Submittal: 10/10/2016
Revision 1: 06/28/2017
Revision 2: 09/19/2018
Revision 3: 05/24/2019
Revision 4: 07/07/2020
Revision 5: 02/16/2022
Revision 6: 07/08/2025

URBAN DESIGN GUIDELINES

July 2025

fitzsimons
Innovation Community

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CONTENTS

LIST OF EDITS

02/02/2018

- Add lighting package to the appendix.
- Clarify that 18” step out zone does not include curb (all street sections)
- Submission 1: include urban design diagrams depicting how the development fits within the overall site specifically depicting building orientation, anticipated heights, pedestrian entries, vehicular circulation, parking areas, bicycle access, etc. If it is a phased project, show both near term and ultimate conditions.
- Revise diagrams to reflect Scranton / 23rd shift (lets discuss first)
- Bike facility along 23rd diagram update (if this gets changed)

09/19/2018

- 1.4 Urban Design Frameworks (p.8-9): Update 6 diagrams per the Scranton Pkwy. shift
- 2.1 Circulation (p.12-13): Update 5 diagrams per the Scranton Pkwy. Shift
- 2.2 Streets (p.15): Update diagram per the Scranton Pkwy. shift
- 2.2 Streets (p.16-17): Update diagrams per the Scranton Pkwy. shift
- Update all key maps per the Scranton Pkwy. Shift
- 2.2 Streets (p.22): Update dimensions on 23rd and Racine.
  - Pedestrian Zone: 16.5’ → 16’
  - Bike lane: 6’ → 6.5’
  - Drive lane: 10’ → 10.5’
- 2.2 Streets (p.23): Update dimensions on Scranton Pkwy.
  - ROW: 175’ → 178’
  - Median: 90’ → 96’
  - Pedestrian Zone: 16.5’ → 16’
  - Bike lane: 6’ → 6.5’
  - Drive lane: 10’ → 10.5’
- 2.2 Streets (p.26): Update dimensions on Secondary Street.
  - ROW: 68’ → 66’
  - Pedestrian Zone: 16.5’ → 16’
- Update all intersection diagrams per changed dimensions on street section
- 2.4 Landscape (p.42): Update diagram per the Scranton Pkwy. Shift
- 6.1 Conceptual Campus Phasing (p.82): Update diagram per the Scranton Pkwy. Shift
- Appendix B
  - Requirement of hardcopy submittal has been removed, only an electronic set in PDF format in all submissions
  - Due date of submittal has been changed to 5 days prior to the DRB meeting in all submissions
  - Add Urban Design Plan requirements in all submissions
  - Add response to the DRB letter in submission 2, 3, and 4

05/24/2019

- Add lighting cut sheet to the appendix D.
- 2.2 Streets (p.23): Update dimensions on Scranton Pkwy.
  - ROW: 178’ → 186’
  - Median: 96’ → 102’
  - Pedestrian Zone: 16’ → 17’
- Update intersection diagram at Scranton and 23rd per changed dimensions on street section.
- Replace the image of lighting fixture on p.33.
- Revise the language under urban design plan on p.94.
  - Include by depicting how the development → be provided that depict the proposed development
  - bicycle access → bicycle circulation access
- Add the language under urban design plan for all submissions.
  - Referred per Submission 1, 2 and 3.
- Add cut sheets on Appendix D.
- Add crosswalk detail on Appendix E.

07/07/2020

- Added surface parking lot screening requirements to Chapter 5.
- Added parking lot and fence screening guidelines to Chapter 5.
- Modified screening language in Chapter 3 and Chapter 4 to refer to Chapter 5 for parking lot screening.
- Revised curb ramp illustrative graphics to align with GDP.
- Update Fitzsimons Innovation CAMPUS to Fitzsimons Innovation COMMUNITY.

02/16/2022

- Update typical lighting plans on Appendix C.
- Revise language on 2.2.4 Lighting
  - Spacing should be approximately 150’ on center, and be coordinated with tree spacing. → Spacing per Appendix C and D.

