



**DENVER**  
COMMUNITY PLANNING  
& DEVELOPMENT



**11.29.18 DRAFT**  
**NATIONAL WESTERN CENTER**  
**DESIGN STANDARDS AND GUIDELINES**

**IMAGINE. DISCOVER. CULTIVATE.**



In association with Winter and Co., 505 Design, Studio Insite, Livable Cities Studio, and Clanton and Associates



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# INTRODUCTION



*Honor and celebrate the spirit of the West, while also promoting research and progress in agriculture for the next 100 years.*

## **VISION STATEMENT:**

**To be a global destination for agricultural heritage and innovation.**

## **MISSION STATEMENT:**

**Our mission is to convene the world at the National Western Center to lead, inspire, create, educate, and entertain in pursuit of global food solutions.**

The National Western Center Campus (NWC or the Campus) presents a once-in-a-lifetime opportunity to honor and celebrate the spirit of the West, while also promoting research and progress in agriculture for the next 100 years. The revolutionary campus will host programs and house facilities that focus broadly on entertainment, food, animal health and performance, water, energy, agriculture, rodeo, livestock, equestrian, and sustainability and the environment. This document's vision, mission, and guiding principles were identified during the National Western Center Master Plan (2015) process.

## **ABOUT THE NATIONAL WESTERN CENTER AUTHORITY**

The National Western Center Authority is a Colorado nonprofit corporation that programs, operates and maintains the year-round Campus. The actions of the Authority are guided by a 13-person Board made up of 11 voting directors and two non-voting directors. The Authority is working closely with adjacent neighborhoods to ensure development of the Campus is consistent with adopted plans and community vision. See Page 7 for more information on existing Regulatory Framework.

# DESIGN PRINCIPLES



*Ensure that buildings and public spaces will accommodate flexible programming that can evolve over time in support of the NWC mission and vision.*

The following design principles apply to all development throughout the Campus.

**ACHIEVE EXCELLENCE IN DESIGN:** Each development should express excellence in design and raise the bar for others to follow. This includes using materials and construction methods that express depth of detail, shadow, contrast, and other similar rich visual qualities.

**PROMOTE CREATIVITY:** Exploring new ways of designing buildings and public amenity spaces is appropriate when they contribute to a cohesive campus fabric. This type of creativity should be distinguished from simply being “different.”

**DESIGN WITH AUTHENTICITY:** The NWC should be defined by buildings and public spaces that reflect authentic design and material choices, including distinct construction techniques. An authentic building design has a consistent design concept that speaks of its own time and does not convey a false history. It also is one that uses design concepts, materials and forms in a consistent manner such that an entire building is understood to be a single composition.

**DESIGN FOR DURABILITY:** New buildings and public spaces throughout the NWC should be designed for the long term with high-quality, durable materials.

**ENHANCE THE PEDESTRIAN EXPERIENCE:** Define street edges and public spaces with buildings and amenities that are visually interesting and attract pedestrian activity. Public spaces should be inviting with wide sidewalks, universally accessible, and appealing landscape elements.

**DESIGN FOR REGENERATION:** Urban design and architecture should promote sustainability and regeneration.

**DESIGN FOR FLEXIBILITY:** Ensure that buildings and public spaces accommodate flexible programming and can evolve over time in support of the NWC mission and vision.

**DRAW UPON LOCAL AND REGIONAL DESIGN TRADITIONS:** Surviving buildings and historic site features at the NWC exemplify a unique character and authenticity, with lessons for design. Opportunities to reuse historic materials and reference the past should be pursued. Development at the NWC should also consider how regional farming and ranching design traditions can influence and inspire materials, building massing and form.

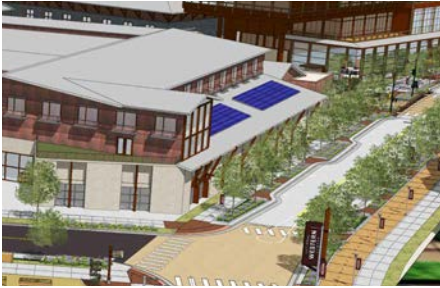
**CREATE ENGAGING PUBLIC SPACES:** Each project should incorporate engaging elements, features and public space amenities for pedestrians to move through and enjoy. These include promenades, plazas, courtyards and natural areas. Linking these while enhancing and restoring connections to the South Platte River in a cohesive circulation network will create a valuable public amenity.

**EDUCATE, ENGAGE, AND INSPIRE VISITORS:** Functional and historic aspects of the Campus should be used to teach visitors about the past, current systems, and stories on the Campus. Public spaces should be used to teach and inspire visitors in interactive ways.

# URBAN DESIGN FRAMEWORK

## NATIONAL WESTERN CAMPUS URBAN DESIGN FRAMEWORK

The National Western Center Authority, in conjunction with the Citizens Advisory Committee, went through an in-depth placemaking study. This document reflects the design thinking that was developed during this process. The map on the following pages illustrates the urban design framework, which identifies major circulation routes and Key Intersections to give users of this document an understanding of the overall organization and hierarchy of the Campus. Specific elements are referred to throughout and the document, and defined below.



### KEY STREETS

The Denver Zoning Code (DZC) identifies Key Streets within the NWC as priority areas for pedestrian-oriented design. These streets have higher street frontage requirements, including build-to, transparency, and street-level active uses. See Chapter 2: Public Space Design page 35 for more design guidance along Key Streets.

Note: This section of the Zoning Code is currently being revised as part of the CPD Regulatory Package Update.



### KEY FRONTAGES

Like Key Streets, Key Frontages are priority areas for pedestrian-oriented design. Located along major plazas, these areas should have a high degree of transparency and ground-level active uses. See Chapter 2: Public Space Design page 35 for more design guidance along Key Frontages.



### PEDESTRIAN PRIORITY ROUTES

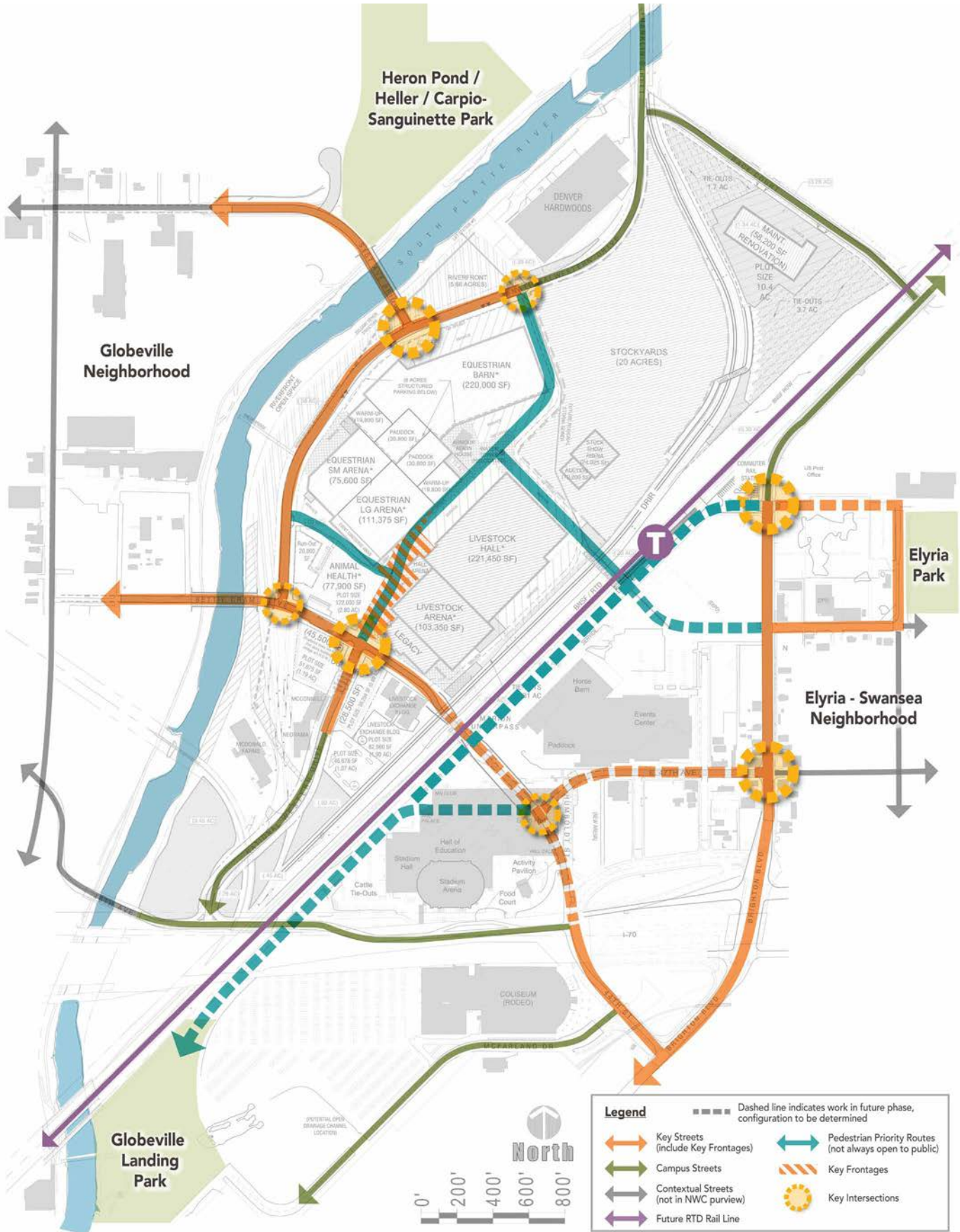
The NWC Campus is intended to be highly walkable, interactive, and engaging. Visitors are encouraged to explore the Campus and learn about the facilities. As such, it is critical that the Campus is a walkable environment so people can move freely. Certain areas of the Campus are deemed as "pedestrian priority" and should be designed for the pedestrian above all else. These areas include plazas, gathering areas, major internal connections, and sidewalks along Key Streets. See Chapter 3: Circulation page 61 for more design guidance along Key Streets.



### KEY INTERSECTIONS

Several Key Intersections exist on the campus. These are highly visible crossings where visitors pass an important threshold into the campus. They should be celebrated with iconic gateways or monuments. See Chapter 2: Public Space Design page 48 for more design guidance at Key Intersections.

# URBAN DESIGN FRAMEWORK MAP



# PURPOSE AND APPLICABILITY



NWC Placemaking Study Rendering: Looking north at Betty Cram Drive and the Entry Plaza

## APPLICABILITY

*The NWC DSG apply to all:*

- » *New construction;*
- » *Additions;*
- » *Exterior improvements;*
- » *New or expanded public use areas;*
- » *Signs; and*
- » *Public right-of-way improvements.*

## STATE-OWNED PROPERTIES

*There are some state-owned properties on the Campus; in addition to City and County of Denver Regulations, these properties are subject to state regulations and requirements.*

## PURPOSE

The purpose of the Design Standards & Guidelines (DSG) is to set clear criteria for design of the National Western Center (NWC). This document sets forth standards and guidelines that will be administered by the City and County of Denver's Department of Community Planning and Development (CPD).

Approval is required by CPD, as provided for in the special zoning overlay that is established as part of the Denver Zoning Code. The Zoning Administrator shall utilize the Design Standards and Guidelines in this document when making a determination of appropriateness for any proposed project at the National Western Center.

Design review and approval for work in the NWC Campus involves two forms:

1. Review by the Zoning Officer of the City and County of Denver, and
2. Review by the National Western Center Authority



# REGULATORY FRAMEWORK



*NWC Placemaking Study Rendering: Ground level view looking northeast at the Entry Plaza*

The NWC DSG serve as one of a number of documents involved in the City's planning and development process. The Design Standards and Guidelines are intended to implement adopted City regulations, plans and policies while working within existing regulations. Several of the key policy and regulatory documents relevant to National Western Center are summarized on this page. All documents are available for download at [denvergov.org/CPD](http://denvergov.org/CPD).

## **DENVER ZONING CODE (2010)**

The Denver Zoning Code preserves and promotes the public health, safety and welfare of the City's residents and employees and facilitates the orderly growth and expansion of the City. Zoning regulations provide the basic form, parking, signage, and land-use requirements for all neighborhoods within the City, including special districts such as National Western Center.

## **NATIONAL WESTERN CENTER MASTER PLAN**

The National Western Center Master Plan was adopted in 2015 and provides a clear vision for the development of the Campus.

## **ELYRIA AND SWANSEA NEIGHBORHOODS PLAN**

The Elyria and Swansea Neighborhoods Plan was adopted in 2015 and provides a vision, goals, and recommendations for the Elyria and Swansea Neighborhoods, including recommendations for the National Western Center and Station Area.

## **GLOBEVILLE NEIGHBORHOOD PLAN**

The Globeville Neighborhood Plan was adopted in 2014 and provides a vision, goals, and recommendations for the Globeville Neighborhood, including recommendations to establish connections over the South Platte River and into the Campus.

## **BLUEPRINT DENVER**

Blueprint Denver is a citizen-driven, integrated land-use and transportation plan. The plan was originally adopted in 2002 and is currently being updated. It aims to enhance Denver life by using land in the way that is health for its economy, supports alternative modes of transportation, and maintains the integrity of neighborhoods.



*NWC Placemaking Study Rendering: Looking southeast at the Stockyards Event Center*

## **CMP - NWC ZONE DISTRICT**

*The Denver Zoning Code (DCZ) Article 9, Special Contexts and Districts includes a specific Campus - National Western Center (CMP-NWC) Section, which provides general guidance and regulations for building height, siting, design elements and permitted uses on the NWC Campus. These regulations should form the baseline for design on the NWC Campus. See the DCZ for more information and specific requirements.*

*Note: This section of the Zoning Code is currently being revised as part of the CPD Regulatory Package Update.*

# USING THE DESIGN STANDARDS & GUIDELINES DOCUMENT



NWC Placemaking Study Rendering: Looking south at the Stockyards and Stockyards Event Center



NWC Placemaking Study Rendering: Looking southeast at National Western Drive

## FLEXIBILITY FOR CREATIVE AND INNOVATIVE DESIGNS

*In some cases, an innovative or creative design approach that does not comply with specific design standards or guidelines may be approved if it is consistent with the guiding principles and relevant intent statements. It is the applicant's responsibility to show that an alternative solution is consistent with, and effectively implements the guiding principles and intent statements.*

The remainder of the DSG are organized into chapters that address different levels of design and specific design topics. Chapters are organized by a series of design topics which are addressed at the three levels described below.

**1. Intent Statements** establish the objectives to be achieved for each topic and may also be used to determine the appropriateness of alternative or innovative approaches that do not meet specific standards.

**2. Design Standards** set criteria for achieving the intent statements. They use action-oriented phrases to indicate that compliance is expected.

**3. Design Guidelines** provide additional recommendations to achieve the intent statements. They use softer language, such as “consider,” to indicate suggestions.

The intent statements, design standards, and guidelines provide structure for the design review process while encouraging flexibility for creative design. See “Sample Design Standards & Guidelines Format” on the following page for more detail regarding the format and use of intent statements, design standards and design guidelines.

# SAMPLE DESIGN STANDARDS & GUIDELINES FORMAT

To increase clarity and ease-of-use, the design standards and guidelines pages use a standard format. The example below indicates each key element of the standard format.

| DESIGN TOPIC TITLE   |  | Design Subtopic   |
|--|--|---|
|    |  |    |
| <p><b>Photographs and Diagrams</b> show conceptual examples of the guidance listed on that page. <b>Image Captions</b> are most often text directly from a standard or guideline that relates to the image.</p>              |  |   |
| <b>INTENT</b>  | <b>STANDARDS</b>   | <b>GUIDELINES</b>   |
| <p>1a <b>Intent Statements</b> establish the objectives to be achieved for each topic and may also be used to determine the appropriateness of alternative or innovative approaches that do not meet specific standards.</p> | <p>1.1 <b>Design Standards</b> set criteria for achieving the intent statements. They use action-oriented phrases and language to indicate that compliance is expected.</p> <p>a. <b>Alphabetized Lists</b> beneath standards and guidelines provide additional suggestions or more information on how to achieve certain standards or guidelines.</p> | <p>1.2 <b>Design Guidelines</b> provide additional recommendations to achieve the intent statements. They use softer language, such as “consider,” to indicate suggestions.</p> <p>» <b>Bulleted Lists</b> indicate specific approaches and strategies to meet the corresponding standard or guideline.</p> |
| <b>SIDEBARS</b>  |  |   |
| <p><b>Sidebars</b> give general background information or reference related section of the Denver Zoning Code or other regulatory document.</p>  |  |   |

## ADDITIONAL FORMAT NOTES

*The Design Topic Title Bar is indicated with a heading at the top of each page. These bars are color-coded by Chapter.*

*Intent Statements, Standards, and Guidelines are numbered by chapter for clarity and ease of reference.*

*Sidebar Pages are pages in the standards and guidelines chapters that do not have numbered DSGs. These pages offer additional explanation, imagery, and background information on design topics*

# CHAPTER OVERVIEW

This document is organized into seven chapters. Chapters One and Seven provide background information about the Campus and Character Areas and the design review process and Chapters 2-6 provide specific standards and guidelines to be used by the City in the review of each project.



## CHAPTER 1: CHARACTER AREAS

*This section outlines the existing character and future vision for the Campus Character Areas. This chapter will be used to aid in interpretation of the general DSG for specific areas of the campus.*



## CHAPTER 2: PUBLIC SPACE DESIGN

*This chapter provides standards and guidelines for public spaces on the NWC Campus (See Page 32 for the definition of public space as it pertains to the NWC Campus). This chapter includes guidance on different types of public spaces, design elements, overall campus design, and other site design topics.*



## CHAPTER 3: CIRCULATION

*This chapter provides standards and guidelines for the NWC transportation network. It provides specific detail on pedestrian, bicycle, transit, and vehicular facilities.*



## CHAPTER 4: BUILDING DESIGN

*This chapter provides standards and guidelines for buildings on the NWC Campus. It defines building types and addresses mass, scale, facade design, pedestrian level design, and rehabilitation and reuse of existing buildings.*



## CHAPTER 5: LIGHTING DESIGN

*This chapter provides standards and guidelines for lighting design, including information on overall lighting for building exteriors and public spaces.*



## CHAPTER 6: SIGN DESIGN

*This chapter provides standards and guidelines for signs. It defines types of signage and addresses location, character and materials, and lighting.*



## CHAPTER 7: DESIGN REVIEW PROCESS

*This chapter summarizes the Design Review process and application requirements for project proposals.*

Campus Character Areas Overview ..... Page 12

Character Areas Map ..... Page 13

**Character Areas**

- » Riverfront ..... Page 14
- » Festival Grounds ..... Page 16
- » Maintenance & Operations ..... Page 18
- » Innovation Campus ..... Page 20
- » Triangle North ..... Page 22
- » Triangle South ..... Page 24
- » South Campus ..... Page 26
- » Elyria-Swansea Gateway ..... Page 28

# CHAPTER 1: CHARACTER AREAS

# CAMPUS CHARACTER AREAS OVERVIEW

The Character Areas recognize and encourage the distinct identity of different campus areas, while helping to ensure there is a general sense of continuity in design across all areas that signals one is on the NWC Campus. These unifying elements are experienced at a very high level. Site and building design should have an overall character that supports the NWC vision; one that celebrates the past, but clearly points to the future. The character of buildings and public space should reflect the American West by considering the landscape, the river, the prairie and an inclusive heritage while inspiring new design ideas for the future.

The Character Areas were established to:

- Give direction for design character;
- Convey distinct themes that help in understanding the place;
- Support heritage interpretation; and
- Support programming opportunities.

Their physical descriptions are included on this page and more information on the vision and design intent for each area is included in the following pages.

