to §2.5 for detailed standards.

#### 5. Vistas and Viewsheds

Examples of existing vistas and viewsheds include:

- axial vista between the Gorgas Library and President’s Mansion
- axial vista between Morgan and Smith Hall
- axial vista of Gorgas House along Colonial Drive
- open viewshed along the central greensward within the Cultural Campus
- open viewshed from north campus to the Black Warrior River

A. *Protect existing views.* Existing vistas and viewsheds shall be protected and no new structures shall be constructed that will interfere with sight lines.

B. *Create new views.* New vistas should be created through the construction of buildings in prominent locations such as the terminus of a viewshed, street, or axis of an open space.

#### 6. Natural Preservation Areas

Open spaces not to be used for gathering spaces or paths shall be preserved in a natural state or improved as needed to accommodate passive uses. These include the ravine, creek, riverfront, Marr’s Spring, and Palmer Lake. These areas shall be treated in accordance with the applicable sections of Chapter 5: Sustainability Guidelines.



### 2.3. Building Form and Disposition

The following guidelines are intended to ensure that the scale and arrangement of new buildings optimizes the design of usable, comfortably proportioned open spaces and streetscapes and minimizes the creation of remnant spaces.

#### 1. Building Form

A. *Scale.* The scale of new buildings on campus shall respect the scale of buildings within the precinct as well as that of the community edge, where adjacent or abutting. Buildings in a residential community should generally not be taller than three stories. In other precincts, buildings may exceed three stories or equivalent height.

B. *Massing.* Individual buildings shall be designed to avoid excessively deep footprints. This may be accomplished by designing large buildings as a cluster of smaller modules.

- For most building types, the typical module will be based around a double-loaded corridor (see prototypes below).
- Buildings shall be massed in accordance with their spatial purpose: whether to define the edges to space in the case of background buildings or to act as a focal point of a space in the case of foreground buildings (refer to the next section).