## NWC CAMPUS CULTURAL PLAN

*Readers should also refer to the NWC Campus Cultural Plan, which speaks to the vision for the Character Areas, provides a history of the site, and acts as a resource for future designers and programmers that addresses treatment of historic elements, interpretive opportunities, public art, and more.*

## CHARACTER AREA LOCATION

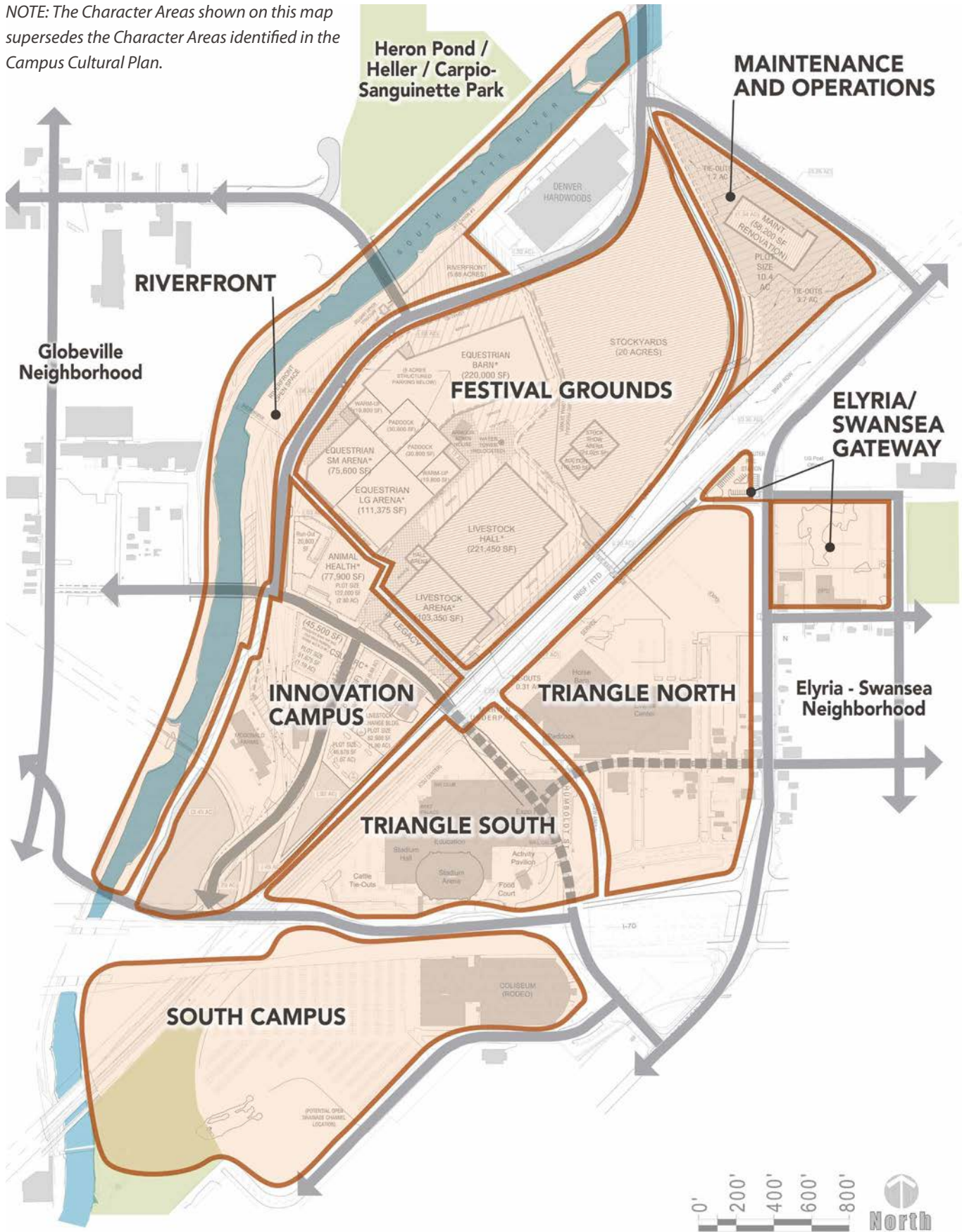
- **Riverfront** - This area from Globeville Landing Park to 51st Avenue along the western edge of the NWC is largely inaccessible today.
- **Elyria-Swansea Gateway** - This area is a former Denver Public Schools (DPS) school bus site, located east of Brighton Boulevard and north of 48th Avenue, and includes the new RTD commuter rail platform.
- **Triangle North** - This area on the eastern edge of the NWC, north of I-70 and west of Brighton Boulevard currently includes the Events Center, surface parking, and a few smaller commercial and residential buildings.
- **Triangle South** - This area is located north of I-70, and east of the BNSF/RTD rail lines. It currently contains the National Western Stock Show (NWSS) Administration Building/Hall of Education, Exposition Hall, Livestock Hall, Stadium Hall and the 1909 Stadium Arena, which was designated a Denver landmark in 2016.
- **Festival Grounds** - This area, located north of the planned Bettie Cram Drive and west of the BNSF/RTD rail corridor, is currently the livestock yards for NWSS, surface parking lots, and industrial uses and includes the Armour Administration Building.
- **Maintenance and Operations** - This area is located south of Race Court and west of the BNSF/RTD rail tracks.
- **South Campus** - This area is located south of I-70 and west of Brighton Boulevard. It is home to the Denver Coliseum, an attached horse barn, surface parking, and Globeville Landing Park.
- **Innovation Campus** - This area is west of the BNSF/RTD rail tracks, east of the South Platte River, and straddles the north section of the proposed Bettie Cram Drive and the southern leg of the proposed National Western Drive. It contains three buildings associated with the Livestock Exchange. This area also contains the Artist Studio, built in 1918 and the McConnell Welders, built in 1930, as well as the McDonald Farm Enterprises.

## HOW TO USE THE CHARACTER AREAS

This chapter shall be used in conjunction with the other design guidelines chapters in this document. The specific guidance that follows aids in application of the general standards and guidelines to a specific Character Area. A description of existing and future character is provided for each. The objective is to establish distinct, but complementary identities for the various Character Areas within the NWC. The map on the next page illustrates these Character Areas.

# CHARACTER AREAS MAP

NOTE: The Character Areas shown on this map supersedes the Character Areas identified in the Campus Cultural Plan.





Today, the river is largely inaccessible due to overgrown vegetation.

## EXISTING CHARACTER

The Riverfront Character Area runs for approximately 1.3 miles from Globeville Landing Park to the Heron Pond, Heller and Carpio-Sanguinette Open Space along the western edge of the NWC. Today, the river is largely inaccessible due to overgrown vegetation, the Globeville Levee to the west and the Delgany Interceptor sanitary sewer lines and a portion of the Denver Rock Island Railroad (DRIR) to the east. The area also includes the Sheep Bridge.



## FUTURE CHARACTER

**VISION:** The Riverfront becomes a celebrated community asset with a series of spaces and activities that allow the neighborhoods and the Campus to engage with the river.

### INTERPRETATIVE ELEMENTS

- Include riparian habitat restoration and innovative storm water management
- Incorporate environmental education elements, when feasible

### NEIGHBORHOOD INTEGRATION

- Create an open space amenity for the surrounding neighborhoods

### PUBLIC SPACE DESIGN

- Incorporate natural elements, plants, and materials
- Provide furnishings and recreation opportunities
- Encourage users to interact with nature
- Relocating Delgany Interceptor provides a strong connection between Campus and the Riverfront

### CIRCULATION

- Connect the surrounding neighborhoods, campus, and the city to the river
- Bridges over the river at Bettie Cram Drive and 51st Avenue provide notable entries into the campus
- National Western Center Drive creates an edge and should be integrated into the riverfront design

### BUILDING DESIGN

- Modestly scaled buildings can provide activity and recreation options
- Design and locate buildings to maintain views to the riverfront
- Buildings should activate the riverfront and provide a visually interesting edge along National Western Drive







This area is currently the stockyards for the National Western Stockshow and also includes surface parking and industrial buildings.

## EXISTING CHARACTER

*This area is currently the Stockyards for National Western Stockshow and includes surface parking, industrial buildings, and railroads. Historically, development was oriented along the rail lines. By 1938, the meat packing facilities were expanded and remained until 1965. By 2017, the packing facilities that once dominated this area had been demolished, except for the Armour Building and associated water tower.*



## FUTURE CHARACTER

**VISION:** The Festival Grounds will be the most highly programmed, active area of the Campus with year-round activities that accommodates a variety of events and user experiences.

### INTERPRETATIVE ELEMENTS

- Incorporate sustainability and regeneration throughout the Festival Grounds
- Celebrate traditional buildings and features
- Acknowledge the historic significance of large, meat packing structures
- The historic water tower will act as an iconic wayfinding element

### NEIGHBORHOOD INTEGRATION

- Acknowledge the edge along National Western Center Drive approaching 51st Avenue; this is a critical neighborhood connection

### PUBLIC SPACE DESIGN

- Accommodate both large events and daily use
- Create a unique and meaningful user experience
- Notable public spaces include the Main Campus Plaza, Stockyards, and Event Plaza

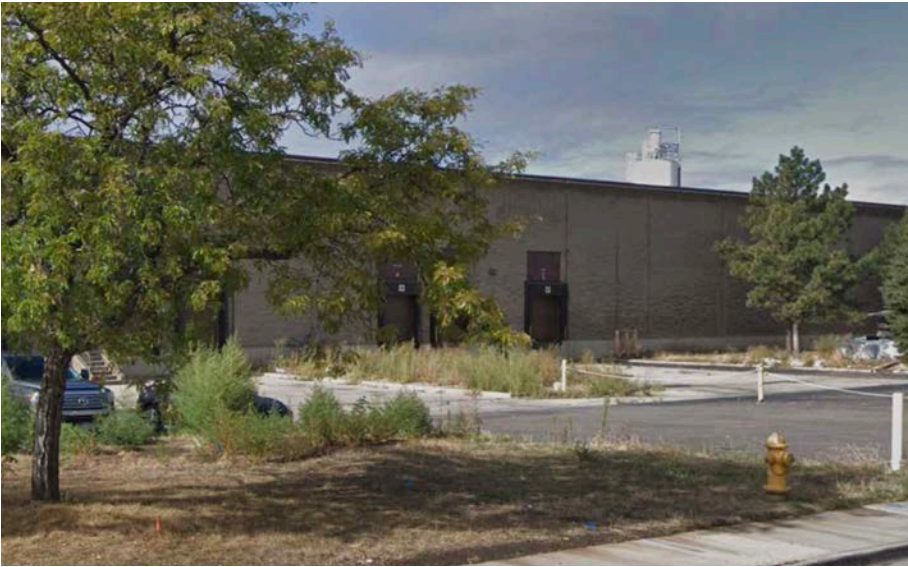
### CIRCULATION

- Provide sophisticated and well-managed systems of circulation
- Create routes that are highly accessible and accommodate a ranges of modes
- National Western Drive will be a Key Street on Campus

### BUILDING DESIGN

- New buildings include Livestock Center, Equestrian Center, and Stockyards Event Center
- Armour Administration Building will be integrated into the Festival Grounds
- Buildings will be some of the largest of the Campus; vary massing and articulate facades to break up the scale of these large buildings
- Create visually interesting buildings that convey a human scale
- Design building entries to aid visitor orientation
- Provide views into active building interiors

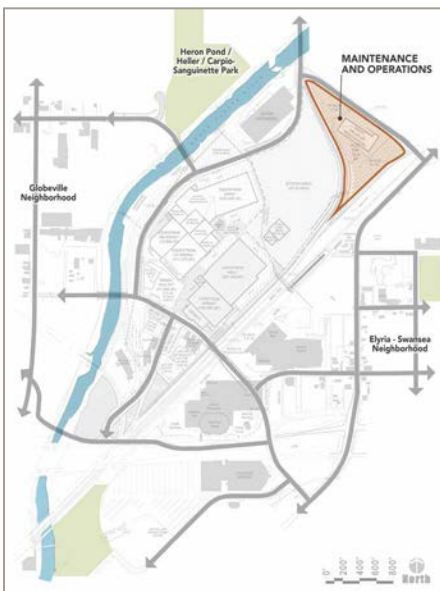




## EXISTING CHARACTER

The existing Maintenance and Operations area is approximately nine acres and has been adapted for parking, equipment storage, dirt/footing mix storage, and cattle ties during the National Western Stock Show. The site currently consists of industrial and warehouse uses with some freight rail access.

The site currently consists of industrial and warehouse uses with some freight rail access.



## FUTURE CHARACTER

**VISION:** As the key operational and maintenance hub for the Campus, the Maintenance and Operations Character Area will maintain a high level of flexibility and functionality.

### PUBLIC SPACE DESIGN

- Design spaces around buildings to be utilitarian and operational
- Much of the area will be secluded from the public eye
- Perimeter fencing will be needed and should contribute to the aesthetic appeal of the Campus

### CIRCULATION

- Provide circulation that accommodates overflow areas during large events
- Access along the railroad underpass should be suitable for service vehicles and livestock
- Improve walkways to facilitate pedestrian access
- Race Court will provide access along the edge of the area; this edge should contribute positively to the user experience

### BUILDING DESIGN

- Design buildings to be utilitarian with limited amounts of detailing, simple building mass and form
- Building facades fronting Race Court and Stockyards should provide visual interest, human scale, and windows with views into the building, when feasible
- A portion of the existing Rocky Mountain Colby Pipe Company Building is being reused and incorporated into the Maintenance and Operations Facility

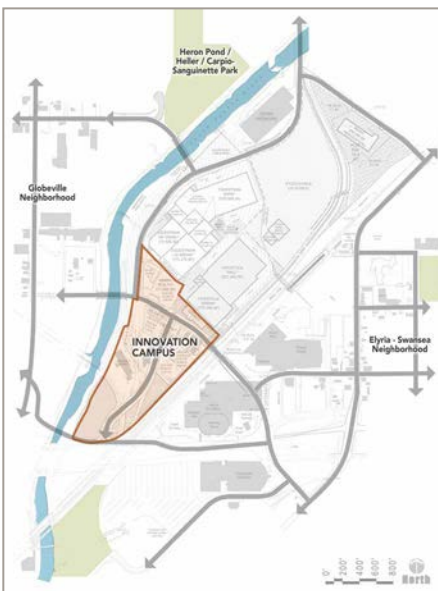




This area contains the three buildings associated with the Livestock Exchange.

## EXISTING CHARACTER

This Character Area contains the three buildings associated with the Livestock Exchange built between 1898 and 1919, and includes the oldest building on site. It also includes two buildings built during the historic period by Swift & Company, the Artist Studio in 1918 and the McConnell Welders in 1930. The McDonald Farms Enterprises came after 1967. Buildings are sprinkled along the southern leg of National Western Drive.



## FUTURE CHARACTER

**VISION:** The Innovation Campus Character Area becomes the epicenter of campus, housing institutional and research facilities that will provide year-round activation.

### INTERPRETATIVE ELEMENTS

- Convey innovation in water resource management and food production
- Utilize signature design elements and express innovation in technology
- Integrate historic elements and buildings, when possible
- Encourage innovative techniques in adaptive reuse

### NEIGHBORHOOD INTEGRATION

- Establish connections through the campus and to the surrounding neighborhoods along Bettie Cram Drive
- Provide connections from the neighborhoods to the riverfront

### PUBLIC SPACE DESIGN

- Notable public spaces include the Grand Plaza and Bettie Cram Drive
- Establish a memorable entry experience, creating the southwestern gateway

### CIRCULATION

- Bettie Cram Drive is a Key Street and becomes the main street of campus; public spaces and buildings along Bettie Cram Drive should respond accordingly

### BUILDING DESIGN

- New buildings include the Water Resources Center, CSU Animal Health Building, WSSA Legacy Building, Livestock Exchange Building, and the Central Utility Plant
- The preservation of the Livestock Exchange building is anticipated
- Design buildings with Articulate and variation in massing is important in this area to help create a human scale at the pedestrian level.
- Highlight primary building entries with iconic architectural features and design active, engaging ground floors
- Use contemporary applications of wood, masonry, metal and glass
- Provide visual interest on every building facade since each building will be viewed from many different points

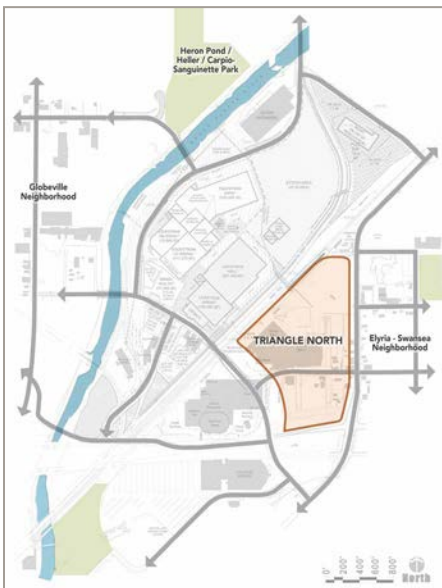




The area currently includes the Events Center, surface parking, and a few smaller commercial and residential buildings.

## EXISTING CHARACTER

This area is approximately 27 acres and is located on the eastern edge of the NWC, north of I-70 and west of Brighton Boulevard and east of the planned consolidated BNSF/RTD/DRIR rail corridor. The area currently includes the Events Center, horse barn, historic buildings on Baldwin Court and 47th Avenue, surface parking, and a few smaller commercial and residential buildings.



## FUTURE CHARACTER

**VISION:** The Triangle North Character Area will provide signature entertainment venues and other revenue-generating facilities such as mixed-use, infill development.

### INTERPRETATIVE ELEMENTS

- Draw inspiration from the industrial heritage and interpret these references in new and innovative ways
- When possible, adaptively reuse historic commercial and residential structures

### NEIGHBORHOOD INTEGRATION

- This area is a key interface with the Elyria Neighborhood
- Create compatible transitions between the Campus and the Elyria Neighborhood along Brighton Boulevard

### PUBLIC SPACE DESIGN

- Active spaces will provide a “front door” to the Campus from Brighton Boulevard
- Design spaces to accommodate event spaces and community gatherings

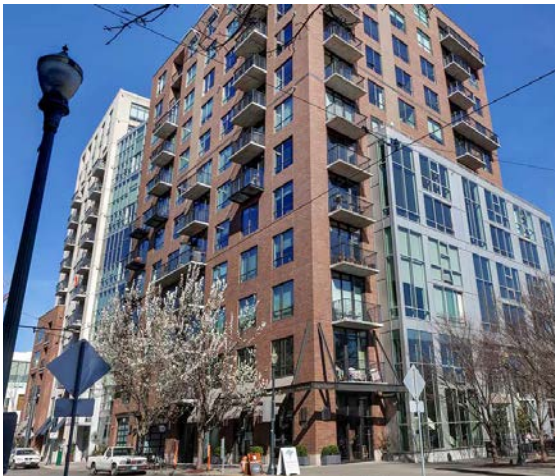
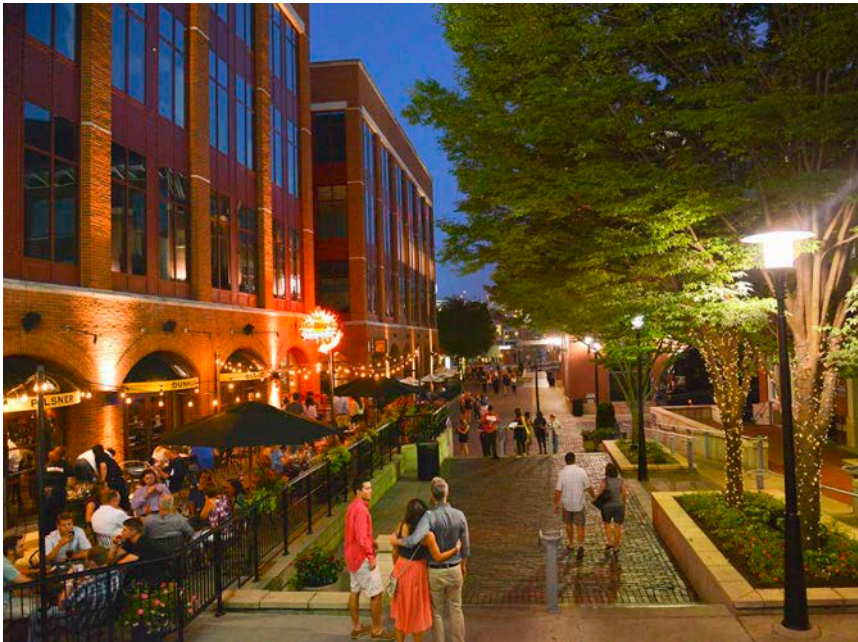
### CIRCULATION

- Provide enhanced connections to the Campus from Elyria and Swansea Neighborhoods along Brighton Boulevard and 47th Avenue
- 47th Avenue or realigned Bettie Cram Drive is a Key Street and may be designed as a “festival street,” which can be adapted for special events

### BUILDING DESIGN

- New buildings include an Arena, Expo Hall, and other future development
- Design buildings to provide visual interest and to activate the public realm
- These buildings may be larger in scale and should have varied massing to create a sense of human scale
- Choose clean, modern materials such as metal and glass and detail buildings in a creative, elegant manner
- Design iconic building elements that help with site wayfinding and are visible from I-70



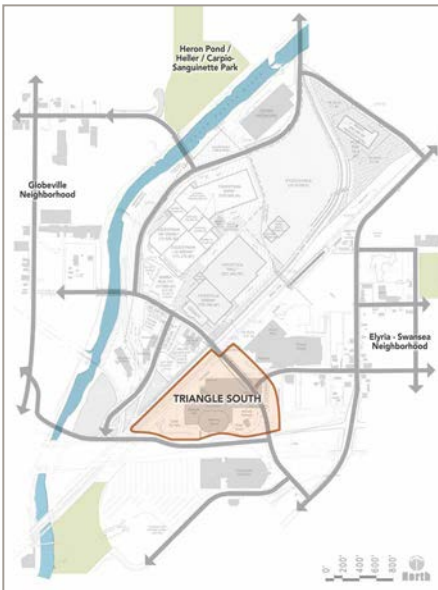




The 1909 Stadium Arena is a treasured historic structure and was designated a Denver Landmark in 2016.

## EXISTING CHARACTER

This area currently contains the National Western Stockshow Administration Building/Hall of Education, Exposition Hall, Livestock Hall, Stadium Hall and the 1909 Stadium Arena. The Arena is a treasured historic structure and was designated a Denver Landmark in 2016.



## FUTURE CHARACTER

**VISION:** The Triangle South Character Area will feature a restored 1909 Stadium Arena and surrounding plaza space that can be used and enjoyed by the public through a variety of uses.