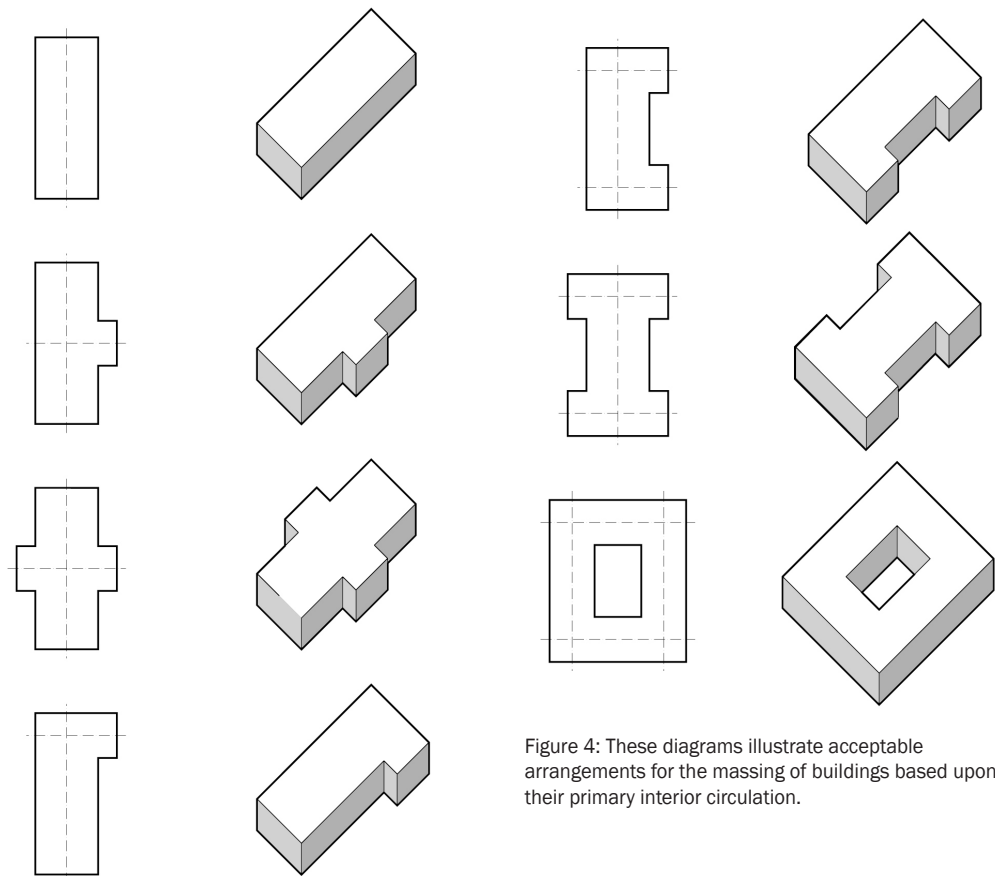


Figure 4: These diagrams illustrate acceptable arrangements for the massing of buildings based upon their primary interior circulation.

C. *Foreground and Background*

*Buildings.* The following guidelines are to be applied carefully within the Traditional Campus Realm to reinforce classical geometry and hierarchy and within residential communities to address axes and vistas of the larger campus and to create hierarchy and harmony around internal open spaces. More flexibility may be permitted within the Cultural Campus where each building may act as a foreground element within the landscape.

Buildings are categorized as foreground buildings, when they are of special importance (such as of a civic or historic nature or in a prominent location) or background buildings, when they are intended to be visually secondary to foreground buildings.

- Foreground buildings shall occupy sites at the end of viewsheds, streets, and major paths to create a special focal point terminating the view. This may be accomplished by orienting special building features such as entrances, cupolas, or towers toward the view.
- Open spaces immediately bordered on two or more sides by buildings, shall only have one foreground building, for which views are created and protected by the arrangement and modest, rhythmic façades of background buildings.
- In some cases, a building may act as a background element within a streetscape or other open space but also serve as a foreground element within another open space.



Above Left: Smith Hall terminates vista along Capstone Drive.

Above Right: Gorgas Library is the foreground building on the Quad.

Left: Nott Hall acts as a background building along Sixth Avenue enfronting the Quad.

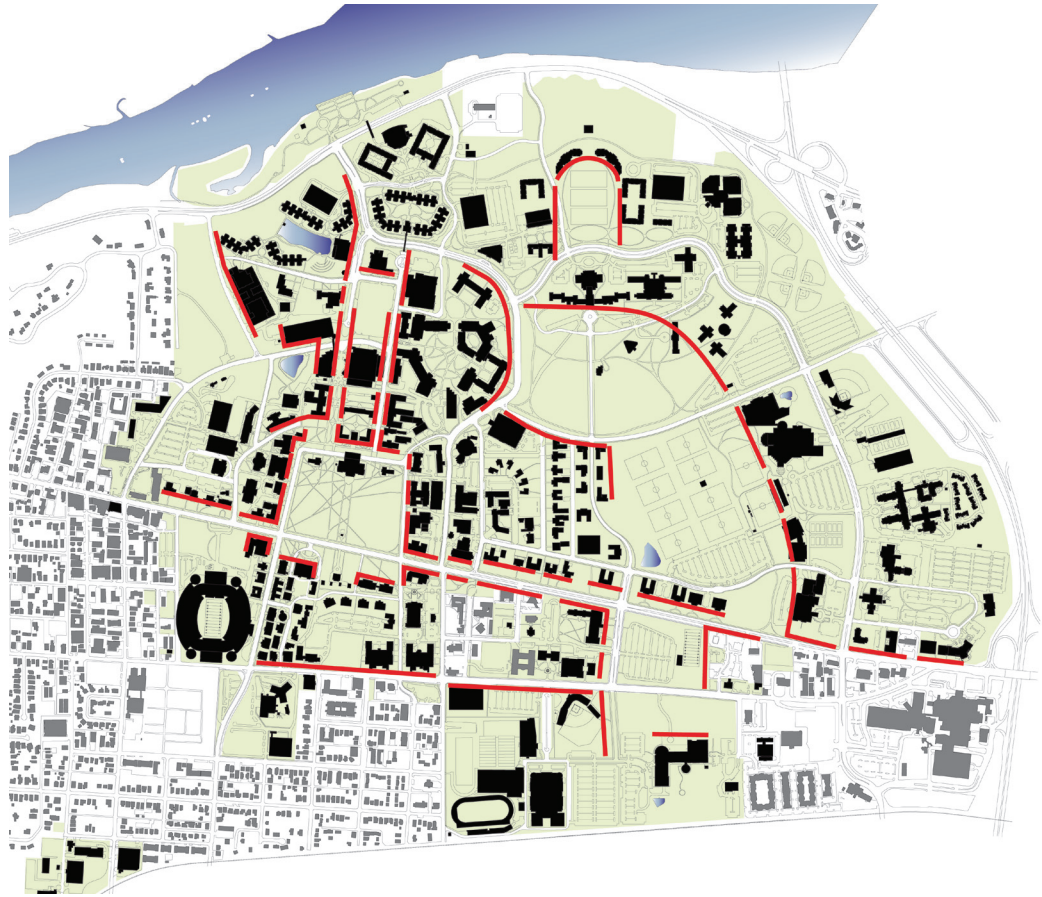
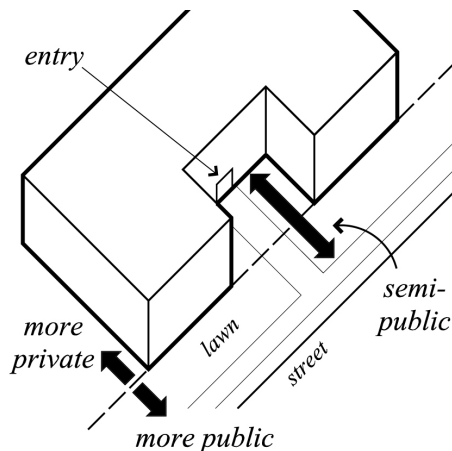