### INTERPRETATIVE ELEMENTS

- Respect the 1909 Stadium Arena by design subordinate spaces that are compatible in use and design
- Reuse brick pavers and incorporate historic elements, when feasible
- Integrate interpretive opportunities, art work, and reused relics to further layer the experiential quality and cultural identity of this area

### PUBLIC SPACE DESIGN

- Design an entry sequence, plaza design, and adjacent streetscape to frame and anchor the 1909 Stadium Area, emphasizing its importance
- Use vegetation, furnishings and historic materials to complement the architecture of the 1909 Stadium Arena

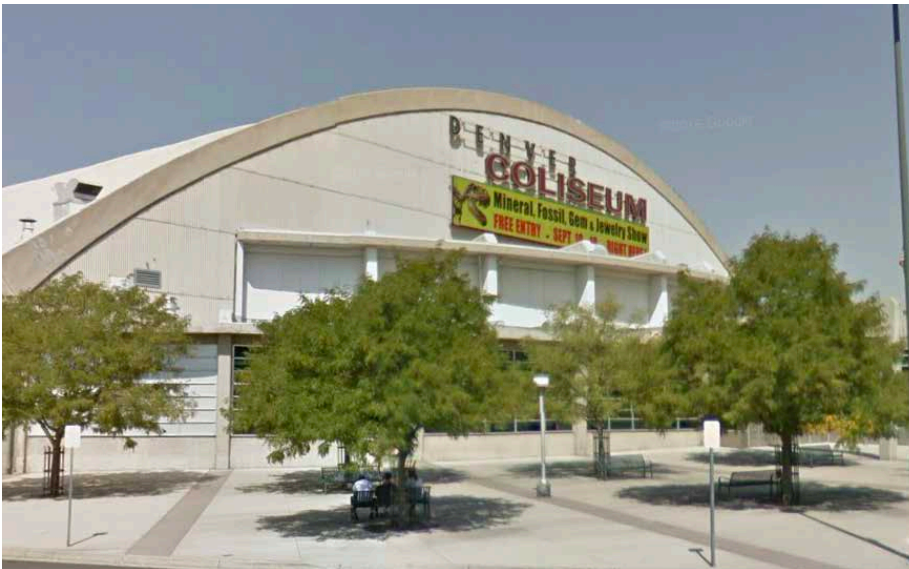
### CIRCULATION

- 47th Avenue and Bettie Cram Drive intersect at a key gateway; intersection should reflect the importance of this Campus gateway

### BUILDING DESIGN

- Restore the 1909 Stadium Arena
- Appropriate materials for new buildings include masonry and metal
- Design new buildings to relate to the street, the 1909 Stadium Arena, and the surrounding public space

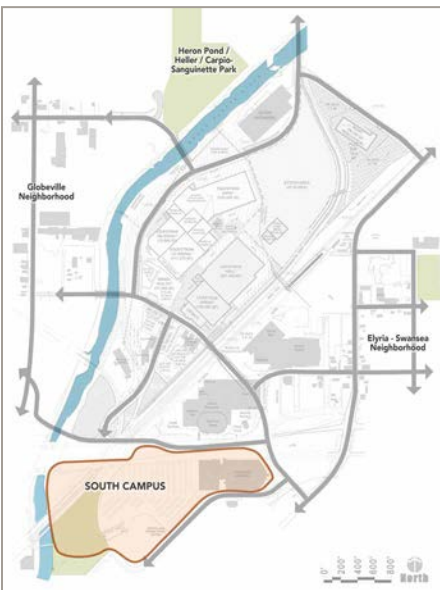




The area currently houses the Denver Coliseum, an attached horse barn, and 2,240 surface parking spaces as well as Globeville Landing Park.

## EXISTING CHARACTER

The South Campus Character Area includes approximately 30 acres. The area currently houses the Denver Coliseum, an attached horse barn, and a surface parking lot, and is adjacent to the Globeville Landing Park. This Character Area is currently separated from the rest of the Campus by the elevated Interstate 70 corridor and 46th Avenue (underneath I-70).



## FUTURE CHARACTER

**VISION:** The South Campus Character Area will redevelop with uses that are compatible and complementary to the Campus; these uses include residential, retail, hotel, office or commercial uses that help to support the needs of the surrounding neighborhoods, the city, and the region.

### NEIGHBORHOOD INTEGRATION

- New development should enhance connections to adjacent neighborhoods and districts, including the River North (RiNo) Art District

### PUBLIC SPACE DESIGN

- Establish a southern gateway to the Campus
- Provide creative lighting, signage, and art to stitch the Campus together and create a welcoming space
- The I-70 viaduct provides year-round weather protection and shade; use this feature for programmed events that are linked to NWC and the local community

### CIRCULATION

- Utilize wayfinding and signage to enhance the area as a gateway to the NWC
- Provide easy and clear access to the river and adjacent uses to provide 'eyes on the river and park'

### BUILDING DESIGN

- Buildings should provide visual interest at the pedestrian level and activate the Character Area

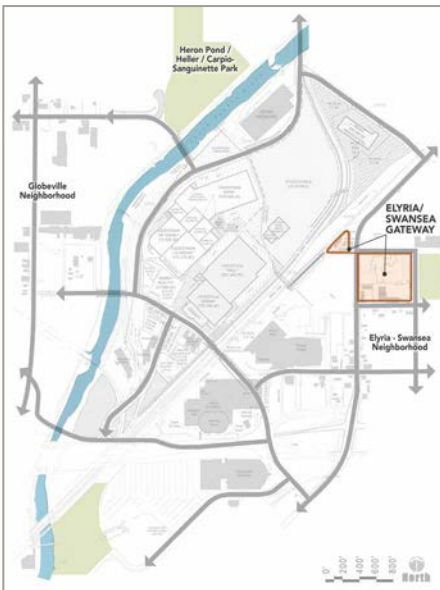




Today, the area is largely underutilized industrial land that has a potential for redevelopment in the northern part of Elyria.

## EXISTING CHARACTER

The Elyria-Swansea Gateway is currently largely underutilized industrial land that has a potential for redevelopment in the northern part of Elyria. The former industrial site poses environmental challenges and was identified in the Elyria and Swansea Neighborhoods Plan as a TOD Development Opportunity Area.



## FUTURE CHARACTER

**VISION:** The Elyria-Swansea Gateway will become a key transition between the Campus and the Elyria and Swansea Neighborhoods; this area will transform into mixed-use, transit-oriented development that provides neighborhood-serving amenities in line with the Elyria and Swansea Neighborhoods Plan.

### INTERPRETATIVE ELEMENTS

- Supporting the Campus mission of regeneration and environmental stewardship by addressing environmental challenges of this area

### NEIGHBORHOOD INTEGRATION

- Provide sensitive transitions to the existing neighborhood in terms of building scale and land use, particularly along 48th Avenue and High Street
- Locate lower building masses along neighborhood facing edges
- Enhance the edge along Elyria Neighborhood with compatible uses such as residential development and neighborhood supporting uses

### PUBLIC SPACE DESIGN

- Create public spaces that are compatible with the residential character of the Elyria neighborhood

### CIRCULATION

- Promote walkability and provide safe, attractive connections from the neighborhoods to the transit station
- The new commuter rail station will greatly increase mobility options

### BUILDING DESIGN

- Provide new development along Brighton Boulevard
- Create a flagship, vertical mixed use development with ample streetscape amenities, high-quality materials, and lush vegetation
- Provide retail, community-serving amenities and other street level activation
- Use high-quality materials and create human scale through building articulation and use of architectural details







# CHAPTER 2: PUBLIC SPACE DESIGN

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# INTRODUCTION



*While all site design elements should be high performing, the design of the campus should also be approached as a hierarchy of spaces with different layers and types of spaces receiving an appropriate level of design, detailing, and investment*

A variety of spaces are planned for the National Western Center (NWC) Campus. The portion of the Campus owned by the City and County of Denver is operated by the NWC Authority. Colorado State University (CSU) and the Western Stock Show Association (WSSA) also own portions of the Campus, however the overall site should still be approached as one campus, with multiple tenants. For the purposes of this document, public space refers to all areas on the Campus that are outdoors, and may include public right-of-way and streets, plazas, gathering areas, event spaces, Stockyards, service areas, the riverfront, and other open spaces.

In order to create a cohesive campus that is well integrated into the surrounding neighborhoods, this section defines and provides guidance for the design of a wide variety of spaces on the NWC Campus. The standards and guidelines in this chapter aim to ensure that all outdoor spaces and associated design elements are developed to a high level of quality and functionality, while still maintaining the flexibility needed to create different types of spaces in various contexts as the Campus continues to grow and develop.

Campus design should establish a hierarchy of spaces with different layers and types of spaces receiving an appropriate level of design, detailing, and investment. Emphasis should be placed on the areas that define the pedestrian experience and that provide critical connections to the surrounding neighborhoods, such as the gathering areas and plazas, riverfront and natural areas, and streetscapes. Public spaces should be designed to assist in orientation and wayfinding. They also provide opportunities to incorporate interpretive elements that allow users to reflect on the history of the site and surrounding areas.

## DESIGN HANDBOOK

*Content relating to historic and interpretive design/reuse; detailed paving, planting, and furnishing specifications; and how these elements should relate to the Character Areas can be found in the NWC Design Handbook.*

## PUBLIC REALM PROGRAMMING

*The Public Realm Programming Report identifies potential programming opportunities for specific public spaces in the first phase of design. The report also suggests design features that should be considered for these spaces.*

# PUBLIC SPACE ORGANIZATIONAL ELEMENTS

The standards and guidelines for public space on the NWC Campus are broken into three major components: public space guidance, design elements, and public space types. These categories are described in detail below. The remainder of the chapter covers other relevant site design topics including boundaries and gateways, Green Infrastructure, public art, topography, and walls.

## OVERARCHING PUBLIC SPACE DESIGN

*These standards and guidelines provide overarching guidance on an overall approach to public space design. These pages apply to all design elements and public spaces. Most of the standards and guidelines give criteria for how to layout and orient campus to achieve a well-functioning, legible, and vibrant series of public spaces. This section also speaks to frontages and how to locate buildings to frame the adjacent outdoor spaces.*



## DESIGN ELEMENTS

*Design elements are those features that are found in all public spaces. At a high level they cover guidance for paving materials, landscaping, and furnishings. These overarching components define much of the pedestrian experience in public spaces and should be designed to a consistent level of quality. The criteria in these sections apply to all types of public spaces. These pages lay the framework for a pedestrian-friendly campus that is consistent in quality while still providing flexibility for the different needs of varying spaces.*



Paving materials refers to all elements of the ground-plane, for more information see pages 36-37 of this Chapter.



Landscaping includes all planted areas on campus, for more information see pages 38-39 of this Chapter.



Furnishings applies to the wide variety of user amenities placed on campus including benches, bike racks, art, planters, and tables, for more information see pages 40-41.

## PUBLIC SPACE TYPES

*In order to accommodate the variety of uses and functions of the Campus public spaces, spaces were organized into several categories. These categories provide more specific guidance on how to design the varying types to better serve their specific function. Campus space types include streetscapes; gathering areas and plazas; riverfront and natural areas; event and flexible space; and back-of-house areas. More information about each of these specific space types can be found on pages 43-47 of this Chapter.*



# OVERALL PUBLIC SPACE DESIGN



Use trees, lights, and other vertical elements to direct pedestrians through the site along preferred routes.

## INTENT

- 2a To create a well-organized, legible campus
- 2b To accommodate a diversity of campus needs and visitors
- 2c To provide for the design of vibrant public spaces
- 2d To integrate with surrounding neighborhoods and Denver's urban fabric

## CRIME PREVENTION

*Crime Prevention Through Environmental Design (CPTED) strategies use design to reduce criminal behavior. Primary CPTED strategies include:*

- » *Natural Surveillance - orienting public spaces and placing design elements to maximize the visibility of public spaces, or increasing "eyes on the street"*
- » *Natural Access Control - controlling how people move through a space through placement of entries, fencing, lighting, landscaping, and furnishings*
- » *Natural Territorial Enforcement - Clearly defining types of space and uses to create a sense of ownership*

## STANDARDS

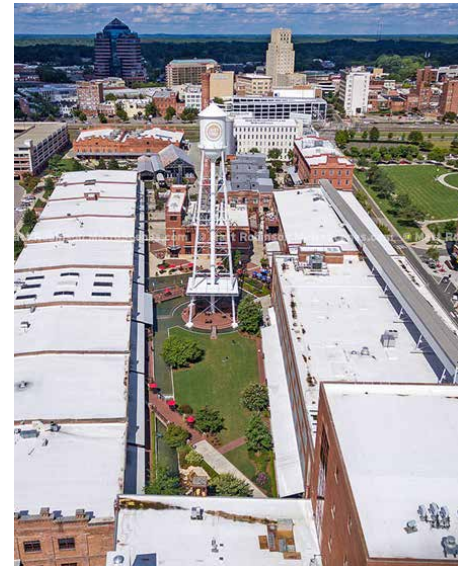
- 2.1 **Locate site features to create a hierarchy of user-friendly spaces.**
- 2.2 **Create an efficient campus layout.**
  - a. Layout buildings, streets, and public spaces in a logical manner.
  - b. Strategically locate utilities, access easements, and infrastructure to use campus space efficiently and reduce conflict between pedestrians, bicyclists, vehicles, and other travel modes.
- 2.3 **Ensure that the Campus is accessible for all age groups and abilities, including children, parents, elderly persons and people with special needs.**
- 2.4 **Design public spaces and streets to guide visitors through the campus.**
  - a. Use cues in paving materials to guide pedestrians to key site destinations.
  - b. Use trees, lights, and other vertical elements to direct pedestrians through the site along preferred routes.
  - c. Use building edges and design elements to identify key destinations.
- 2.5 **Ensure Campus edges are well integrated with the surrounding neighborhoods.**
  - a. Avoid back-of-house spaces or the "backside" of buildings along neighborhood edges.
  - b. Connect campus circulation routes to the surrounding neighborhood network.
- 2.6 **Use design elements and materials that are low maintenance and proven to be durable in the Colorado climate.**
- 2.7 **Use design elements that are pedestrian scaled to help break down large areas into smaller, more comfortable areas.**

## GUIDELINES

- 2.8 **Consider employing Crime Prevention Through Environmental Design (CPTED) strategies in public spaces to increase feelings of safety for users, see Crime Prevention sidebar on this page for more information.**



Consider using programming and visual permeability to activate public spaces.



Frame public spaces with building edges or other vertical features.

### INTENT

- 2e To create user-friendly and human-scaled public spaces
- 2f To locate site features to frame and enhance streetscapes, plazas, and other campus spaces
- 2g To promote an active and vibrant pedestrian experience
- 2h To create a strong connection between public spaces and adjacent buildings

### STANDARDS

- 2.9 **Frame public spaces with building edges or other vertical features.**
  - a. Along a Key Street, locate buildings at or near the primary street zone lot line to frame the sidewalk and activate the streetscape.
  - b. Along a Key Frontage area, locate and front buildings to frame the public space.
  - c. Locate buildings along a plaza, gathering area, or event space to frame the public space.
  - d. Locate buildings within the Campus so that the back-of-house features can be accessible, visible, and integrated into overall site circulation.
- 2.10 **Design public space and building edges to provide visual interest.**

### GUIDELINES

- 2.11 **Consider using programming and visual permeability to activate public spaces.**
  - a. Design public space to allow for building uses to “spill out” such as cafe seating
  - b. Create public space for visitors to watch activities inside the building, such as equestrian warm-up, training and other campus-related activities
  - c. Provide sufficient access for trucks, livestock uses, gathering spaces, and programmed activities

### KEY STREETS AND FRONTAGES

*The Denver Zoning Code (DZC) identifies Key Streets within the NWC as priority areas for pedestrian-oriented design. These streets have higher street frontage requirements, including build-to, transparency, and street-level active uses. Key Frontages should be designed similarly to Key Streets along a plaza or public space. Key Streets and Frontages are mapped on the Urban Design Framework Map on page 5.*

*Note: This section of the Zoning Code is currently being revised as part of the CPD Regulatory Package Update.*



*Use creative paving designs that help create a unique sense of place.*



*Incorporate permeable paving systems to allow natural stormwater drainage.*

## INTENT

- 2i To ensure paving materials function to support the unique needs of the NWC Campus
- 2j To indicate distinct uses and programs
- 2k To support the campus vision and space programming needs
- 2l To provide safe circulation for all users

## STANDARDS

- 2.12 **Select paving materials suitable to the site context and unique needs of the space.**
  - a. In plazas and gathering areas, consider higher quality materials and design details that signal the importance of the area.
  - b. In event and flexible spaces use paving materials to highlight main pedestrian aisles.
  - c. Along streetscapes, use distinct paving materials to indicate areas of continuous travel.
  - d. In back-of-house, less decorative and more functional and durable paving materials are appropriate.
- 2.13 **Select durable materials that can accommodate a wide variety of traffic including trucks, livestock, and large crowds.**
- 2.14 **Use paving materials that provide a safe path of travel for all campus visitors and users.**
  - a. Use paving materials and installation methods that maintain a flat, even walking surface over time to ensure accessibility.
  - b. Use paving materials that are slip resistant.
- 2.15 **Use paving materials that are functional and flexible for a range of programming needs.**
- 2.16 **Design paving systems to be easily cleaned and maintained.**



Use paving materials to differentiate between uses.



Select durable materials that can accommodate a wide variety of traffic.

## GUIDELINES

- 2.17 Consider using paving materials to differentiate between uses. Appropriate strategies include:**
- a. Utilize multiple material types for different uses;
  - b. Vary the material color, finish, orientation, and/or texture; and
  - c. Use accent paving to highlight areas of importance such as building entries, gathering areas, major circulation intersection, gateways, or other prominent site features.
- 2.18 Consider selecting paving materials that are environmentally sensitive.**
- a. Choose paving materials that reduce the urban heat island effect.
  - b. Use hardscape materials with a Solar Reflectance Index (SRI) of at least 29 (averaged across the project site).
  - c. Incorporate permeable paving systems to allow natural stormwater drainage where feasible.
- 2.19 Consider incorporating paving designs that help create a unique sense of place.**

## DISTINCT PAVING MATERIALS

*The City of Denver's Public Works Department reviews and approves paving materials and designs. Public Works may approve unique or distinctive paving designs if applicants have a program to ensure ongoing maintenance of paving.*



Locate planting areas to maintain clear paths and sight-lines.



Select planting palettes that provide varied seasonal interest.

## INTENT

- 2m To introduce natural elements to the campus
- 2n To reduce the heat island effect
- 2o To create shaded, comfortable spaces
- 2p To provide year-round interest
- 2q To integrate local food production
- 2r To provide spaces for healthy, easy to maintain plants
- 2s To integrate stormwater management into site design

## GREEN INFRASTRUCTURE

*Additional considerations should be made for incorporating Green Infrastructure and Low Impact Development (LID) strategies in landscaping design. For more information see page 50-51.*

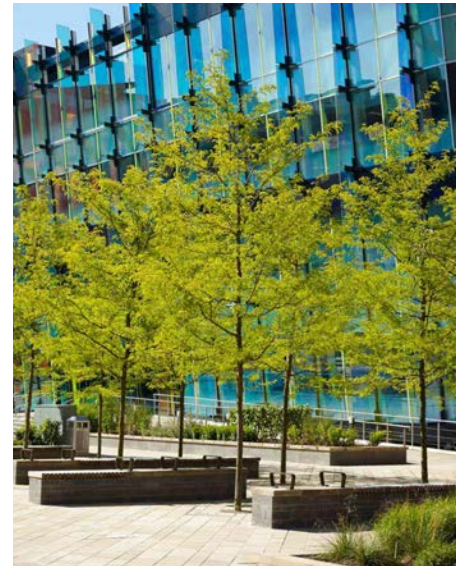
## STANDARDS

- 2.20 **Locate planting areas to maintain clear paths and sight-lines.**
  - a. Avoid conflicts with buildings, utility corridors and other design elements that may reduce plant health and longevity.
  - b. Consider vertical gardens where feasible.
- 2.21 **Design planting areas to protect trees. Appropriate strategies may include:**
  - a. Use of slightly raised planter beds that protect trees from de-icing agents or other chemicals;
  - b. Use of features that retain crusher fines or other ground covers in the planting bed; and
  - c. Use of suspended pavers or tree grates in areas of high volume pedestrian traffic to prevent root compaction.
- 2.22 **Design planting beds to support the root system of mature shade trees. Appropriate strategies may include:**
  - a. Dimensioning tree pits by at least five feet wide by 15 feet long;
  - b. Using suspended paving systems; and
  - c. Using structural soil where access is required.
- 2.23 **Avoid tree grates in all areas except for those with substantial pedestrian use. When tree grates are used, appropriate strategies may include:**
  - a. Plan for and accommodate mature trunk sizes; and
  - b. Incorporate tree guards or other protective measures to safeguard trees from locked bikes and other potential damage.
- 2.24 **Provide sufficient irrigation for establishing and maintaining plantings and trees.**





Use hardy and drought tolerant plants.



Place trees and planting beds to scale large spaces into smaller, human scale spaces.

## GUIDELINES

- 2.25 Consider selecting tree and plant species suitable for the NWC campus setting.**
- Use hardy and drought tolerant plants.
  - Select planting palettes that provide varied seasonal interest.
  - Avoid plants that are known to be toxic to horses, humans, and livestock.
  - Select native and edible plants, when feasible.
  - Consider salt tolerant plants where subject to de-icing.
- 2.26 Consider designing planting areas to create a pollinator-friendly campus.**
- Plant diverse species that bloom throughout the season.
  - Plant clumps of the same species.
  - Avoid using chemical pesticides, if feasible.
  - Leave areas of bare soil for ground nesting bees.
- 2.27 Consider using trees and plants to create comfortable public spaces.**
- Use trees to maximize shade.
  - Place trees and planting beds to scale large spaces into smaller, human scale spaces, when feasible to still accommodate flexibility and event needs.
  - Use trees to emphasize pedestrian paths and direct users.
- 2.28 Preserve established trees and natural landscapes, when feasible.**
- Assess tree conditions and ensure measures of protection are included in development plans.
- 2.29 Consider incorporating planting features that are educational and environmentally friendly. Appropriate features may include:**
- » Stormwater planters
  - » Educational signage
  - » Demonstration gardens
  - » Interactive exhibits
- 2.30 Consider water saving techniques for irrigation system designs.**

## DENVER CITY FORESTRY PERMIT

A permit is required from the Office of the City Forester prior to planting or removing trees from the public right-of-way per Chapter 57 of the Municipal Code. Tree grates, planting areas, tree locations, tree species, and other details relating to trees must comply with current Forestry Standards. Forestry's Rules and Regulations take precedence over the Standards and Guidelines.

## TREE AND PLANT SPECIES

For a list of suitable tree and plant species within the public right-of-way, see the Denver Parks and Recreation Forestry Office website.



Provide site furnishings to encourage pedestrian activity.



Use durable and low maintenance site furnishings that are appropriate for the Colorado climate.

## INTENT

- 2t To create a memorable pedestrian experience
- 2u To convey a sense of continuity throughout the campus
- 2v To promote flexible elements that create a variety of comfortable spaces for pedestrians
- 2w To encourage pedestrian activity

## STANDARDS

- 2.31 Provide a variety of site furnishings to encourage pedestrian activity. Appropriate furnishings may include:
  - » Benches
  - » Planters
  - » Shelters and shade structures
  - » Public art
  - » Pedestrian lighting
  - » Signage and wayfinding
  - » Kiosks
  - » Bicycle racks
  - » Trash, composting and recycling receptacles
  - » Pet waste bag dispensers
  - » Ash urns
- 2.32 Locate site furnishings to avoid conflicts with utility corridors, access easements, and major circulation routes.
- 2.33 Locate furnishings near heavily used pedestrian areas, such as sidewalks, Pedestrian Priority Routes, public building entrances, and other public spaces.
- 2.34 Select site furnishings that accommodate a variety of visitors needs, abilities, and activities.



Locate furnishings near heavily used pedestrian areas, such as sidewalks, building entrances, and other public spaces.

#### GUIDELINES

- 2.35 Consider locating furnishings in strategic clusters that indicate areas of rest and pause to pedestrians.**
- Co-locate furnishings with other pedestrian amenities.
  - Locate clusters of furnishings adjacent to Key Intersection, Key Facades, and Pedestrian Priority Routes.
- 2.36 Consider selecting site furnishings specific to the needs of different types of public space.**
- In event and flexible spaces, use movable site furnishings that provide maximum flexibility and accommodate a variety of configurations.
  - In streetscapes ensure furnishings do not block main travel routes, place furnishings at relatively high frequency and regular intervals.
  - In plazas and gathering areas, strategically place furnishings to activate spaces and strengthen the relationship between buildings and adjacent spaces.
  - In riverfront and natural areas, select furnishings that are more durable in nature. Use furnishings that are suitable for the outdoor, natural habitat.
- 2.37 Consider using furnishings that provide flexibility to allow for increased programming along building edges and entries.**
- 2.38 Consider incorporating artistic or decorative elements into site furnishings.**

#### CAMPUS-WIDE CONSISTENCY

*Site furnishings should be selected to create a consistent campus-wide experience, employing a similar thematic and material palette. The Design Standards and Guidelines provide guidance on overall furnishings and functional requirements and explain how furnishings may vary by space type. The Design Handbook establishes what furnishings should be consistent throughout the campus and provides detailed direction as to what types of furnishings should be specified to maintain a cohesive campus character and identity.*

# PUBLIC SPACE TYPES

As defined in the introduction of this Chapter, public space on campus refers to all outdoor spaces. In order to provide specific guidance about how different spaces with varying functions should be designed and used, this document separates them into broader organizational categories. These organizational categories are defined below.

## STREETSCAPES



Streetscapes are those areas of the Campus that are within and adjacent to the public right-of-way, including building edges, setback areas, and bridges and underpasses. These areas will be highly multi-modal with safe and comfortable travel prioritized. Streetscapes will be designed to include pedestrian amenities such as street trees and furnishings, clear demarcation of transportation facilities, and street level interest and activation.

## GATHERING AREAS AND PLAZAS



Gathering areas and plazas include a variety of public and private spaces designed for pedestrian use. These areas will be used year-round by campus visitors, employees, neighbors, and residents and should therefore be activated and support flexible programs, gatherings, and events. These spaces offer opportunities for art, educational and interpretive features, and visibility of unique NWC activities.

## RIVERFRONT AND NATURAL AREAS



Riverfront and natural areas are public spaces that are more oriented to natural landscapes and recreation. They should include some activation and a variety of uses with an emphasis on the native landscape, the river, outdoor activities, and education about environmental best practices. These areas should include more vegetation and softscape materials.

## EVENT AND FLEXIBLE SPACE



Event and flexible spaces should be open, unobstructed, and highly flexible. These areas will accommodate a wide range of programs including fairs, concerts, stock pens, and educational displays. Design elements should be located to maintain clear zones for event vehicle and emergency access. Materials should be strategically placed to alert visitors of different uses. These spaces should include carefully designed and placed boundaries, gateways and other features that establish an intuitive spatial hierarchy.

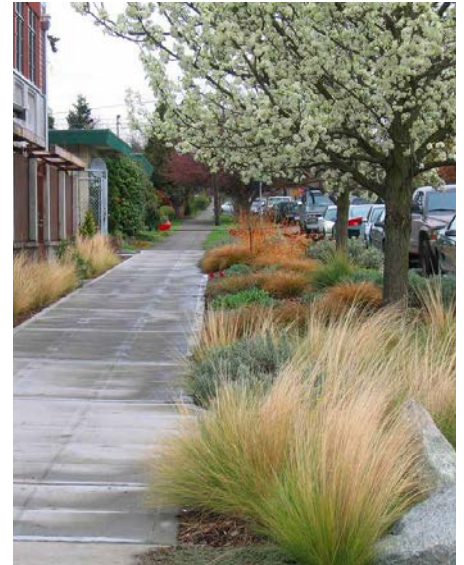
## BACK-OF-HOUSE



Back-of-house includes loading/unloading, utilities, storage, service and maintenance and operations areas. In order to accommodate one of the Campus's primary goals, to educate and engage visitors, these back-of-house areas should allow for a managed level of safe access and provide examples of sustainable design, livestock and agricultural processes, and other campus wide systems.



Provide an expanded amenity zone to accommodate active uses along building frontages.



Use landscaping to beautify the streetscape.

## INTENT

- 2x To create safe, pedestrian-oriented streetscapes
- 2y To design streetscapes in a creative manner that contributes to a unique sense of place
- 2z To contribute positively to the environment
- 2aa To contribute to efficient, safe, comfortable, and visually interesting neighborhood connections

## STREETSCAPES

*Streetscapes are those areas of the Campus that are within the public right-of-way. These areas will be highly multi-modal with safe and comfortable travel prioritized. Streetscapes will be designed to include pedestrian amenities such as street trees and furnishings, clear demarcation of transportation facilities, and street level interest and activation. Campus bridges and underpasses are also included in this space type.*

## SITE CIRCULATION

*Consider overall site circulation in streetscape design. For more information see Chapter 3: Site Circulation page 56-71.*

## GUIDELINES

- 2.39 **Consider repeating sidewalk materials, furnishings, and other design elements to maintain a consistent, continuous streetscape experience.**
  - a. Use lines of trees, lights, and other vertical elements.
  - b. Use paving to define pedestrian and amenity zones.
- 2.40 **Consider using design elements to add visual interest to the streetscape.**
  - a. Use landscaping to beautify the streetscape.
  - b. Use decorative functional elements.
- 2.41 **Consider using design elements to enhance pedestrian safety comfort**
  - a. Locate landscaped areas, planters or pedestrian amenities to provide separation between vehicular and pedestrian/bicycle circulation.
  - b. Locate design elements outside of main paths of travels.
- 2.42 **Consider designing environmentally responsible streets with Green Infrastructure elements. For more information see Green Infrastructure and Low Impact Development, page 50-51. Appropriate elements include:**
  - » Continuous tree canopy;
  - » Tree filters/suspended paving; and
  - » Bioretention areas (rain gardens, stormwater planters).
- 2.43 **Consider designing streetscapes to respond to their surrounding context.**
  - a. Along Key Streets establish a continuous pedestrian experience. Provide an expanded amenity zone to accommodate active uses along building frontages.
  - b. Along riverfront and natural areas, design streetscapes to be respectful of the natural environment.
  - c. Design streetscapes adjacent to event spaces, or streetscapes expected to host events, with additional flexibility. Consider including managed curb areas (flexibly allocated curb space for different uses throughout the day, targeting new mobility services), flexible lane configurations, removable bollards, accent paving, and temporary access points.
  - d. When adjacent to a residential area, design streetscapes to include continuous pedestrian facilities and furnishings and to limit curb cuts.



Use outdoor furnishings and planters to create intimate spaces for smaller events or gatherings and everyday use.



Use paving and furnishings to distinguish between areas of movement and pause.

## INTENT

- 2ab To create space for programmed and unprogrammed uses year-round
- 2ac To promote safe and comfortable spaces accessible to all visitors
- 2ad To encourage social gathering, education, interpretation and active living
- 2ae To create multi-use spaces that accommodate operational flexibility and efficiency

## GATHERING AREAS AND PLAZAS

*Gathering areas and plazas include a variety of public and private spaces designed for pedestrian use. These areas will be used year-round by campus visitors, employees, and neighbors and residents and should therefore be activated and support flexible programs, gatherings, and events. These spaces offer opportunities for art, educational and interpretive features, and visibility of unique NWC activities.*

## STANDARDS

- 2.44 Locate gathering areas and plazas along Key Streets and Primary Pedestrian Routes (see Framework Map on page 5 for more detail).
- 2.45 Blend plazas with adjacent streets, buildings, and other spaces to ensure continuity between spaces.
  - a. Use removable bollards or other flexible site elements to create a porous edge into plazas from adjacent street or parking areas.
  - b. Use outdoor furnishings, lights, and planters to define queuing space for entry into arenas or other event spaces.
- 2.46 Use design elements to break up the scale of large plaza spaces.
  - a. Use outdoor furnishings and planters to create intimate spaces for smaller events or gatherings and everyday use.
  - b. Use changes in paving to break large plaza spaces into smaller human-scale spaces.
- 2.47 Use primarily hardscape materials in the areas that will need to accommodate large numbers of people, temporary parking, animal and vehicle circulation, and loading/unloading activities.
- 2.48 Design spaces to accommodate a wide range of outdoor events. Appropriate strategies include:
  - a. Unobstructed space for booths, food trucks, and other mobile vendors;
  - b. Access to utilities such as electrical, water, and audio/visual hookups; and
  - c. Site furnishings that are moveable or located to not obstruct key programmable spaces or operational requirements of the campus.

## GUIDELINES

- 2.49 Consider using planting areas in strategic locations and along the edges of plazas and gathering areas to soften and frame spaces.
- 2.50 Consider using paving and clusters of furnishings to distinguish between areas of movement and areas of pause within plazas and gathering areas.
- 2.51 Consider incorporating educational and interpretative elements.



Use design elements that are compatible with the natural context.



Consider integrating direct connections to the South Platte River.

## INTENT

- 2af To connect the campus and neighborhoods to natural amenities
- 2ag To instill visitors with a sense of environmental stewardship
- 2ah To provide places of respite and relaxation
- 2ai To create a public amenity
- 2aj To educate visitors on the natural context and local ecosystem

## RIVERFRONT AND NATURAL AREAS

*Riverfront and natural areas are public spaces that are more oriented to natural landscapes and recreation. They should include some activation and a variety of uses with an emphasis on the native landscape, the river, outdoor activities, and education about environmental best practices. These areas should include more vegetation and softscape materials.*

## STANDARDS

- 2.52 Use natural areas adjacent to the river corridor to enhance water quality, erosion control and flood mitigation.
- 2.53 Integrate amenities that encourage visitors to occupy riverfront and natural areas throughout the year. Appropriate strategies include:
  - » Formal and informal seating areas;
  - » A walking paths with different levels of access and formality;
  - » Shade structures, shelters, and pavilions; and
  - » Signage and wayfinding.
- 2.54 Use design elements in the flood-way that can withstand flood events.
  - a. Design elements should not create a rise in the floodplain elevation.
- 2.55 Use design elements that are compatible with the natural context.
  - a. Limit the use of hardscape materials to areas where they are essential for planned programming, activities, and circulation.
  - b. Use rustic, natural elements as design details and finishings.
- 2.56 Integrate flexible spaces for temporary activation and programming. Appropriate uses may include:
  - » Small performances
  - » Pop-up retail
  - » Community gatherings/festivals
  - » Markets

## GUIDELINES

- 2.57 Consider integrating direct connections to the South Platte River.
- 2.58 If locating art, consider works that reference the surrounding natural context, the river, or the history of the area.
- 2.59 Consider providing passive natural areas that benefit the local ecosystem. Appropriate features include:
  - » Rain gardens
  - » Constructed wetlands
  - » Native planting and grass areas
  - » Permeable surfaces
- 2.60 Consider providing active or functional spaces that contribute to educational opportunities, food production, and recreation. Appropriate features include:
  - » Demonstration/community gardens
  - » Interpretive displays
  - » Exercise equipment
  - » Space for exercise classes



Use primarily hardscape materials to accommodate large numbers of people, temporary parking, and loading/unloading activities.



Design event and flexible spaces to be usable during all days of the year.

## INTENT

- 2ak To provide safe and flexible spaces for small and large events
- 2al To accommodate the unique requirements of events, festivals, and other large gatherings
- 2am To accommodate service, truck, and event operational needs
- 2an To provide a meaningful user experience during off-peak times
- 2ao To ensure large event spaces are visually articulated

## EVENT AND FLEXIBLE SPACES

*Event and flexible spaces should be open, unobstructed, and highly flexible. These areas will accommodate a wide range of programs including fairs, concerts, stock pens, and educational displays. Design elements should be located to maintain clear zones for event vehicle and emergency access. Materials should strategically to alert visitors of different uses. These spaces should include carefully designed and placed boundaries, gateways and other features that establish an intuitive spatial hierarchy.*

## STANDARDS

- 2.61 Use primarily hardscape materials to accommodate large numbers of people, temporary parking, and loading/unloading activities.
- 2.62 Design event and flexible spaces to be usable during all days of the year. When not being used for a large event or festival, incorporate temporary uses such as parking, small gatherings, or other campus programs.

## GUIDELINES

- 2.63 Consider limiting sun exposure in the design of event and flexible spaces.
  - a. Incorporate design elements such as furnishings or tree canopy that sufficiently protect users from sun exposure.
  - b. Use flexible shading devices that respond to various events and times of year.
- 2.64 Consider providing electrical and audio/visual infrastructure to support large events. Key features include:
  - » Electrical outlets for vendors
  - » Utility hookups for stages
  - » Sound/public announcement system
  - » Information Technology (IT) infrastructure
  - » Security and surveillance
- 2.65 Consider providing mechanical and plumbing infrastructure to support large events. Key features include:
  - » Hot water and cold water distribution
  - » Flush-mounted water outlets
  - » Water supply and drains
- 2.66 Consider using flexible or moveable site elements to accommodate a variety of event types and scales.
- 2.67 Consider using design elements to create visual articulation and break up large event and flexible spaces.
  - a. Use changes in paving or lines of furnishings to distinguish vehicle access drives and loading/unloading areas.
  - b. Use materials, furnishings, and other design elements to distinguish major circulation routes from gathering areas.
  - c. Use trees, shade structures and other vertical elements along the perimeter of event and flexible spaces to define the edges.





Consider creating back-of-house areas that provide educational opportunities for campus visitors such as demonstration and viewing areas.

**INTENT**

- 2ap To minimize negative impacts of back-of-house areas and utilities on the visitor experience
- 2aq To reduce conflicts between back-of-house activities, site circulation and campus programming
- 2ar To maximize operational efficiency and flexibility
- 2as To maintain a safe campus environment
- 2at To provide educational opportunities for site visitors and showcase back-of-house areas

**BACK-OF-HOUSE**

*Back-of-house includes loading/unloading, utilities, storage, service and maintenance and operations areas. In order to accommodate one of the Campus's primary goals, to educate and engage visitors, these back-of-house areas should allow for a managed level of safe access and provide examples of sustainable design, livestock and agricultural processes, and other campus wide systems.*

**STANDARDS**

- 2.68 **Locate back-of-house areas to maintain a more continuous pedestrian experience.**
  - a. Locate service areas and utilities away from Primary Pedestrian Routes.
  - b. Locate service areas and utilities to avoid conflicts with adjacent programs.
- 2.69 **Design back-of-house areas to minimize visual impacts.**
  - a. Recess dumpsters, waste collection, sorting, and storage from Key Streets, pedestrian routes, or plaza and gathering areas.
  - b. Screen dumpsters, utility infrastructure, and material storage with high-quality materials and/or landscaping that is consistent with the campus design.
- 2.70 **Provide well-managed designated areas for storage of materials to minimize potential safety hazards.**
  - a. Locate material storage away from Key Streets and Primary Pedestrian Routes.
  - b. Use proper storage techniques to ensure safety for operational staff.
- 2.71 **Design material storage areas to mitigate potential environmental hazards**
  - a. Ensure any potential contaminants are properly stored.
  - b. Ensure pollution and runoff is minimized.

**GUIDELINES**

- 2.72 **Consider consolidating back-of-house uses with each other to minimize potential impacts on campus visitors.**
  - a. Combine vehicle access points with service areas, when feasible.
  - b. Combine service areas, utilities, and storage areas, when feasible.
- 2.73 **Consider changes in paving to delineate where back-of-house areas begin and to signal the edge of the pedestrian zone. Paving in back-of-house areas can be more simple and should be more durable than the rest of the campus.**
- 2.74 **Consider creating back-of-house areas that provide educational opportunities for campus visitors such as demonstration and viewing areas.**

# BOUNDARIES AND GATEWAYS



Create entry features and gateways at Key Intersections.



Integrate boundaries into the site design so that they function as barriers without appearing out of place.

## INTENT

- 2au To welcome visitors to the campus in a memorable way
- 2av To orient visitors to and within the campus
- 2aw To guide visitors to Key Intersections and major destinations
- 2ax To contribute to the management of circulation and access
- 2ay To create clear and intuitive paths throughout the campus
- 2az To integrate Campus with surrounding neighborhoods

## KEY INTERSECTIONS

Several Key Intersections exist on the campus. These are highly visible crossings where visitors pass an important threshold into the campus. They should be celebrated with iconic gateways or monuments. Key Intersections are mapped on the Urban Design Framework Map on page 5.

## STANDARDS

- 2.75 Use boundary elements to define event spaces or other limited access areas and controlled entry locations. Appropriate strategies include:
  - » Fences
  - » Walls
  - » Landscaping
  - » Bollards
  - » Rocks
  - » Water features
- 2.76 Create entry features and gateways at Key Intersections that welcome visitors and can function as meeting areas or navigational tools. Appropriate strategies include:
  - » Architectural elements
  - » Landscape features
  - » Lighting elements
  - » Monument signs
  - » Public art
  - » Plazas or other outdoor spaces

## GUIDELINES

- 2.77 Integrate boundaries into the site design so that they function as barriers without appearing out of place. Appropriate strategies include:
  - » Decorative fences and walls;
  - » Incorporating public art;
  - » Boundaries that can double as seating;
  - » Matching adjacent materials;
  - » Blending with the natural landscape; and
  - » Reuse of historic materials.
- 2.78 Use boundary elements in conjunction with gateways to direct visitors through major decision points and transitional spaces on campus.

# BOUNDARIES AND GATEWAYS

Boundaries and gateways are key urban design elements of the NWC Campus that work in tandem with each other. Boundaries provide access control and guide movement throughout the site, where there is a break in a boundary there is often a gateway feature to mark a designated pedestrian entry to a space. These elements and the various forms they can take are described in detail below.

## BOUNDARIES

*Boundaries are those elements that block or guide access to different areas of the site. Boundaries can be solid, like fences and walls or more permeable like bollards or landscaping. These elements are intended to guide pedestrian travel without appearing out of place or detracting from the visitor experience.*



Fences and walls should be used for areas that need to completely exclude pedestrian access.



Bollards should be used to indicate a vehicle barrier or to guide pedestrian movement.



Landscaping, rocks, or water features are more permeable boundaries that can subtly guide circulation while providing visual interest.

## GATEWAYS

*Gateways are key points on campus that represent a major entry or pedestrian decision point. These should be designed to indicate their significance to visitors and provide visual markers that aid in wayfinding. Artistic and iconic elements are encouraged as are informational or monument signs.*



Monument signs can provide information or wayfinding and highlight a location's importance.



Iconic architectural elements should be used to create visual interest and indicate significant entries.