Figure 5: Build-to Lines

## 2. Orientation/Disposition

Buildings shall be located and arranged to create appropriate transitions between public, semi-public and private zones (see §2.6.3) and to provide enclosure to streets and open spaces. Buildings shall also be oriented to reduce energy consumption (see Chapter 5).

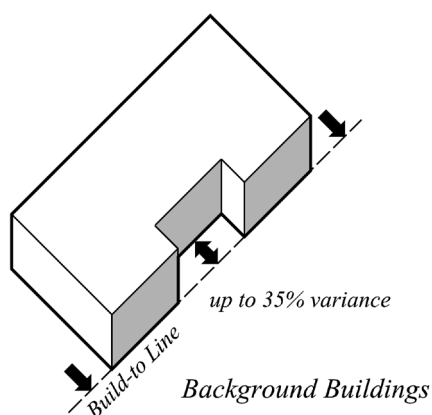


A. *Buildings to Enclose Space.* Each building in the Traditional Campus Realm and Residential Communities shall be positioned and its façade(s) designed to enclose adjacent open spaces and streetscapes and to frame views.

B. *Buildings within Spaces.* Generally, open spaces shall not be encumbered with buildings except in the Cultural Campus. However, certain buildings may be necessary and desirable to support the function(s) of an open space, such as pavilions or gazebos. Such buildings shall be designed to be transparent and shall be placed with respect to an intended axial relationship of the space.

C. *Build-To Lines.* Figure 5 represents streetscape and open space edges with required build-to lines where building edges shall be located to ensure that the adjacent space is properly framed by the building wall and transitions zones are properly defined through building and site design.

- The façade of foreground buildings may vary from the build-to line to allow for façade articulation.
- Background buildings shall not vary more than 35% of the façade span from the build-to line.
- Variation is measured in linear feet of the façade along the build-to line.



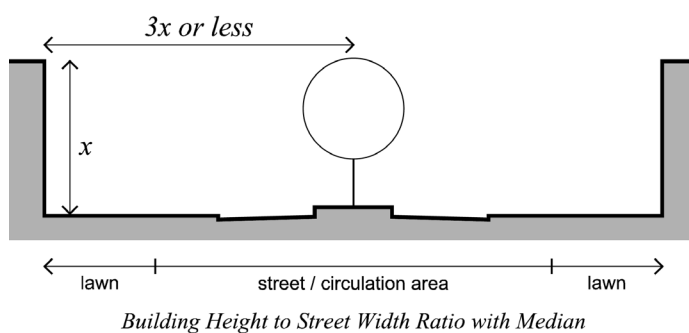
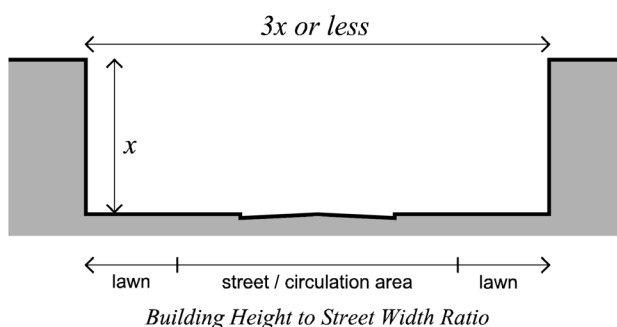
D. *Functional Relationship to Public Spaces.* To the degree possible, those uses within the ground level of buildings, located alongside an open space, streetscape or path, shall be more public in nature given the particular program for the building. This ensures a logical transition between the public/civic character of the open space or path and the uses and spaces within the building. This also provides “eyes on” the space (see also §2.6.1).

### 3. Relationships to Open Space

Within the Traditional Campus Realm and Residential Communities, building height shall be proportionate to the width of the adjacent streetscape or open space.

A. *Along Streets.* Buildings fronting on a street should create a building height to street width ratio of 1:3 or greater. This width is measured between the nearest façades on opposing sides of the street.

For exceptionally wide streets, street trees and/or landscaped medians can be used to achieve desirable ratios.



B. *Along Open Spaces.* When located adjacent to an open space, the designer shall strive to provide a building height to open space width ratio of 1:4 or greater. This width is measured between the outermost faces of opposing façades along the short axis of the space.

Desired scale can be achieved in wider spaces by providing a row of trees on either edge of the space.

## 2.4. Supplemental Conditions

The following guidelines apply to all areas of the campus where the described conditions exist.

### 1. Buildings at Community Edges

Along the community edge, building functions shall be designed to provide the most compatible relationship with surroundings. Designers should review the University Area Neighborhoods Specific Plan for additional guidance.

- A. *Use Impacts.* When directly abutting the community, how building uses impact immediate surroundings should be carefully considered. To minimize disruption, building entrances and areas of high activity shall be located toward the campus and away from the community.
- B. *Parking and access.* Parking structure entrances and driveways should be located away from city streets wherever possible.
- Parking shall be screened in accordance with §4.3.4.

- Parking decks located along the community edge should be carefully designed to fit into the campus and community context. When a deck site fronts on a city street, liner buildings or façades should be incorporated into the design to minimize visual incompatibility.

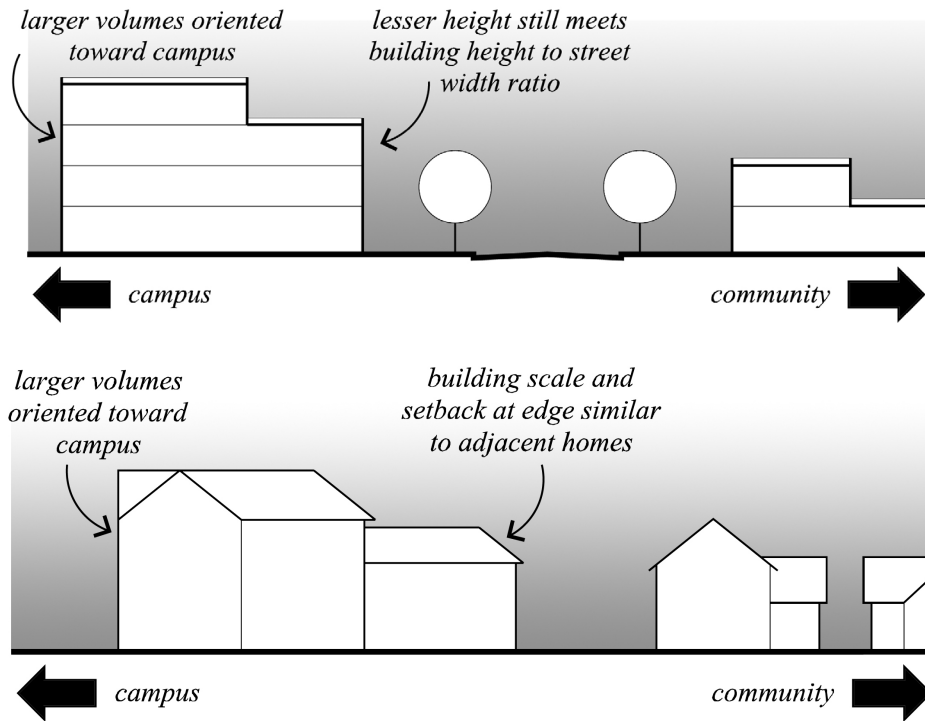
C. *Light and Noise.* Uses which generate light or noise that may be disruptive to adjoining community areas should be located away from the community and toward the interior of the campus. Light and noise shielding or buffering may also be appropriate in minimizing unwanted impacts (see §4.4).