## KEY INTERSECTIONS

*Key Intersections, defined on the previous page, represent major thresholds and entries to the campus and should all be marked with gateway elements*



Public art should be used to create easily recognizable thresholds on campus that guide pedestrian movement.

# GREEN INFRASTRUCTURE AND LOW IMPACT DEVELOPMENT



Integrate Low Impact Development (LID) stormwater management systems into public space design, when feasible.

## INTENT

- 2ba To reduce peak runoff rates
- 2bb To incorporate Green Infrastructure features that provide multiple benefits
- 2bc To create resilient and adaptive Green Infrastructure systems
- 2bd To educate campus visitors about water quality best practices

## ULTRA-URBAN GUIDELINES

*The City of Denver is making Green Infrastructure a fundamental part of the city's long-term stormwater management strategy. The Ultra-Urban Green Infrastructure Guidelines provide valuable information and should be consulted when incorporating Green Infrastructure and LID strategies.*

## STANDARDS

- 2.79 **Reduce site runoff and distribute stormwater flows. Appropriate strategies include:**
  - » Permeable paving
  - » Water storage/reuse
  - » Open swale conveyance
  - » Limiting impermeable surfaces
- 2.80 **Disperse water storage and design for maximum stormwater filtration and infiltration. Appropriate strategies include:**
  - » Bioretention areas (rain gardens)
  - » Subsurface infiltration
  - » Tree trench filters
  - » Infiltration planters

## GUIDELINES

- 2.81 Consider integrating Green Infrastructure and LID strategies into all planting areas.
- 2.82 **Incorporate Green Infrastructure and Low Impact Development (LID) features into public spaces, when feasible.**
  - a. In event and flexible spaces, use permeable paving in locations that don't interfere with major event traffic.
  - b. In streetscapes use the amenity zone to accommodate water strategies such as bioretention areas and tree trench filters.
  - c. In plazas and gathering areas, use permeable paving, when feasible. Direct runoff to planting areas
  - d. In riverfront and natural areas, use low-runoff paving, constructed wetlands, detention channels and ponds, and filtration facilities, when feasible. Treat stormwater runoff before it enters the river.
- 2.83 **Consider including educational and demonstration elements into Green Infrastructure, when feasible.**

# GREEN INFRASTRUCTURE AND LOW IMPACT DEVELOPMENT

In order to meet the Campus and city-wide goal to design for sustainability and regeneration, Green Infrastructure and LID principles should be a priority for large and small scale site design. These strategies improve stormwater capacity, reduce flooding, and minimize pollutant discharge. A more in depth description of how these strategies are executed and the benefit they provide is outlined below. For a more technical understanding, see the City of Denver Ultra-Urban Green Infrastructure Guidelines.

## STORMWATER RUNOFF DISTRIBUTION

*Distributing stormwater allows for more time and area for water to infiltrate. Strategies include permeable paving and swale conveyance (described below) water storage and reuse, which uses stormwater for other purposes such as irrigation or greywater, and limiting impermeable surfaces such as parking lots, which reduces paved areas that contribute to major runoff.*



Permeable paving systems allow water to pass around pavers and infiltrate into the soil, reducing runoff and filtering stormwater.



Open swale conveyance channels allow water to move across the site in a natural setting that increases water infiltration.

## STORMWATER FILTRATION AND INFILTRATION

*Stormwater filtration and infiltration strategies store stormwater to provide more storm capacity and increase time for water to filter into the ground. Strategies include subsurface infiltration, which uses underground chambers to store water during a storm event, as well as tree trench filters, bioretention areas or rain gardens and infiltration planters, described below.*



Tree trench filters are tree planting areas, often covered with a grate, that include large underground areas with materials that store and filter stormwater



Bioretention areas or rain gardens are planted areas with subsurface materials that store and filter stormwater while supporting vegetation



Infiltration planters are bioretention areas with deeper above ground containers to allow water to sit and slowly infiltrate

# PUBLIC ART



*Integrate artwork and murals into public spaces to encourage an active and engaging environment.*

## INTENT

- 2be To engage visitors and enhance the campus experience
- 2bf To encourage art that is integral to the campus history, culture, and surrounding context
- 2bg To provide opportunities for interpretation of heritage, regeneration, and innovation.

## PUBLIC ART MASTER PLAN

*Denver's Public Art Program works to provide a variety of artistic elements across the City. This program also facilitated the creation of the NWC Public Art Master Plan, which provides guidance on appropriate placement and thematic content for art on the Campus.*

## STANDARDS

- 2.84 Use public art to promote the National Western Center as a unique cultural center, with both long and short term art installations.
- 2.85 Integrate artwork and murals into public spaces to encourage an active and engaging environment.
- 2.86 Ensure public art is in compliance with the safety and event needs of the campus. Do not locate art within necessary clear zones for emergency vehicles and event traffic.

## GUIDELINES

- 2.87 Consider co-locating public art with major gateways and highly active areas, when feasible.
- 2.88 Consider integrating public art or artistic elements into functional features of the campus, when feasible. Appropriate strategies include incorporating art into:
  - » Boundaries
  - » Paving
  - » Walls
  - » Signage and wayfinding
  - » Furnishings
  - » Bike parking

# PUBLIC ART

The Campus will be home to a variety of public art of different sizes, themes, and applications. Art should be incorporated into the Campus setting wherever feasible and support the over all mission and principles of the NWC. Art can be integrated at a small scale with decorative or functional features such as screens, grates, or lighting as well as larger scale iconic art pieces placed at strategic locations throughout campus. Art that engages visitors through play, educational, or interpretive elements is also encouraged. Some potential art applications are shown below. Consult the Campus Cultural Plan and the Public Art Master Plan for more information.



Art incorporated into facades, walls, or windows



Art that adds volume to facades or walls



Artistic or decorative screens or shade structures



Interactive sculptural elements



Art integrated into tree grates or other landscape elements



Artistic or decorative lighting elements



Vertical art elements or gateways



Art that educates



Iconic sculptures or statues

# SITE TOPOGRAPHY



Address changes in grade in an integrated and creative manner that is accessible and comfortable for all visitors.

## INTENT

- 2bh To integrate site design with existing topography
- 2bi To minimize disturbance of contaminated soils

## SITE GRADING

*Ensure grading is consistent with the Denver Zoning Code Site Grading Standards found in Chapter 10.6, the intent of which is to minimize the negative impacts of grade changes on adjacent properties and neighborhoods.*

## STANDARDS

- 2.89 Minimize disturbance of contaminated soils.
- 2.90 Ensure changes in grade are accessible and comfortable for all visitors.

## GUIDELINES

- 2.91 Consider addressing changes in grade in a manner that is integrated with the overall site design.
  - a. If a street or sidewalk must slope, use landscape walls, fences, and other elements to address the change in grade.
  - b. Use landscaping and site design to rectify the differences in grade change.
- 2.92 Consider using the site's natural topography as a creative design feature to enhance the user experience.
  - a. Incorporate stairs, ramps, terraces, and overlooks in areas with significant grade change.
  - b. Consider using grade change as a design element to separate areas from each other.
  - c. Consider opportunities to create views when modifying the topography.



# SITE WALLS



*Incorporate textured or decorative materials to break-up large areas of walls*



*Consider incorporating public art or decorative elements into wall design.*

## INTENT

- 2bj To provide a comfortable pedestrian environment while still providing for the functional needs of the site
- 2bk To encourage creative wall designs
- 2bl To integrate walls into the overall campus design

## STANDARDS

- 2.93 Locate walls only as needed for grading needs or access control.
- 2.94 Do not locate walls where they will block views or pedestrian access to major campus features including Key Streets, Key Intersections, Key Facades, Pedestrian Priority Routes, and public building entrances.
- 2.95 Incorporate textured or decorative materials to break-up large areas of walls

## GUIDELINES

- 2.96 Consider incorporating landscaped areas at the base of site walls to add visual interest
- 2.97 Consider incorporating public art or decorative elements into wall design.



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# CHAPTER 3: CIRCULATION

# INTRODUCTION



*Campus circulation should provide an amenity to the area and ensure access to the campus for all.*

To ensure that all the spaces and destinations that the National Western Center (NWC) has to offer are accessible and that travel through the Campus is safe and efficient, a cohesive and multi-modal approach should be taken for campus circulation. The standards and guidelines in this section speak to the design and orientation of various facilities and how they work together to create a complete transportation network.

While all modes are essential to the success of the Campus, each requires varied approaches and levels of detailing. A comfortable pedestrian experience is particularly essential to the vision and goals, as most spaces on campus will require some amount of pedestrian level travel to reach. Pedestrian paths should be frequent and receive a high level of detailing and design. In order to ensure full access, some bridges, catwalks, and underpasses will be needed to provide safe pedestrian travel across major barriers. Bicycle paths should be prioritized along Key Streets, as defined by the Urban Design Framework Map, page 5, and should be designed for maximum safety and efficiency. Transit facilities will be more interspersed and strategically located, connecting the Campus to the surrounding neighborhoods and the rest of Denver. The vehicular network will include campus streets and interior spaces of campus that facilitate building ingress and egress, emergency vehicles, and event needs. Vehicle access should be designed to minimize conflicts with other modes.

The circulation system should provide key connections and access to the surrounding neighborhoods. Campus circulation should provide an amenity to the area and ensure access to the Campus for all.



## MASTER PLAN CIRCULATION

*One of the primary goals of the NWC Master Plan was to create both internal and external connections. Specific suggestions included providing improved pedestrian and bicycle circulation; providing bridges, catwalks or underpasses to connect across site boundaries; increasing transportation options and improving transit infrastructure; and connecting primary paths to the surrounding neighborhoods and amenities.*

# CIRCULATION TYPES

The campus circulation system should distinguish between different modal uses and provide a system of wayfinding and amenities distributed throughout the network. The design of circulation facilities should also take into account the growing use of scooter, bicycle, and vehicle share and provide pick-up and drop-off areas and bike and scooter parking. The six key circulation types addressed in this Chapter include;

## PEDESTRIAN CIRCULATION



Pedestrian comfort and safety should be a campus-wide priority. A complete network of pedestrian paths will traverse the Campus, connect to the surrounding neighborhoods, and provide access to interior public and event spaces, building entries, and bicycle and transit facilities. Pedestrian routes should be clearly marked, separated from other modes, and provide a variety of furnishings to encourage use.

## ANIMAL CIRCULATION



The presence of animals is one of the many things that makes the NWC Campus unique. Animal circulation requires special considerations to ensure that animals on campus are safe and comfortable. Areas that animals occupy should be extremely durable and free of potential obstacles or stressors. When feasible, these areas should be separated from other circulation types.

## BICYCLE CIRCULATION



Well-marked, unobstructed bike circulation should be provided along Key Streets. Facilities that provide separation from vehicular traffic should be prioritized wherever feasible and should connect major destinations on campus to the surrounding neighborhoods and transit facilities. Bike parking and sharing should be provided at frequent intervals.

## TRANSIT STATION AREAS



In addition to the 48th Street and Brighton Boulevard Commuter Rail Station on the North Metro Rail Line, several key transit stops and corridors will be provided in and around the Campus. Transit facilities should include signage and wayfinding, pedestrian furnishings and lighting, shelters, and bike and scooter parking and sharing.

## VEHICLE CIRCULATION



Vehicle circulation and access will be needed along campus streets and interior public spaces. Access routes must be provided for event trucks, trailers, and emergency vehicles. These routes can be co-located with utility corridors and designed to accommodate pedestrian use.

Parking areas will be critical to campus, but their visual impacts on the public realm and conflicts with non-vehicular modes should be minimized.

## INFRASTRUCTURE ELEMENTS



Several natural and human-made boundaries exist on the NWC Campus, such as the river and rail lines. Bridges and underpasses will be constructed to facilitate movement across these obstacles. Bridges, underpasses and catwalks should be an extension of public spaces, with quality furnishings and materials to encourage use and provide comfort. The infrastructure elements should be designed to maximize safety and reduce conflicts between modes.

# OVERALL SITE CIRCULATION



Design streets and circulation routes to integrate multiple modes of transportation, providing a seamless transition from one mode to another.

## INTENT

- 3a To encourage a balanced transportation network
- 3b To create spaces that allow for easy, safe, and comfortable circulation, regardless of physical ability
- 3c To increase use of non-vehicular modes of transportation and promote active lifestyles and sustainability
- 3d To integrate campus circulation with the surrounding Denver network

## DENVER MOVES

*As part of the City of Denver's Denveright outreach and planning effort the City has created comprehensive transportation plans for Transit, Pedestrians and Trails. The documents aim to create a reliable, safe, and efficient transportation network. These plans are split into two topics:*

- » *Denver Moves Peds and Trails*
- » *Denver Moves Transit*

## STANDARDS

- 3.1 **Create a campus circulation system that is easy and safe for visitors to navigate.**
  - a. Consider overall campus circulation and major destinations when designing streets and circulation routes.
  - b. Layout travel routes to easily and efficiently direct people to major gateways and entries.
- 3.2 **Create a clear guide and pathway for visitors to experience the Campus.**
  - a. Design an integrated signage and wayfinding system. For more information see Chapter 6: Sign Design, page 98-104.
  - b. Create unobstructed access to major connections.
  - c. Ensure circulation routes connect to each other and do not end abruptly.
- 3.3 **Ensure a seamless transition between campus circulation routes and connections to the surrounding network.**

## GUIDELINES

- 3.4 **Consider locating circulation facilities to integrate multiple modes of transportation, providing a seamless transition from one mode to another.**
  - a. Locate bike parking and bike and scooter share facilities at regular intervals through campus and at major entries and destinations.
  - b. Locate bike facilities and ride-share pick-up and drop-off areas near transit stops to allow easy access to multiple mobility options.
- 3.5 **Consider using design elements to safely distinguish between modal facilities, for more information Chapter 2: Public Space Design Chapter, page 36-41. Appropriate strategies include:**
  - » Use different paving materials to delineate different types of travel.
  - » Use landscaping, bollards or other vertical separation to create a safe buffer between modes.

# PEDESTRIAN FACILITIES



Provide wayfinding and signage that is oriented to the pedestrian.



Use furnishing to create places of rest and pause along pedestrian routes. Ensure that the placement of furnishings does not impede travel.

## INTENT

- 3e To promote a pedestrian-friendly campus
- 3f To maintain a continuous and well-marked pedestrian experience
- 3g To clearly define Pedestrian Priority Routes
- 3h To create an active, safe, and engaging pedestrian realm

## PEDESTRIAN PRIORITY ROUTES

*The NWC Campus is intended to be highly walkable, interactive, and engaging. Visitors are encouraged to explore the Campus and learn about the facilities. As such, it is critical that the Campus is a walkable environment so people can move freely. Certain areas of the Campus are deemed as "pedestrian priority" and should be designed for the pedestrian above all else. These areas include plazas, gathering areas, major internal connections, and sidewalks along Key Streets. Pedestrian Priority Routes are mapped on the Urban Design Framework Map on page 5.*

## STANDARDS

- 3.6 Use pedestrian routes to create a highly walkable campus setting.**
  - a. Design pathways around building edges, through plazas, gathering areas, and event spaces, and along streetscapes to maintain a continuous path of travel.
  - b. Connect pedestrian routes with Key Streets, public spaces, buildings, transit facilities, parking areas, and bicycle facilities.
- 3.7 Design pedestrian facilities to be easily navigable.**
  - a. Provide wayfinding and signage that is oriented to the pedestrian.
  - b. Use paving materials and rows of lighting or furnishings to indicate a clear path of travel.
- 3.8 Ensure safe paths of travel for pedestrians through the campus and into the surrounding neighborhoods.**
  - a. Provide separation between pedestrians and faster modes of travel.
  - b. Ensure that the placement of furnishings does not impede travel.
- 3.9 Provide adequate space along pedestrian routes for groups of pedestrians to move comfortably along side each other.**

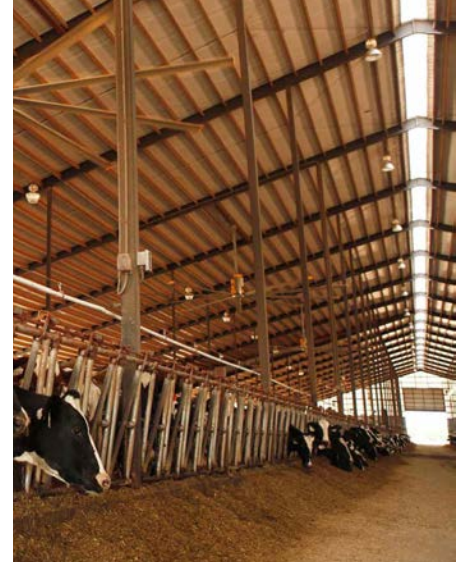
## GUIDELINES

- 3.10 Consider using design elements to create a more comfortable environment for pedestrians.**
  - a. Use furnishing to create places of rest and pause along pedestrian routes.
  - b. Use pedestrian-oriented lighting and furnishings.
  - c. When feasible, screen Pedestrian Priority Routes from parking and back-of-house areas.

# ANIMAL CIRCULATION



*Design animal circulation areas to minimize potential obstacles.*



*Ensure a clear path of travel with no interruptions in the ground plane.*

## INTENT

- 3i To create a well-functioning livestock campus
- 3j To provide clear and safe circulation for animal travel
- 3k To integrate animals into overall site circulation patterns
- 3l To avoid conflicts between animals and other modes

## STANDARDS

- 3.11 **Locate animal circulation to reduce conflicts between modes.**
  - a. Locate animal circulation adjacent to back-of-house, service, and loading areas
  - b. Separate animal circulation from Pedestrian Priority Routes when feasible
  - c. Keep fast moving traffic away from animal circulation areas
- 3.12 **Design animal circulation areas to minimize potential obstacles.**
  - a. Avoid harsh contrasts between light and shadow.
  - b. Ensure animal circulation areas are efficiently drained to prevent standing water.
  - c. Ensure a clear path of travel with no drain grates or other interruptions in the ground plane.
  - d. Avoid highly reflective materials.
- 3.13 **Use highly durable paving materials that are safe for animal use.**
- 3.14 **Provide adequate space along animal circulation routes for the specific functional needs of animals.**
  - a. Provide room for animal “push piles”
  - b. Provide temporary storage space for feed and bedding.

## GUIDELINES

- 3.15 **Consider designing animal circulation paths to be curvilinear to mimic more natural movement patterns.**
- 3.16 **Consider providing physical separation between animal circulation and other modes, when feasible.**



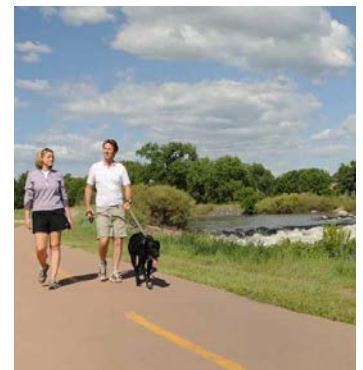
# ANIMAL CIRCULATION

Many different types of animals will be on Campus throughout the year. These animals will include livestock during NWSS, resident animals, visiting animals, veterinary patients, therapy animals, show animals, and breeding animals. They will have a variety of different needs in terms of circulation and their ability to mix with other modes. Some of these animal users are described in more detail below.



## STOCK SHOW/EVENT ANIMALS

*During NWSS equestrian events, breeding, and stock shows will bring a wide variety of animals to the campus. These animals will be temporary visitors but it is crucial that the site design accommodates their comfort and safety. These animals will include everything from horses, cattle, and llamas to chickens, goats, and pigs.*



## OTHER RESIDENT AND VISITOR ANIMALS

*Throughout the year many other animals will find a home on the NWC Campus. These animals could include visitors to the Animal Health Facility, educational or therapeutic animals that reside on campus or visit for special events or expositions, and the personal pets of the site's residents or residents of the surrounding neighborhoods using the Campus for recreation.*

# BICYCLE FACILITIES



Locate bicycle runnels along stairways so cyclists can walk up or down them.



Use striping, vertical separation, or other design elements to provide separation between bikes and major vehicular routes.

## INTENT

- 3m To make bicycling safe, comfortable and efficient
- 3n To provide clear and continuous routes for bicyclists
- 3o To locate bike facilities along Key Streets
- 3p To facilitate first and last mile bicycle connections
- 3q To connect the NWC Campus to the neighborhood and regional bike network

## HIGH EASE-OF USE FACILITY

*High ease-of-use bike facilities are defined by Denver Public Works as any bike facility that has a physical separation from vehicular traffic. These facilities include bike boulevards, cycle tracks, and shared use sidewalks.*

## STANDARDS

- 3.17 Locate bicycle facilities strategically throughout the Campus.**
  - a. Connect major campus destinations, including buildings, transit facilities, and event spaces, internally and to surrounding neighborhoods.
  - b. Lay-out bike facilities to function during large events.
  - c. Locate bicycle runnels along stairways so cyclists can walk up or down them.
  - d. Locate bike stations with information and bike repair equipment at major mobility nodes, entries or access points, when feasible.
- 3.18 Prioritize high ease-of-use facilities along Key Streets when feasible. If high ease-of-use facilities are not feasible, provide the safest bike facility that the roadway can accommodate.**
- 3.19 Don't terminate bike route without providing a clear connection to an adjacent facility.**
- 3.20 Design bike facilities that contribute to a safe bicycle network.**
  - a. Use striping, vertical separation, or other design elements to provide separation between bikes and major vehicular routes.
  - b. Provide adequate space for multi-use or shared bike facilities.