### 2. Massing and Orientation at the Community Edge

Along the community edge, building massing and orientation shall be designed to provide the most compatible relationship with surrounding community areas.

- A. *Abutting Edges.* When directly abutting the community, building heights should not significantly exceed that of neighboring community buildings. Height differences shall be mitigated by orienting taller building masses toward the campus. Similarly, upper floors may be stepped back away from the street frontage.





B. *Adjacent Edges.* When adjacent but not abutting the community, such as facing from across a street, campus building heights may exceed the height of adjacent community buildings but should not overpower views of the street. Similar methods as described in A above should be used to minimize scale incompatibility.

### 3. Riverfront

#### A. *Building Orientation.*

- Buildings on the south side of Jack Warner Parkway shall be oriented to maximize views of the river.
- The riverfront area north of the Parkway shall be maintained as open space and development shall be limited to small buildings supporting passive recreational uses.

B. *Accessibility.* Paths and open spaces shall be provided, as appropriate, for recreational and educational activities.

#### C. *Environmental Considerations.*

Impervious surfaces shall be minimized and care shall be taken to control sedimentation and erosion during and after construction. See also Chapter 5.



Figure 6: Gateways and Image Corridors

#### 4. Gateways and Image Corridors

Buildings, signage, and landscaping at gateways and along major corridors (see Figure 6 above), as identified in the Campus Master Plan, shall be designed to ensure a welcoming, attractive appearance into and through the campus. Gateway beautification improvements shall be consistent in overall treatment.

A. *Gateway Landscaping.* At gateways, landscaping shall be provided to create a sense of arrival.

- Landscaping shall include signage (as detailed in the Wayfinding Graphics Master Plan), lighting, and other streetscape details to enhance the sense of transition from the community into the campus.

- Changes in paving materials at intersections, for instance, demark the gateway and prove attractive, easily identified crosswalk areas.

B. *Gateway Buildings.* Buildings at gateways shall create a sense of arrival. This can be accomplished by placing the building mass closer to the street, forming part of a symbolic gate into the campus.

- The location of building entrances and vertical building masses may also be used to enhance sense of arrival and physical transition.
- Buildings at gateway locations may be, but are not necessarily, foreground elements.

## 2.5. Circulation and Accessibility

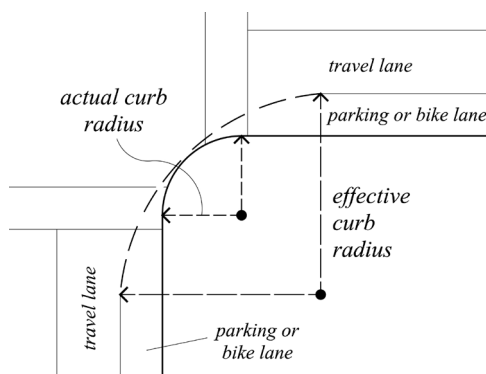
The following guidelines apply to all precincts and are intended to provide safe and attractive street and pedestrian environments. These guidelines seek to limit vehicular traffic on the Campus to that which is necessary by providing other convenient, effective options for circulation and access.

### 1. Streets

All streets shall be designed as “complete streets” providing adequately sized travel ways, sidewalks, landscaping, lighting and, where applicable, bicycle lanes, and on-street parking.

- A. *Street Types.* Streetscapes shall be designed in accordance with the cross sections for Hackberry Drive, Campus Drive, and typical campus local streets.
- B. *Access.* Vehicular access to buildings and parking areas shall be limited in size and shall require adequate spacing from intersections and adjacent driveways to reduce traffic conflicts along streets.
  - Wherever possible, access to new buildings and parking areas, shall be through shared driveways. Relocation of existing driveways to create new, shared entrances is encouraged.
  - Driveways shall be at least 100 feet from existing or planned intersections.

- For buildings which front on a community street, driveway access should be from an adjacent campus street wherever possible.
- Curb radii at intersections and driveways shall be as small as practical, given the types of vehicles needing access and desired speed of the subject streets.



- For streets with on-street parking or an on-street bike path, an “effective” curb radius may be used rather than an unnecessarily large physical radius that would encourage higher speed turns.

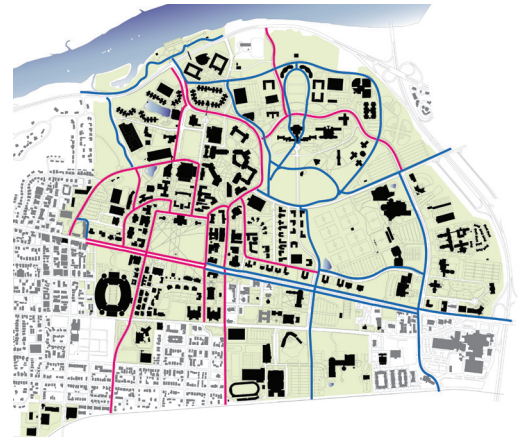


Figure 7 (left): Pedestrian Facilities

Figure 8 (right): Bicycle Circulation

## 2. Pedestrian Facilities

Pedestrian facilities shall be designed in accord with the University’s Sidewalk Master Plan and the following:

- A. *Access.* Pedestrian paths shall be directly connected to building entrances by the extension of the path or by a plaza or similar hardscaped entrance area extending to the path.
- B. *Lighting.* Pedestrian paths shall be adequately lit for safety by pedestrian-scaled fixtures. Paths that receive higher pedestrian traffic in the evening shall have lighting at decreased spacing intervals to ensure continuous lighting levels. Refer also to §4.4.
- C. *Crosswalks.* Crosswalk improvements shall be provided wherever pedestrian paths cross vehicular ways. Parking areas shall be designed to concentrate pedestrian passage into a limited number of continuous, protected paths which utilize pedestrian tables, where practicable, at crossings with vehicular ways.

## 3. Bicycle Facilities

Improvements for bicycle accessibility shall be provided as shown in Figure 5, including on-street bicycle lanes (shown in red), multi-use paths (shown in blue), and bicycle storage.

- A. *Bicycle Lanes.* For those streets designated for bicycle lanes, adequate width, signage, and pavement marking shall be provided. Each designated street shall have a one-way bicycle lane along each side.
- B. *Multi-use Paths.* Multi-use paths shall have adequate width, signage, and surface marking designating that portion of the path intended for bicycle use separate from the area intended for pedestrian use.
- C. *Bicycle Storage.* Bicycle racks shall be provided in accessible, visible locations and mounted on concrete pads. To avoid visual obtrusiveness, bicycle racks may be at side entrances or partly screened with low hedges.

#### 4. Transit Facilities

Transit stops and related facilities shall be located to provide safe, convenient access to sidewalks and buildings and shall include adequately sized signage to identify the facility to pedestrians.

#### 5. Parking Structures

Parking structures shall include liner buildings or facade designs along public frontages or open spaces to provide an attractive image, conceal the parking use, and foster an engaging street or open space environment.