## GUIDELINES

- 3.21 Consider designing bike facilities that minimize conflicts with pedestrians.**
  - a. Separate bike facilities and adjacent sidewalks or public spaces, where feasible.
  - b. Limit bike facilities along Pedestrian Priority Routes or in plazas and gathering areas.
- 3.22 Consider using design elements to create a more easily navigable bike network.**
  - a. Use signage and wayfinding along bike routes to direct cyclists through the campus and to signal connections to surrounding neighborhoods.
  - b. Use materials, vertical elements, or signage to distinguish and signal areas where bicycle traffic is likely to occur.



Provide bike parking along dedicated bicycle facilities, in areas that are visible from the streetscape or bike route, in highly active areas, at Key Intersections and near transit stations.

## INTENT

- 3r To ensure that bicycle parking is visible, logically located, and meets cyclist demand
- 3s To provide parking areas that anticipate new forms of transportation, bike and scooter share, and dock-less mobility options

## STANDARDS

- 3.23 **Locate bicycle parking to maximize functionality and use.**
  - a. Provide bike parking along dedicated bicycle facilities, in areas that are visible from the streetscape or bike route, in highly active areas, at Key Intersections, as defined by the Urban Design Framework Map, page 5,, and near transit stations.
  - b. Bicycle racks shall not impede pedestrian traffic.
  - c. Bicycle racks shall be located a minimum of 4 feet from street trees, curb ramps, driveway ramps, street furnishings, and buildings.

## BIKE PARKING REQUIREMENTS

*The Denver Zoning Code (DZC) provides specific requirements for fixed bicycle parking. The design standards and guidelines in this section are intended to build on DZC requirements with additional guidance regarding the placement and character of bicycle parking.*

## GUIDELINES

- 3.24 **Consider providing flexible and well-marked areas that can accommodate bike and scooter share and other potential dock-less mobility options.**
- 3.25 **Consider incorporating creative designs, public art, and other placemaking features into bike parking.**

# TRANSIT FACILITIES



Consider incorporating art, branding, and / or wayfinding into transit facilities.



Furnish transit stops with seating, trees, and other furnishings, when feasible.

## INTENT

- 3t To connect the Campus to neighborhoods, employment areas and other destinations
- 3u To make transit use safe and comfortable
- 3v To maximize First and Final Mile connections

## FIRST AND FINAL MILE

*First and Final Mile connections are the facilities that provide people access to and from transit stops to their destination. Making these connections safe and straightforward increases the likelihood of people using public transportation.*

## STANDARDS

- 3.26 Locate transit and bus stops in highly visible locations and near main building entries and prominent campus destinations.
- 3.27 Co-locate transit stops with other First and Final Mile facility connections. Appropriate facilities include:
  - » Bike parking
  - » Bicycle share
  - » Scooter share
  - » Bike routes
  - » Vehicle pick-up/drop-off
  - » Pedestrian routes

## GUIDELINES

- 3.28 Design priority transit shelters to provide shade and protection from the elements, when feasible.
- 3.29 Furnish transit stops with seating, trees, and other furnishings, when feasible.
- 3.30 Consider incorporating art, branding, and/or wayfinding into the design of transit facilities.

# VEHICLE ACCESS



Design vehicle access routes through the Campus to be pleasant pedestrian environments. Use utility corridors as multi-purpose space that can accommodate occasional vehicle access.

## INTENT

- 3w To ensure efficient vehicular access
- 3x To minimize conflicts between vehicles, pedestrians, and cyclists
- 3y To reduce negative impacts of vehicle access on plazas, gathering areas, event spaces, and streetscapes
- 3z To promote the use of back-of-house areas for access to vehicle parking, loading, and service areas

## VEHICLE ACCESS REVIEW

*Vehicle access is subject to review and approval by the City of Denver's Department of Public Works. In some cases, Public Works review may result in required changes that deviate from the Standards and Guidelines.*

## STANDARDS

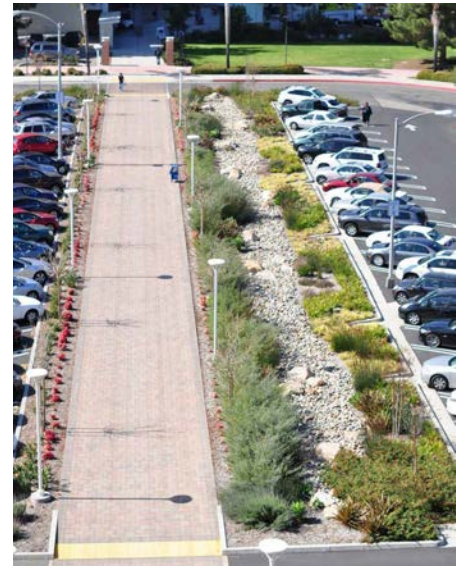
- 3.31 **Design vehicle access points to minimize impacts on pedestrians and cyclists. Appropriate strategies include:**
  - a. Limiting the width of vehicle access points;
  - b. Using paving materials, colors, or patterns to differentiate access points;
  - c. Screening vehicle access areas with landscaping or other vertical elements;
  - d. Consolidating vehicle access points with back-of-house areas; and
  - e. Using bollards in areas that may only require occasional vehicle access.
- 3.32 **Design vehicle access points to accommodate the functional needs of the campus.**
  - a. Provide adequate turning radii for large trucks and trailers.
  - b. Provide efficient connections between access points, loading and unloading areas, and back-of-house and service areas.
- 3.33 **Define vehicle access points with signs.**

## GUIDELINES

- 3.34 **Consider creating clear vehicle pick-up and drop-off areas around gateways and other highly active areas.**
- 3.35 **Limit personal vehicle access points to interior areas of campus, when feasible.**
- 3.36 **Consider designing vehicle access routes through the Campus to also function as pleasant pedestrian environments.**



Use Green Infrastructure and Low Impact Development (LID) principles to treat runoff from surface parking lots.



Provide safe, convenient pedestrian connections from parking areas to adjacent uses.

## INTENT

- 3aa To minimize visual impacts of parking lots
- 3ab To ensure that parking design promotes pedestrian, bicycle and vehicular safety
- 3ac To promote parking layouts and designs that allow for efficient redevelopment in future phases
- 3ad To encourage parking designs that provide flexibility for events
- 3ae To ensure that parking contributes to sustainability

## PARKING SCREENING

Article 10.5.4.4 of the DZC provides specific requirements for surface parking lot landscaping, including:

- » Required perimeter planting strip with deciduous tree canopy
- » Required screening device (garden wall)
- » Required pedestrian access

## STANDARDS

- 3.37 Screen permanent surface lots from adjacent public spaces. Appropriate screening devices include:
  - » Landscaping
  - » Trees
  - » Garden walls
  - » Public Art
  - » Decorative fencing
- 3.38 Provide safe, convenient pedestrian connections from parking areas to public sidewalks, building entries, street crossings, public space and adjacent uses.
- 3.39 Incorporate signage and wayfinding to direct the user to and through parking areas.

## GUIDELINES

- 3.40 Consider locating surface parking lots to preserve flexibility for development at a later time.
- 3.41 Consider designing parking lots to provide flexibility for events and community gatherings. Appropriate design elements include:
  - » Temporary bollards
  - » Movable furnishings
  - » Landscaping and other perimeter elements
  - » Lighting and electrical hookups
  - » Durable paving materials
- 3.42 Consider using Green Infrastructure and Low Impact Development (LID) features to treat runoff from surface parking lots, for more information see Chapter 2: Public Space Design, page 50-51.
- 3.43 Consider including space for bike, scooter, or motorcycle parking and electric vehicle charging stations in surface lots.



*Design parking structures to limit the view of parked cars and angled ramps from public spaces.*

## INTENT

- 3af To minimize the visual impacts of parked cars on public spaces
- 3ag To provide pedestrian-friendly edges to parking structures
- 3ah To promote structured parking designs that are safe and compatible with the character and quality of the Campus
- 3ai To provide parking structures that can convert to other uses over time

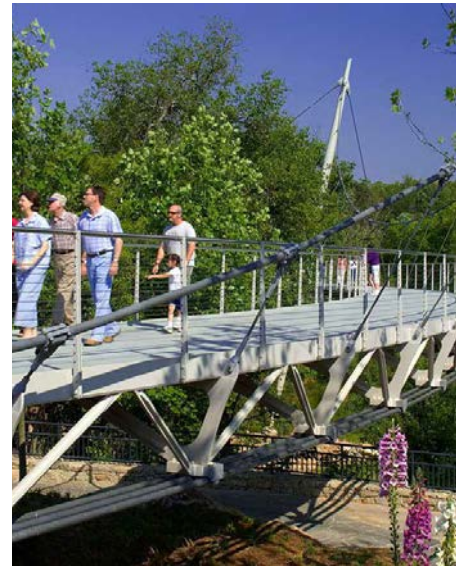
## STANDARDS

- 3.44 **Design parking structures to limit the view of parked cars and angled ramps from public spaces. Appropriate screening devices include:**
  - » Active uses
  - » Architectural elements
  - » Murals
  - » Plants
- 3.45 **Design structured parking to be compatible with conversion to potential future uses. Strategies include:**
  - a. Provide adequate floor to ceiling heights to accommodate other uses.
  - b. Incorporate mostly level floors as opposed to speed ramps or other continually sloping surfaces.
- 3.46 **Visually integrate parking structures into a building's overall facade design. Appropriate techniques include:**
  - a. Continue similar building materials across facade areas.
  - b. Continue vertical and horizontal articulation across facade areas.
- 3.47 **Design parking structures to be a safe environment for users.**
  - a. Ensure areas in and around parking structures are well lit.
  - b. Ensure parking structure access is clearly visible and well marked.

## GUIDELINES

- 3.48 **Consider designing parking structures to limit conflicts with pedestrian uses.**
  - a. Keep vehicle access off of Key Streets or public spaces, when feasible; and
  - b. Locate mechanical systems away from Key Streets or public spaces.
- 3.49 **Consider designing the ground floor of parking structures to provide visual interest along streetscapes and public spaces. Appropriate techniques include:**
  - a. Wrap the ground floor with an active use, when feasible;
  - b. Incorporate art or decorative elements; and
  - c. Incorporate landscaped areas and trees.
- 3.50 **Consider including space for bike, scooter, or motorcycle parking and electric vehicle charging stations in parking structures.**

# BRIDGES AND CATWALKS



Consider using materials, forms and colors on bridges and catwalks that reinforce the character of adjacent buildings and public spaces.

## INTENT

- 3aj To provide bridges and catwalks that function as placemaking elements
- 3ak To create opportunities for seating and viewing along the bridges and catwalks
- 3al To accommodate safe, accessible, direct and low-stress circulation routes

## STANDARDS

- 3.51 Design bridge and catwalk deck surfaces with durable materials able to withstand the Colorado sun, freeze/thaw, salt, snow melt and regular maintenance.
- 3.52 Design bridges and catwalks to be safe pedestrian environments.
  - a. Provide pedestrian lighting on all bridges and catwalks to avoid extreme contrasts between light and shadow.
  - b. Ensure bridge and catwalk materials integrate non-slip surfaces.
- 3.53 Provide a minimum 6 foot clear pedestrian/bicycle zone in each direction on all bridge decks.

## GUIDELINES

- 3.54 Consider incorporating site furnishings and seating areas along the bridges and catwalks, when feasible. Locate these elements to maximize view opportunities such as:
  - » Views to Downtown Denver
  - » Views to the mountains
  - » Views along the river
  - » Views across the Campus and to prominent Campus features
  - » Views of adjacent neighborhoods
- 3.55 Consider using traffic calming devices and additional design elements to discourage high speed bike and automobile traffic.
- 3.56 Consider using materials, forms and colors on bridges and catwalks that reinforce the character of adjacent buildings and public spaces.



# UNDERPASSES



Consider incorporating gateway features and public art to help establish underpasses as distinct places.

## INTENT

- 3am To promote a safe and dignified path of travel for all users
- 3an To minimize the risk of conflicts between travel modes
- 3ao To encourage the use of lighting and artistic design to ensure underpasses are a community amenity
- 3ap To emphasize underpasses as gateways

## STANDARDS

- 3.57 **Design underpasses to be safe pedestrian environments.**
  - a. Use pedestrian and bicycle scaled lighting within all underpasses to ensure all users and paths are visible.
  - b. Provide signage and wayfinding to clearly identify the path of travel.
  - c. Ensure all users are visible when entering and exiting underpasses.
- 3.58 **Provide a minimum 8 foot clear pedestrian/bicycle zone within all underpasses to prioritize a safe path of travel for those modes.**

## GUIDELINES

- 3.59 **Consider incorporating gateway features and public art to help establish underpasses as distinct places.**

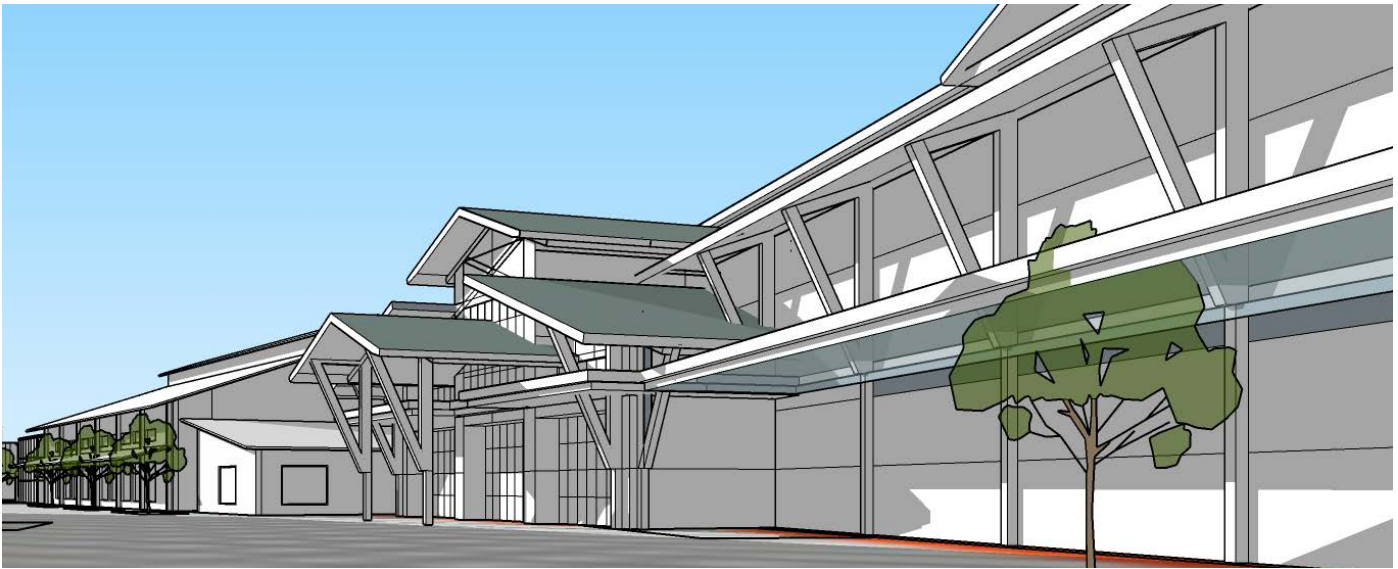


# CHAPTER 4: BUILDING DESIGN

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# INTRODUCTION



*The National Western Center (NWC) Campus includes a diverse range of building types with different designs and functions.*

The National Western Center (NWC) Campus includes a diverse range of building types with different designs and functions. Some building types are already being planned, such as arenas and barns for the National Western Stock Show. Other building types are yet to be determined - but must fit within the vision for the Campus. To this end, this section provides flexibility to accommodate a range of building types.

It establishes baseline design standards and guidelines applicable to **all buildings** throughout the Campus. More detail is provided for specific contexts in the Character Areas section of Chapter 1, which reflect the themes and uses envisioned for each. Designs will also need to vary based on functional requirements, and more flexibility may be appropriate for certain building types.

The building types on the next pages are offered to show potential buildings that may occur at the NWC. Some buildings may fall into more than one category, or outside the categories.



# BUILDING TYPES

These building types are shown to aid in applying the design standards and guidelines to varying conditions on the NWC Campus. Some buildings may fall into more than one of the categories below.

## ARENAS



Arenas, small and large, are planned as part of the Campus to host equestrian, livestock, agricultural, educational, musical, athletic, and other planned events. They are designed to be flexible in use. Arenas will occur in the Festival Grounds, although the historic Stadium Arena and potential for another large, multi-use arena is possible in The Triangle (North and South) Character Areas.

- » Simple massing; long articulated walls
- » Sloping roofs (gable and shed) or possibly some flat roofs
- » Metal siding as the primary material
- » Masonry (stone, concrete or brick) at the base
- » Daylighting clerestories and monitors
- » Large loading docks and doors
- » More refined materials, transparency, and details at the primary entrance and along Key Streets

## BARNES



Two large barns, the Equestrian Barn and Livestock Barn, are planned for the Festival Grounds Character Area. Other, smaller barns may occur throughout the Campus. These structures will be utilitarian in design with necessary loading/unloading areas for animals, exhibitors and patrons. These barns may also be used for other events throughout the year, and will therefore will be designed to be flexible in use.

- » Simple massing; long articulated walls
- » Sloping roofs (gable and shed)
- » Metal siding as the primary material
- » Masonry (stone, concrete or brick) at the base
- » Daylighting clerestories and monitors
- » Large loading docks and doors
- » More refined materials, transparency, and details at the primary entrance and along Key Streets

## RESEARCH AND DEVELOPMENT AND EDUCATIONAL OUTREACH



As part of the NWC's vision for agricultural innovation, the Campus will host high-tech, research, educational outreach, and lab facilities. These buildings, which include many of the CSU facilities, have unique requirements for building programming and design. They should exhibit current trends in technology, energy conservation and generation as well as food production.

- » Varied massing and windows, reflecting internal functions
- » Higher degree of transparency at the primary entrance and along Key Streets
- » Varying roof forms
- » Wide range of building materials
- » Exterior sustainable features (solar arrays, green roofs, light shelves, etc.)
- » Service and loading areas

## CIVIC / VISITOR-RELATED



Some buildings, such as the planned WSSA Legacy Building and CSU Center, will include a mixture of welcome center, educational facility and museum. They will help activate the Campus on a daily basis with employees, tour buses, school buses, and regular visitors.

- » Varied massing and windows, reflecting internal functions
- » Higher degree of transparency at the primary public entrance and along Key Streets
- » Varying roof forms
- » Wide range of building materials (including metal and glass)
- » Exterior sustainable features (solar arrays, green roofs, light shelves, etc.)

# BUILDING TYPES

## UTILITY AND MAINTENANCE



Numerous support buildings will be located on campus, including the NWC Maintenance Facility. These buildings will be utilitarian in function and architectural design. Regardless, they should remain true to the character and mission of the Campus.

- » Simple massing with articulation
- » Only one or two stories
- » Sloping or flat roofs
- » Metal siding as the primary material, as well as CMU, brick or masonry
- » Low percentage of windows on side and rear walls
- » Loading docks and large doors
- » More refined materials, transparency, and details at the primary public entrance and along Key Streets

## MIXED-USE



Mixed-use buildings that include various combinations of commercial and residential activities are anticipated to occur in some parts of the Campus. The term, “mixed-use” applies to a specific building type of two or more stories with active uses at the ground level with housing, offices, or hotel uses above.

- » Varied massing
- » Pedestrian-oriented building frontage, usually with storefronts
- » A high degree of transparency at the street level
- » Some transparency at upper floors
- » A range of roof forms
- » A mix of building materials (often masonry, wood, metal, and glass)

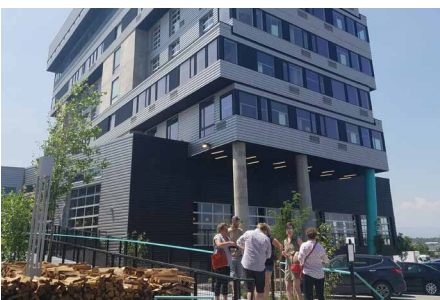
## RESIDENTIAL



Residential buildings may help activate and enliven the Campus on a daily basis. They also should help meet citywide initiatives for design excellence, diverse forms, and sustainability. These may include townhouses and multi-level apartment and condominium buildings.

- » Pedestrian-oriented frontage, with a primary lobby entrance or individual entries with stoops
- » A moderate degree of transparency at the street level
- » Some transparency at upper floors
- » A range of roof forms
- » A mix of building materials (often masonry, wood, metal, and glass)

## HOSPITALITY



Hotels are possible for the Campus. These building forms are similar to mixed-use and residential types but have unique requirements for drop-off, parking, and signage.

- » Pedestrian-oriented frontage, with a primary lobby entrance
- » A high degree of transparency at the street level
- » Some transparency at upper floors
- » A range of roof forms
- » A mix of building materials (often masonry, wood, metal, and glass)



Vary the massing of a building to provide visual interest and reduce perceived scale.



Ground floor wall offsets provide relief at the pedestrian level to avoid a long uninterrupted wall.

## INTENT

- 4a To provide visual interest
- 4b To reduce mass and scale of a large building
- 4c To consider access to sunlight and views

## MASS VARIATION

*Mass variation methods reduce actual building mass and scale, which will be especially important for large buildings. These methods modulate a building floor or wall in a manner that creates a physical relief in an architectural form.*

## CHARACTER AREAS

*Mass variation is particularly important in the Triangle Character Areas, South Campus, the Festival Grounds, and in some parts of the Innovation Campus.*

## STANDARDS

- 4.1 Vary the massing of a building to provide visual interest and reduce perceived scale, especially on a facade that faces a Pedestrian Priority Route or Key Street, as mapped on the Urban Design Framework Map, page 5, Use one or more of the following techniques to vary massing, see the table on the following page for more detail:**
- a. Height variation - Vary the height of a building to add interest. This should occur strategically and in concert with other design methods (i.e. articulation and material changes).
  - b. Ground floor wall offsets - Provide relief at the pedestrian level, to avoid a long wall. Wall offsets should help frame and activate a street, sidewalk, pathway or public space. A wall offset should be proportional to the building facade length, i.e. use larger offsets for larger buildings.
  - c. Upper story setback - When feasible step back upper floors to reduce mass at the pedestrian level. This helps a large building fit into sensitive contexts such as when adjacent to a historic structure or residential neighborhood.
  - d. Middle setback - Carve out space in the middle of a building on upper floors to reduce its central mass. This is particularly useful to allow in natural light and air and to create public spaces for occupants to enjoy.

## GUIDELINES

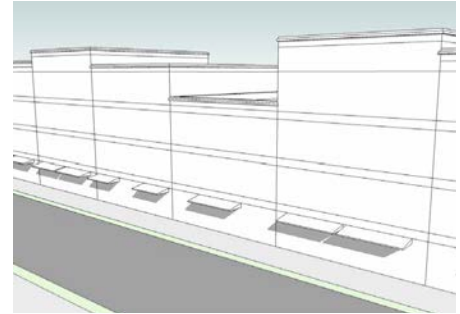
- 4.2 Consider varying massing to maximize solar access to a street or public space.**
  - a. An upper floor setback on a taller building will enhance solar access.
- 4.3 Consider locating the taller portion of a structure away from a sensitive edge, such as a neighboring residential or historic building of lower scale.**

## MASSING VARIATION TECHNIQUES

Building massing variation techniques can reduce the overall scale of a building while also helping to create a more interesting form. Below are examples of the strategies listed on the previous page. Often, these strategies are used in concert with one another in a single building.

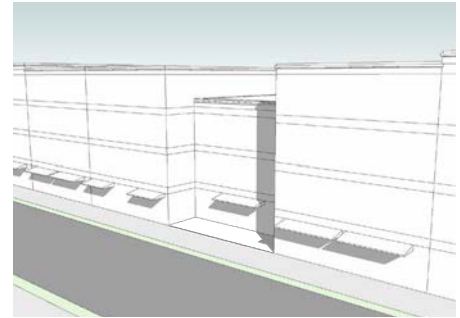
### HEIGHT VARIATION

*Vary the height of a building to add interest. This should occur strategically and in concert with other design methods (i.e. articulation and material changes).*



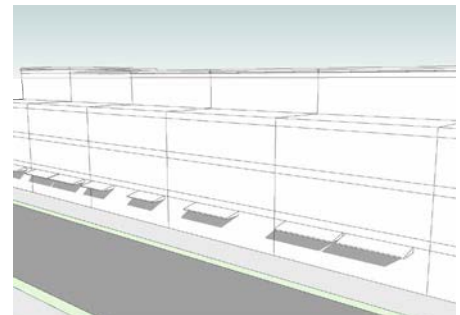
### GROUND FLOOR WALL OFFSET

*Provide relief at the pedestrian level, to avoid a long wall and help frame and activate a street, sidewalk, pathway or public space. A wall offset should be integrated within the overall wall design.*



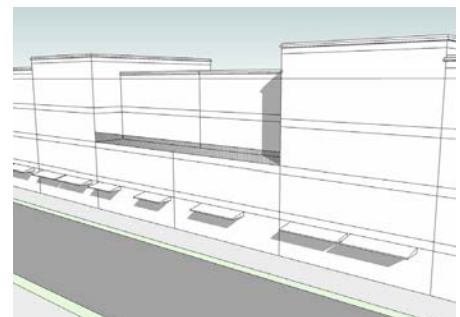
### UPPER STORY STEPBACK

*Step back upper stories to reduce mass and street wall height at the pedestrian level. This helps a large building fit into a sensitive context such as adjacent to a historic structure or residential context of a lower scale.*



### MIDDLE STEPBACK

*Carving out space in the middle of a building on multiple floors reduces the central mass of a building. This is particularly useful to allow in natural light and air and is desirable to create usable space on upper floors or to create a plaza space on the ground floor.*



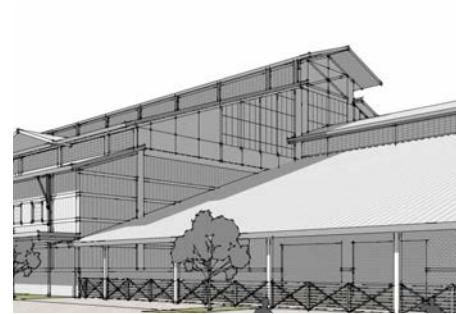


## MASSING VARIATION TECHNIQUES FOR BARNs AND ARENAS

These techniques should be considered for varying the mass of barns, arenas and other buildings that have more utilitarian functions.

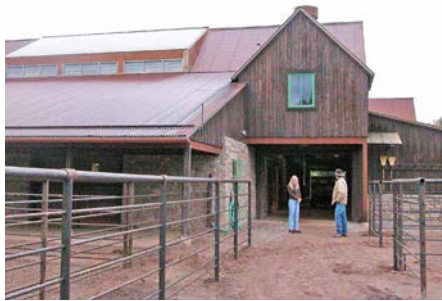
### HEIGHT VARIATION

*Height variation may occur with changes in wall heights for different building modules.*



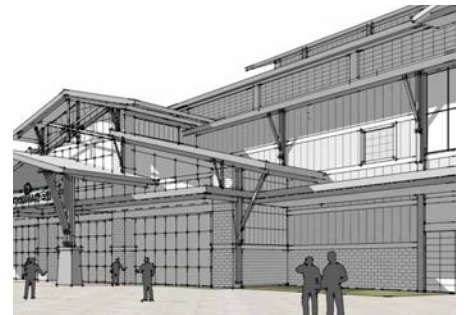
### VARIATION IN ROOF FORM

*Clerestories, monitors and cross-gables can provide variation in roof lines.*



### MASSING STEPBACK

*In some cases a portion of a wall may be set back, sometimes expressing the internal truss system.*





*Integrate architectural details with facade articulation. Use a combination of elements such as exposed posts, beams, trusses and brackets.*



*Include articulation techniques that provide visual interest and human scale.*

## INTENT

- 4d To provide a visually interesting facade
- 4e To reduce perceived scale of a building

## ARTICULATION

*Articulation methods reduce perceived building mass.*

## STANDARDS

- 4.4 **Include articulation techniques in the design of building facades that provide visual interest and express a human scale. See the table on the following page for more detail.**
  - a. Articulation is particularly important for mixed-use, civic/tourism, residential and hospitality building types, any building edge that faces a Pedestrian Priority Area, and along Key Streets connecting to surrounding neighborhoods.
  - b. Articulation methods include:
    - » Accent lines;
    - » Wall recesses, projections or banding;
    - » Changing patterns of window composition;
    - » Balconies, canopies and awnings;
    - » Change in color; and
    - » Change in material.

## GUIDELINES

- 4.5 **Consider employing articulation methods that create shadow lines to show depth and detail.**
- 4.6 **Consider integrating architectural details with facade articulation.**
  - a. Use exposed posts, beams, trusses and brackets.
  - b. Contemporary methods include integrated photovoltaic cells, curtain wall expressions, and shading devices.

## ARTICULATION & DETAIL TECHNIQUES

Use the following articulation methods when designing a building elevation.

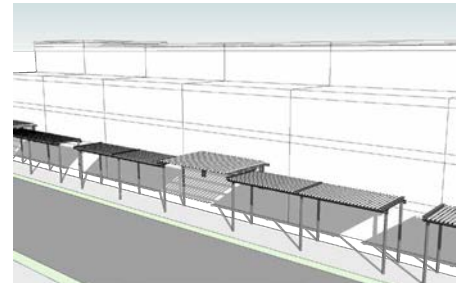
### ACCENT LINES

*These include vertical and horizontal features on a building wall. An accent line often projects from the wall. Examples include: moldings, sills, cornices, pilasters and spandrels.*



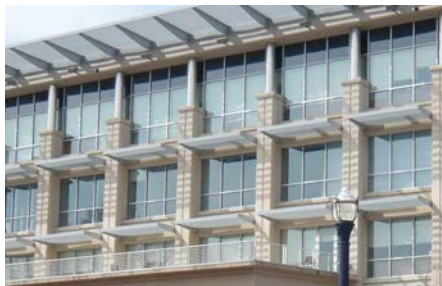
### PROJECTIONS

*These elements extend from the primary wall plane. They usually relate to structural bays in a building.*



### WINDOW COMPOSITION

*Windows of familiar dimensions can convey a human scale. Aligning windows horizontally and vertically creates an interesting rhythm.*



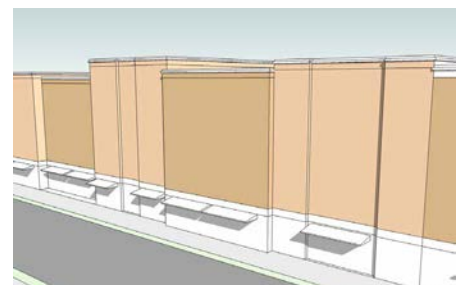
### BALCONIES, AWNINGS, & CANOPIES

*These elements help provide interest and human scale to a building. They should be detailed to be integral to the architecture.*



### MATERIAL/COLOR CHANGES

*Material or color changes help reduce the perceived scale of a large building. For more information see Building Materials on page 84.*





*Design all sides of a building that will be viewed from public spaces to provide visual interest.*

## INTENT

- 4f To provide a visually interesting building facade from all public view points
- 4g To avoid presenting a “back side” of a structure to a public space or view point
- 4h To provide views of active uses inside of a building to help activate adjacent streets and public spaces

## PRIMARY FACADE

*A primary facade is any wall that faces onto a Pedestrian Priority Route or public space. This could mean that two (or more) building faces are considered “primary.”*

## CHARACTER AREAS

*Four-sided design is particularly important in the core event areas of the NWC, including the Innovation Campus and the Festival Grounds, as well as for the Triangle Character Areas.*

## STANDARDS

- 4.7 Design all sides of a building that will be viewed from public spaces to provide visual interest.

## GUIDELINES

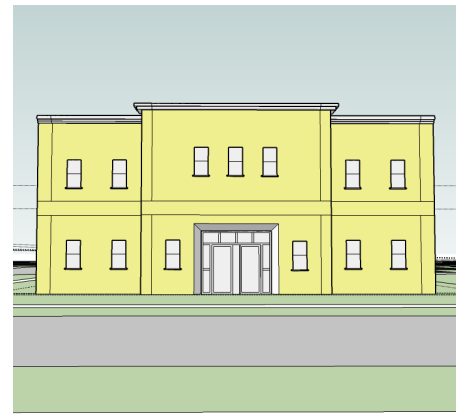
- 4.8 Consider including architectural details to reduce visual impact of a “back side.” Use a variety of methods, including:
  - a. Windows and doors
  - b. Building articulation techniques
  - c. Site walls and raised planters
  - d. Decorative wall treatment such as wall art, murals, display windows/cases and green walls.

## FOUR-SIDED DESIGN

Four-sided design is particularly important in the Campus setting of the NWC. This means that all exterior facades that will be visible to the public should be designed to create visual interest, convey a sense of human scale and in some cases activate streets, public spaces and the riverfront. At the same time, differences in the degree of detailing will vary, based on the degree of exposure to the public and functional requirements. These standards are subordinate to the primary street-facing facades in the zoning code.

### PRIMARY WALL

*This wall type is highly visible to the public and is important in conveying a sense of scale, visual interest and a pedestrian-oriented activity for the building and its site. This is the “front” of a building, either facing a street or public space.*



### SECONDARY WALL

*This type is in relatively high traffic areas, but internal functions do not lend themselves to designs with an extensive amount of transparency. Using alternative means of adding interest and activation is more appropriate. For more information see Pedestrian Level Design, Interest and Activation on page 88-89.*



### TERTIARY WALL

*This type has less public exposure and is often viewed less frequently or from a distance, such as from a loading area or commuter rail. Even so, the objective is to assure that it is seen as part of a coherent design composition. A modest level of detail is appropriate here.*





*Choose materials that are likely to maintain an intended finish over time.*



*Consider using building materials that contribute to visual interest.*

## INTENT

- 4i To ensure that building materials provide visual interest and a sense of scale
- 4j To avoid materials that have flat or featureless surfaces
- 4k To encourage use of innovative, high-quality and sustainable materials
- 4l To ensure the use of durable building materials.

## STANDARDS

- 4.9 **Use building materials of proven durability. Note that applicants may be required to demonstrate the durability of unproven or unusual materials.**
  - a. Choose materials that are proven to be long-lasting and low maintenance in the Colorado climate.
  - b. Choose materials that are likely to maintain an intended finish over time or acquire a patina, when it is understood to be a desired outcome.
- 4.10 **Minimize the use of cementitious stucco on the ground level (that portion of a building extending upward approximately 10'-20' from the ground plane).**

## GUIDELINES

- 4.11 **Consider using building materials that contribute to visual interest and convey a sense of human scale. Strategies include:**
  - a. Applying texture, finish, and detailing.
  - b. Applying materials in ways that create shadow, contrast, and depth.



*Locate windows to express a rhythm and create visual interest.*



*Provide windows at the pedestrian level to permit visibility to indoor activities to the extent feasible.*

## INTENT

- 4m To create a sense of human scale and visual interest
- 4n To enhance safety with “eyes on the street”
- 4o To facilitate views of inside activities from public spaces

## STANDARDS

- 4.12 **Provide windows at the pedestrian level to permit visibility to indoor activities to the extent feasible.**
  - a. The degree of transparency will vary by Character Area and building function.
  - b. Transparency is particularly important for mixed-use, civic/tourism, residential and hospitality building types. It is less critical for maintenance and utility buildings.
- 4.13 **Locate windows to express a rhythm and create visual interest.**
  - a. Provide a generally consistent pattern of spacing between windows.
  - b. Avoid the use of curtain walls. If a curtain wall is used, use spandrels, moldings, awnings, sills or shading devices to provide vertical and horizontal expression.

## GUIDELINES

- 4.14 **Consider using windows to provide views into the interior activities of buildings.**



Consider accommodating large scale signage on buildings intended for public use, such as arenas.



Incorporate pedestrian-oriented signage into the overall facade design.

## INTENT

- 4p To ensure that a facade accommodates pedestrian-oriented signage
- 4q To encourage a facade design that harmoniously integrates identification signage
- 4r To ensure that a key facade on a building that is intended for public use can accommodate large signage

## SIGN DESIGN

Consider overall sign design guidelines when designing facades for signs. For more information see Chapter 6: Sign Design page 98-104.

## STANDARDS

- 4.15 Incorporate pedestrian-oriented signage into the overall facade design. Strategies include:**
- a. Incorporating a designated band or area for signage above the pedestrian level for signage.
  - b. Designing a canopy or awning to accommodate signage.
  - c. Designating an area to accommodate tenant or directory signage near a primary entrance.

## GUIDELINES

- 4.16 Consider accommodating large scale signage on buildings intended for public use, such as arenas.**
- a. Signage should be subordinate to the overall facade in terms of scale and color.
  - b. Reserve an area on the roof parapet, or integrated into the roof cap feature, for future large-scale signage.





*Design a building entrance to be clearly identifiable.*



*Front primary pedestrian entrances onto a street or public space.*

## INTENT

- 4s To integrate pedestrian circulation between buildings and public spaces
- 4t To ensure pedestrian entrances are clearly identifiable

## CHARACTER AREAS

*The orientation and emphasis of building entries is particularly important in the core event areas of the NWC, including the Innovation Campus and Festival Grounds, as well as the Triangle Character Areas, South Campus, and the Elyria/Swansea Gateway..*

## STANDARDS

- 4.17 Front primary pedestrian entrances onto a street or public space.**
  - a. Place a pedestrian entrance along a Key Street or Pedestrian Priority Route, when feasible.
- 4.18 Design a building entrance to be clearly identifiable.**
  - a. Use architectural elements to highlight an entrance, and provide weather protection if feasible.
  - b. Add variation in building mass and height to highlight a primary entrance.
- 4.19 Connect a pedestrian entrance with areas where high levels of pedestrian activity is anticipated.**

## GUIDELINES

- 4.20 Consider orienting a primary public entrance toward a transit station, circulation route, street or plaza when feasible.**



Ensure facades that are located adjacent to a primary pedestrian route provide visual interest to and help activate adjacent public spaces.



Provide building entrances adjacent to a public space.

## INTENT

- 4u To activate public spaces near buildings
- 4v To provide visual interest at the pedestrian level of a building

## BY BUILDING TYPE

*Interest & activation is particularly important for mixed-use, civic/tourism, residential and hospitality building types. It is less critical for utility and maintenance buildings.*

## TRANSPARENCY

*The Denver Zoning Code includes transparency and transparency alternative requirements. See the NWC Campus District for more information.*

*Note: This section of the Zoning Code is currently being revised as part of the CPD Regulatory Package Update.*

## STANDARDS

- 4.21** Ensure facades that are located adjacent to a Pedestrian Priority Route provide visual interest to and help activate adjacent public spaces. This applies generally to the first twenty vertical feet of a building wall from the ground plane. Strategies are listed below and example photos are provided on the following page.
- a. Provide building entrances adjacent to a public space. When that is not feasible, use other methods described below.
  - b. Windows that allow one to see activities occurring inside the building.
  - c. Awnings, canopies, arcades, colonnades, etc.
  - d. Architectural details (unique masonry design, pilasters, exposed columns, structural supports, lighting, etc.)
  - e. Wall art or mural
  - f. Display cases
  - g. Architectural screens
  - h. Landscape feature

The character of a building's ground floor strongly impacts the pedestrian experience of adjacent public spaces. A featureless wall at the pedestrian level can diminish the quality of the pedestrian experience. A building should be designed to promote pedestrian interest and activation at the street level. The following techniques are examples

## ACTIVE PUBLIC ENTRANCE



This is desired, but not always feasible.

## WINDOWS



Use windows to allow people to see activities inside.

## AWNINGS, CANOPIES, ETC.



These architectural elements provide protection from weather and add interest to the pedestrian level.

## ARCHITECTURAL DETAILS



Details can provide a sense of human scale to a building.

## WALL ART AND MURALS



This adds delight to the pedestrian experience.

## DISPLAY CASES



When a view into a space isn't feasible, a showcase can provide interest.

## ARCHITECTURAL SCREENS



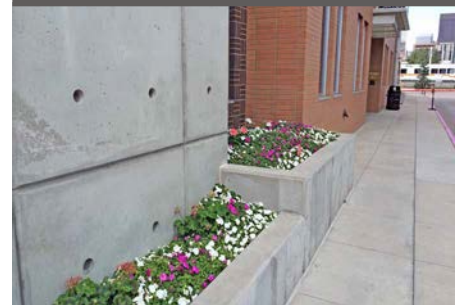
Innovative architectural screens can provide interest.

## LANDSCAPE FEATURE (GREEN WALL)



Green, or "living walls," and vertical planters provide interest and integrate more green space into the Campus.

## LANDSCAPE FEATURE (PLANTER)



Landscaping and planters add texture, green elements, and scale.

# REHABILITATION/REUSE OF EXISTING BUILDINGS



Do not try to change the style of the building or make the structure look older than its actual age.



Traditional materials should be preserved and re-utilized when feasible.

## INTENT

- 4w To retain examples of the heritage of the NWC Campus while accommodating new uses
- 4x To maintain high level character and the ability to perceive a building's original intended functionality
- 4y To maintain flexibility such that adaptive reuse is incentivized

## EXISTING BUILDINGS INVENTORY

*These buildings are a part of the heritage of the Campus and may have potential for reuse:*

- » Livestock Exchange Buildings
- » McConnell Welders
- » Artist Studio
- » Hay Barn #3 (King Energy Building)
- » Chute Office
- » Scale House #6
- » Guard Shack
- » Brands Building
- » 4701 Brighton Blvd.
- » Commercial and Residential Structures on Baldwin Ct. and 47th. Ave.

## INTRODUCTION

The National Western Center Campus includes a number of existing buildings that reflect traditional building designs from earlier eras and are part of the heritage of the Campus. This section provides guidelines for these existing buildings.

When rehabilitating and reusing an existing building, consider implementing the best practices reflected in the guidelines below.

## STANDARDS

**4.22 Reuse existing/traditional buildings whenever feasible.**

## GUIDELINES

**4.23 Consider using a variety of methods to respect the overall character of the building.**

- a. Do not try to change the style of the building or make the structure look older than its actual age.
- b. When constructing an addition, do not copy an older style.
- c. An addition should relate to the original building in mass and scale, but should appear as new.