#### 6. ADA Accessibility

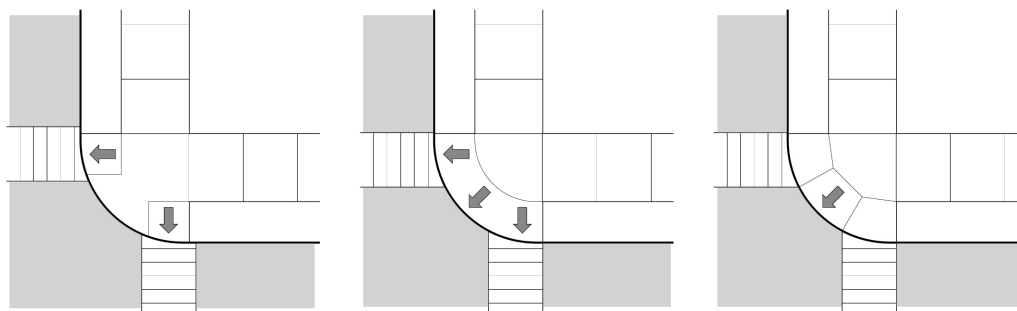
Sidewalks, paths, parking areas, and building entrances shall be designed to maximize accessibility for students,

faculty, employees and visitors with disabilities in accordance with the Americans with Disabilities Act (ADA).

A. *Sidewalks and paths.* Sidewalks and paths intended for access by the handicapped shall have properly designed ramps wherever the path crosses a vehicular way.

B. *At street intersections.* Ramps shall be aligned in the direction of the sidewalk/crosswalk, not aligned toward the center of the intersection. See illustration below.

C. *Ramps at building entrances.* Ramps at building entrances shall be designed as integral components of the building design, not as afterthoughts.



*individual ramps aligned to both directions*

*compound ramp aligned with both directions*

*ramp not aligned with direction of crosswalks*



Liner facade on a campus parking structure.

## 2.6. Environmental Safety

The following guidelines are intended to maximize safety and comfort throughout all campus precincts by incorporation of Crime Prevention through Environmental Design (CPTED) strategies.

### 1. Natural Surveillance

- A. *Building design.* Place windows overlooking sidewalks and parking lots.
- B. *Site and lighting design.* Create landscape designs that provide surveillance, especially in proximity to designated and opportunistic points of entry.
  - Use the shortest, least sight limiting fence appropriate for the situation.
  - When designing lighting systems, avoid light placement that creates blind-spots for potential observers and misses critical areas. Ensure potential problem areas are well-lit: paths, stairs, entrances/exits, parking areas, ATMs, phone kiosks, mailboxes, bus stops, recreation areas, laundry rooms, storage areas, dumpster and recycling areas, etc.
  - Avoid security lighting that creates

blinding glare and/or deep shadows. Eyes adapt to night lighting but have trouble adjusting to severe lighting disparities. Using lower intensity lights may require more fixtures.

- Place lighting along pathways and other pedestrian-use areas at proper heights to light the faces of the people in the space.
- C. *Additional measures.* Complement natural surveillance measures with mechanical and organizational measures, such as cameras where window surveillance is unavailable.

### 2. Access Control

Place entrances and exits, fencing, lighting and landscape to limit access or control flow.

#### A. *Points of entry.*

- Clearly define legitimate points of entry for the public.
- Eliminate design features that provide access to roofs or upper levels.
- Use low, thorny bushes beneath ground level windows.

B. *Fencing*. Refer also to §4.7.

- Between public and semi-public spaces (such as front lawns), use waist-level or open fencing (iron) to control access while allowing natural surveillance.
- Use taller, closed fencing (for example, masonry) in areas with limited natural surveillance but that are otherwise accessible, such as loading and service areas.

### 3. Territorial Reinforcement

Use buildings, fences, pavement, signs, lighting and landscaping to define public, semi-public, and private spaces.

A. *Design and Maintenance*.

- Maintain premises and landscaping to communicate an alert, active presence occupying the space.
- Plant trees. Outdoor spaces with more trees are seen as safer and more likely to be used.
- Display security system signage at access points.
- Place amenities such as seating or

refreshments in common areas to attract larger numbers of desired users.

- Avoid cyclone fencing and razor-wire fence topping, as it communicates absence of a physical presence and cues a reduced risk of being detected.

B. *Activity*.

- Restrict private activities to defined private areas.
- Schedule activities in common areas to attract more people and increase the perception that areas are controlled.