**4.24 Consider utilizing traditional materials and materials that are in keeping with the original intent for the building.**

- a. Traditional materials should be preserved and re-utilized when feasible.
- b. New, alternative materials that keep in character with the original intent of the building (in terms of color palette, scale and rhythm) are appropriate.

# REHABILITATION/REUSE OF EXISTING BUILDINGS



Consider preserving building features to the extent feasible in order to maintain the ability to perceive the fundamental function and organization of a building.

## GUIDELINES (CONTINUED)

- 4.25 Consider preserving building features to the extent feasible in order to maintain the ability to perceive the fundamental function and organization of a building.**
- The fundamental spacing, rhythm and dimensions of windows and doors.
- 4.26 Consider maintaining a roof form that is compatible with that of the original building.**
- Roof materials should be in keeping with the texture, color and overall character with traditional materials.
- 4.27 Consider designing an addition or alteration to respect the existing structure and maintain its aesthetic and structural integrity.**
- When constructing an addition, do not try to emulate an existing style to make the addition look older than its actual age.
  - A contemporary design for an alteration or addition to an existing structure should not be discouraged as long as it does not destroy character-defining features and the design is compatible with the existing building.

## PRESERVATION BEST PRACTICES

*Stabilization (mothballing) of existing buildings:*

- » When funds are not currently available to restore or reuse an existing building, it should be closed up to protect it from vandalism and deterioration. For more information, see "Mothballing Historic Buildings" <https://www.nps.gov/tps/how-to-preserve/briefs/31-mothballing.htm>

*Relocation of an existing building:*

- » When funds are available, relocation may also be an option for some existing buildings, within the NWC campus or elsewhere in the surrounding neighborhoods. For more information, see "Moving Historic Buildings" <https://www.nps.gov/tps/how-to-preserve/preservedocs/Moving-Historic-Buildings.pdf>



# CHAPTER 5: LIGHTING DESIGN

## IN THIS CHAPTER:

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| Overall Lighting Design ..... | Page 95 |
| Public Space Lighting .....   | Page 96 |
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# INTRODUCTION



High-quality lighting can heighten the user experience by providing a sense of wayfinding, safety, and security.

## LIGHTING REGULATIONS IN THE DENVER ZONING CODE

*The Denver Zoning Code (DZC) regulates Outdoor Lighting in Section 10.7. It provides guidance on lighting sources and design standards, with the intent of creating safe, effective lighting while eliminating adverse impacts of light through glare and spillover. See the DZC for more information and specific requirements.*

This chapter on lighting design addresses what lighting is needed for quality streets, safe pedestrian circulation, and feature lighting throughout the Campus and how to support beautiful and effective public spaces. High-quality lighting can provide campus safety and security and highlight features such as art and gateways that enrich the visitor experience.

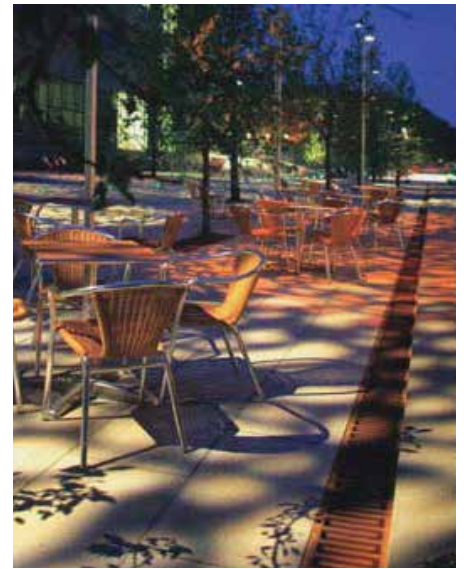
Given the Campus's commitment to sustainability and environmental stewardship, dark sky and light trespass are important concepts that must be incorporated into the lighting plan. Dark sky refers to a type of lighting design that reduces glare and light trespass onto neighboring properties. Light trespass is light that shines onto neighboring sites or properties. It is especially important to consider when adjacent to riverfront and natural areas, or residential neighborhoods.

## GLARE AND LIGHTING DESIGN

*Glare reduces nighttime visibility, especially for people with low vision, and it is an important concept to address for campus lighting. Glare should be minimized in the design of all types of campus lighting.*



# OVERALL LIGHTING DESIGN



Consider locating and spacing lighting in coordination with design elements, circulation patterns, buildings, and different site programs.

## INTENT

- 5a To create a cohesive and intuitive environment
- 5b To heighten spatial awareness throughout the Campus
- 5c To eliminate negative impacts of lighting on adjacent sites
- 5d To encourage creative and innovative lighting design

## ADDITIONAL LIGHTING RECOMMENDED PRACTICES

*The Illuminating Engineering Society of North America (IESNA) Lighting Handbook includes recommended practices for various site design topics. IESNA RP-33 should be referenced for more information on Exterior Environments, RP-8 for more information on Parking Facilities, and RP-20 for more information on Roadway Design.*

## STANDARDS

- 5.1 Distribute light evenly across campus, avoiding dark or overly bright areas
- 5.2 Design campus lighting to reduce glare and minimize light trespass.
  - a. Use cutoffs or shielding to reduce light pollution.
  - b. Downcast and shield all security lighting.
  - c. Limit back-lighting as much as possible.
  - d. Use low light levels at an even wattage.
- 5.3 Design campus lighting to provide a safe environment for all users.
  - a. Reduce glare so that all users are visible at all times.
  - b. Design lighting to be non-distracting, particularly along streetscapes and other areas where vehicles and pedestrians interact.
  - c. Use lighting to illuminate hazards.
- 5.4 Utilize lighting that is warmer in color to create a more comfortable pedestrian environment.
- 5.5 Use lighting fixtures that are LED or high efficiency.

## GUIDELINES

- 5.6 Consider locating and spacing lighting in coordination with design elements, circulation patterns, buildings, and different site programs.
- 5.7 Consider providing varying levels of light on trees, paving, stairs, building edges, and walls throughout the Campus to create visual interest.
- 5.8 Consider creating a unique experience through the use of innovative, decorative and feature lighting.
- 5.9 Consider designing lighting to be sensitive to the specific needs of animals on site.
  - a. Avoid animated or overly bright lighting along animal paths.
  - b. Provide consistent and even lighting along animal paths.

# PUBLIC SPACE LIGHTING



Locate lighting to highlight major campus features and activate public spaces.

## INTENT

- 5e To support a safe and pedestrian-friendly campus
- 5f To draw visitors into and activate public spaces
- 5g To ensure that public spaces are comfortable for all users

## FEATURE LIGHTING

*Feature lighting is distinctive or iconic lighting that highlights site features such as landscaping, furnishings, or art. It creates visual interest and supports wayfinding by giving pedestrians a beacon in nighttime environments.*

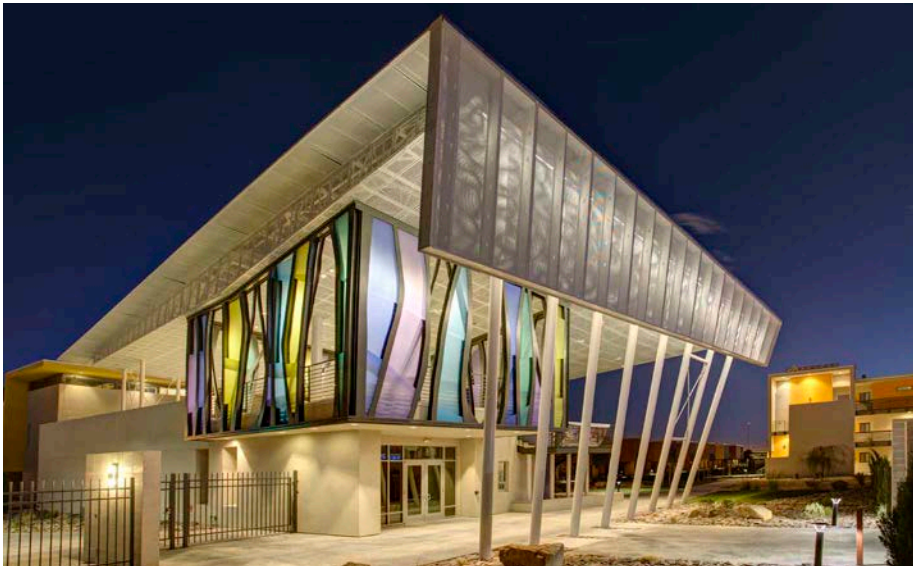
## STANDARDS

- 5.10 **Locate public space lighting to improve campus wayfinding.**
  - a. Light Pedestrian Priority Routes and other circulation routes to act as a visual guide for pedestrians along the intended path of travel.
  - b. Identify prominent entries and gateways.
- 5.11 **Design lighting to respond to the needs of different public space types.**
  - a. Along streetscapes use consistently spaced lighting to ensure safe travel for all modes and reduce conflicts. Enhance the lighting of crosswalks.
  - b. In gathering areas and plazas use adjustable aiming light sources to properly light daily activities while remaining flexible for festivities and events.
  - c. In event and flexible spaces use control systems and dynamic aiming to allow for flexibility in the design of permanent event lighting.
  - d. Use minimal lighting along riverfront and natural areas to protect the natural context.
  - e. In back-of-house areas provide functional lighting and enhanced illumination to safely accommodate service and maintenance activities.

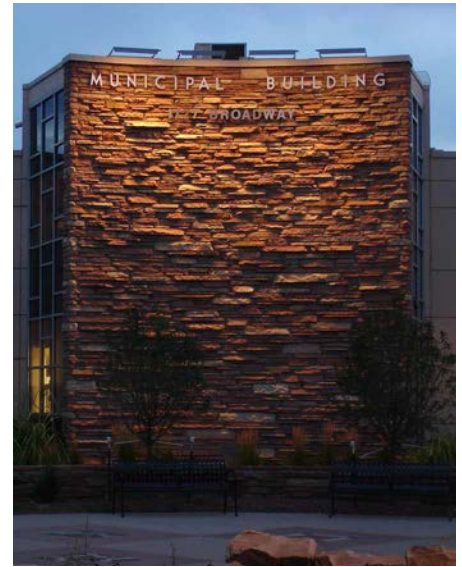
## GUIDELINES

- 5.12 **Locate public space lighting to highlight major campus features and activate public spaces.**
  - a. Use accent lighting for art work and other iconic elements.
  - b. Use feature lighting on landscape and architectural features to add depth and visual interest to the space
- 5.13 **Consider incorporating low level lighting into design elements including:**
  - » Stairs;
  - » Benches;
  - » Low walls; and
  - » Bollards.

# BUILDING LIGHTING



Ensure pedestrian entrances are well-lit and easy to navigate.



Use lighting techniques such as wall grazing to accentuate facade textures.

## INTENT

- 5h To highlight distinctive architectural elements and building entries
- 5i To contribute to campus wayfinding and safety
- 5j To enhance campus architecture and adjacent public spaces

## STANDARDS

- 5.14 **Locate building lighting to fit within its architectural context.**
  - a. Integrate building lighting with architectural features.
  - b. Locate building lighting to avoid obscuring architectural features.
- 5.15 **Use building lighting to improve campus wayfinding.**
  - a. Ensure building signs are clearly visible, for more information see Chapter 6: Sign Design, page 104.
  - b. Ensure pedestrian entrances are well-lit and easy to navigate.

## GUIDELINES

- 5.16 **Consider designing building lighting to enhance the building and adjacent public spaces.**
  - a. Highlight the distinctive or historic features of a building.
  - b. Use lighting techniques such as wall grazing to accentuate facade textures.
  - c. Highlight building edges to help define surrounding spaces.



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# CHAPTER 6: SIGN DESIGN

# INTRODUCTION



*Signage should be compatible with the vision, goals, and desired character of the Campus and contribute to an easy-to-navigate wayfinding system.*

Signs are an important feature of the National Western Center (NWC) Campus and contribute to the overall character of the Campus. They should balance functional requirements associated with building and business identification with the objective to create a high-quality, cohesive character across the NWC. Many of the signs on site should be flexible enough to accommodate different messaging for various events. Signage should be compatible with the vision, goals, and desired character of the Campus and contribute to an easy-to-navigate wayfinding system. Factors that should be considered in the design of signage include:

- Placement;
- Design Character;
- Materials; and
- Lighting.

## SIGN REGULATIONS

*Sign design on the NWC Campus is also subject to the regulations in the City of Denver's Sign Code and to a special Sign Plan that will be adopted*

# SIGN TYPES

The typical Denver Zoning Code (DZC) sign types are defined and illustrated below. The standards and guidelines for sign location, character, materials, and lighting laid out in the rest of the chapter should apply to all the following sign types.

## PROJECTING SIGNS



A sign or graphic, other than a wall sign, that is attached to and projects from the wall, soffit, or eave of a building, is not in the same plane as the wall, soffit, or eave to which it is attached.

## ARCADE SIGNS



A wall or projecting sign attached to the roof or wall of an arcade and totally within the outside limits of the structural surfaces which are delineating the arcade.

## GROUND SIGNS



A sign supported by poles, uprights or braces extending from the ground or an object on the ground but not attached to any part of any building.

## WALL SIGNS



A sign attached to, painted on or erected against a wall, fascia, parapet wall or pitched roof of a building or structure, and no part of which sign projects above the roofline.

## WINDOW AND DOOR SIGNS



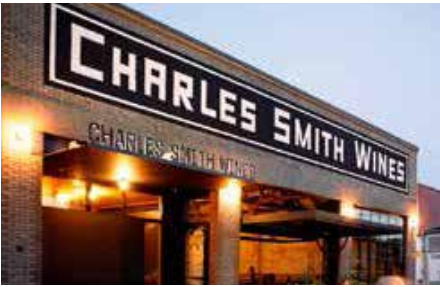
A sign which is applied or attached to, or located within three feet of the interior of a window or door, which sign can be seen through the window or door from the exterior of the structure.

## JOINT IDENTIFICATION SIGNS



A sign which serves as a common or collective identification for three or more businesses or industrial uses by right on the same zone lot excluding, however, the identification of products.

# SIGN LOCATION



*A sign shall be located to fit within the overall context of a building and its site.*



*Locate signs to accentuate a pedestrian entry.*

## INTENT

- 6a To encourage sign locations that promote a vibrant campus
- 6b To promote signage placement that is in scale and in character with its setting
- 6c To improve wayfinding and identification of campus features
- 6d To ensure signage is compatible with and visually subordinate to campus buildings
- 6e To create visual interest
- 6f To ensure signage is clear and legible for its intended audience

## STANDARDS

- 6.1 Locate signs to fit within the overall context of a building and its site.**
  - a. Place a sign to fit within or highlight architectural features.
  - b. Place a sign to avoid obscuring architectural features.
  - c. Locate signs to accentuate a pedestrian entry.
- 6.2 Locate signage to ensure visibility for its intended audience.**
  - a. Orient a sign intended for pedestrians to be visible from the street or plaza level.
  - b. Orient a sign intended for vehicles to oriented to and visible from the street.
- 6.3 Locate signage to contribute to campus wayfinding.**
  - a. Use signs to indicate building entries and parking areas.
  - b. Use signs to indicate significant campus features
  - c. Locate signs to be visible from Key Streets and Intersections as shown on the Urban Design Framework Map, page 5.

## GUIDELINES

- 6.4 Consider locating signs so as not to conflict with streetscape or plaza elements. Elements to consider include:**
  - a. Street trees;
  - b. Lighting; and
  - c. Street furniture.
- 6.5 Consider locating signage to be subordinate to the building or structure it is attached to.**



# SIGN CHARACTER AND MATERIALS



Consider designing signs to be creative and iconic whenever possible.



Construct signs with durable materials that will maintain their quality over time.

## INTENT

- 6g To create legible and high-quality signage
- 6h To promote signage that enhances the public realm
- 6i To ensure that signs retain a quality appearance over time.

## STANDARDS

- 6.6 Construct signs with durable materials that will maintain their quality over time. Appropriate materials include:
  - a. Metal;
  - b. Painted or carved wood;
  - c. Individual wood or cast metal letters or symbols;
  - d. Stone such as slate, marble or sandstone; and
  - e. Painted, gilded or sandblasted glass.

## WAYFINDING & SIGNAGE

*For more information about the cohesive character of signage on the NWC Campus, see the Wayfinding & Signage Vision Memo (2018).*

## GUIDELINES

- 6.7 Consider designing signs to provide flexible messaging that can be adapted for different event needs.
- 6.8 Consider designing signs to be creative and iconic whenever possible.
- 6.9 Considering designing signs to use distinctive craftsmanship, whenever possible.

# SIGN LIGHTING



Direct sign lighting toward signs.



Integrate sign lighting into the design of the facade.

## INTENT

- 6j To promote pedestrian-oriented signage lighting
- 6k To light signage to enhance campus safety
- 6l To encourage sign lighting that maintains its quality over time
- 6m To ensure that sign lighting does not adversely affect adjacent neighborhoods

## LIGHTING

*For information about campus site and building lighting, see Chapter 5: Lighting Design, page 92-97.*

## STANDARDS

- 6.10 **Integrate sign lighting into the design of the facade. Appropriate strategies include:**
  - a. Built-in indirect back-lit/halo lighting;
  - b. Built-in goose neck or lighting arms; and
  - c. Sign lighting that is integrated into an architectural feature on the building facade.
- 6.11 **Direct sign lighting toward signs. Appropriate strategies include:**
  - a. Focusing lighting directly towards the sign; and
  - b. Incorporating hoods or caps to avoid casting light upwards unnecessarily.
- 6.12 **Shield sign lighting so as to minimize light pollution.**

## GUIDELINES

- 6.13 **Consider designing sign lighting to maintain a consistent character with the overall building lighting. Appropriate strategies include:**
  - a. Using the same color of lighting; and
  - b. Using the same or a similar material palette.

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# CHAPTER 7: DESIGN REVIEW

## REVIEW PROCESS



### STRATEGIC DESIGN LEADERSHIP

*The Strategic Design Leadership (SADL, pronounced saddle) is a committee comprised of subject matter experts across a broad range of planning and design expertise. SADL will advise the Mayor's Office of the National Western Center (NWCO) and the National Western Center Authority (NWCA) regarding the design of campus development and site improvements.*

*SADL Design Review has its own submittal requirements and process, separate from the review conducted by the City and County of Denver. Please consult the National Western Center Design Handbook for SADL Design Review details and process.*

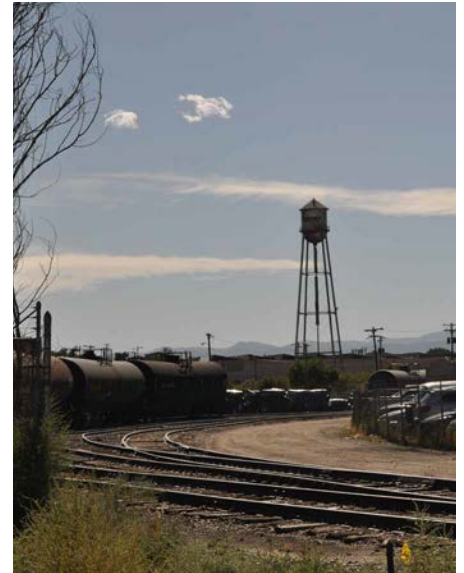
Compliance with these Standards and Guidelines will be assured during site plan review under Section 12.4.3 of the Denver Zoning Code. The applicable City staff will review all site plan submittals for compliance with these Standards and Guidelines, as well as compliance with zoning and all other applicable city regulations. A site development plan subject to these Standards and Guidelines shall not be approved unless City staff makes a specific finding of compliance with these Standards and Guidelines.

The Site Development Plan Review process may be initiated by scheduling a pre-application concept plan review and is mandatory before submittal of a formal site development plan application. During the concept plan review, the City staff will confirm the applicability of site development plan review to the proposed development activity and the specific procedures and submittal requirements the applicant will follow. It also provides an opportunity for informal discussion of the specific circumstances of a project and how the Standards and Guidelines might affect its development. Submittal requirements to show compliance with the Standards and Guidelines should also be discussed at the pre-application meeting.

At the Concept and/or Site Development Plan submittal, the applicant must submit a comprehensive analysis of these Standards and Guidelines and how they apply to the project that is the subject of the site development plan submittal.

The sign standards and guidelines are supplemental and complimentary to the Denver Zoning Code that Development Services staff refers to when reviewing signage applications, and compliance is not assured through site plan review, but through separate procedures. All signs must be approved by all applicable City agencies. Staff will review all sign submittals for conformance with the DZC sign code and the National Western Center Design Standards and Guidelines.

# REVIEW PROCESS



## MODIFICATIONS

The Standards and Guidelines are intended to be flexible. The applicable City staff may grant modifications to a design standard if the applicable City staff finds the applicant has shown the following:

1. The modification is consistent with the stated intent of the design standard at issue;
2. The modification achieves or implements the stated intent to the same degree or better than strict compliance with the standard would achieve; and
3. The modification will not result in adverse impacts on properties abutting the Site.

The applicable City staff shall review the proposed modification and shall approve or deny the request within 14 calendar days of receiving a complete request.

## LETTER OF SADL APPROVAL

*At the time of vertical site development plan submittal, the applicant also must submit a letter confirming or waiving review/approval by the Strategic Architecture and Design Leadership Committee (SADL).*

## STATE-OWNED PROPERTIES

*There are some state-owned properties on the Campus; in addition to City and County of Denver Regulations, these properties are subject to state regulations and requirements.*

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