07/08/2025

- Cover: Updated cover image to reflect the Master Plan update.
- 1.1 Overview (p.2–3): Refined vision and introduction text to align with the FIC Design Framework goals.
- 1.2 Guiding Principles (p.4–5): Expanded guiding principles to address district context, campus character, and sustainability.
- 1.3 Existing Context (p.6–7):
  - Noted proximity of the light rail station within the Transportation section.
  - Updated context diagram to reflect recent campus development.
- 1.4 Urban Design Framework (p.8–13): Separated diagrams onto individual pages; refined descriptions and graphics to align with GDP Amendment 16.
- 2.1 Circulation (p.16–17): Updated circulation diagrams and descriptions in accordance with GDP Amendment 16.
- 2.2 Streets (p.18–21):
  - Added Section 2.2.2 covering streetscape-integrated water quality areas, designated parkways, linear parks, and greenways. Revised Perimeter Streets section to include key corridors such as Montview (p.18).
  - Updated Circulation Network diagram to include open space network (p.19).
  - Refined Urban Design concept graphics to match GDP Amendment 16 block pattern. Enhanced text for Fitzsimons Parkway and Scranton Parkway to emphasize their connections to Sand Creek Park and the Light Rail Station/AMC, respectively (p.20–21).
- 2.2 Streets (p.22–44):
  - Revised streetscape graphics and narrative to reflect GDP Amendment 16. Incorporated district boundaries and related streetscape characteristics (p.22).
  - Added site section illustrating streetscape elements in relation to site context and topography (p.23).
  - Updated street section dimensions and graphics to align with GDP Amendment 16. Consolidated requirements for 24th/25th Linear Parks, Scranton Parkway, and Racine Street, including amenity standards and water quality elements (p.24–39).
  - Updated conceptual intersection diagrams to reflect GDP Amendment 16 (p.40–44).
- 2.3 Open Space (p.48–49): Revised Park Space Diagram per GDP Amendment 16. Added narrative and diagrams for integrated stormwater landscape strategies for major corridors.
- 2.3 Open Space (p.50–53): Expanded park descriptions to include Gateway Park, Racine Park, Racine Pocket Park, and Mid-block Linear Parks. Added amenity requirements per GDP Amendment 16.
- 2.4 Landscape (p.55–62): Introduced new tree species for street character and water quality zones. Updated landscape standards accordingly (p.60).
- 2.4 Landscape (p.64): Added conceptual water quality streetscape detail as design guidance for planter areas.
- 2.5 Signage / Wayfinding (p.67): Revised signage locations and updated graphics to reference existing campus signage.
- 2.6 Public Art (p.74–75): Updated narrative and graphics in line with GDP Amendment 16. Highlighted public art opportunities based on district context and added proposed locations.
- 3.1 Site Plan (p.77–79):
  - 3.1.1 (p.77): Clarified park descriptions as open-to-sky amenitized areas accessible from grade.
  - 3.1.4 (p.79): Updated service and vehicular circulation guidelines to emphasize integration with phased development and shared access.

- 3.2 Architecture (p.80–83):
  - 3.2.1 (p.80): Revised building character guidance by district. Added district character diagram.
  - 3.2.2 (p.81): Included reference images aligned with district character.
  - 3.2.3 (p.82): Updated form and massing guidelines to reflect GDP Amendment 16. Added direction on contextual datums wrapping building forms.
  - 3.2.4 (p.82): Refined materials guidance to distinguish between traditional and contemporary materials and applications.
  - Added hypothetical buildout diagram referencing urban design concepts (p.82).
  - 3.2.5 (p.83): Reframed transparency requirements to focus on integration with active ground-floor uses; added example uses.
- 3.3 Landscape (p.84–85):
  - 3.3.2 (p.84): Updated screening guidelines for service infrastructure to encourage cohesive design and out-of-right-of-way placement.
- 3.4 Lighting (p.86): Revised site and parking lot lighting to meet Aurora UDO standards.
- 4.1 Site Planning (p.88–90):
  - 4.1.1 (p.88): Updated building entry guidelines to allow secondary residential entrances and walk-up units along open spaces.
  - 4.1.2 (p.89): Added guidelines for tuck-under parking and screened service areas.
  - 4.1.3 (p.90): Established minimum parcel amenity area with allowance for DRB discretion.
- 4.2 Architecture (p.91–93):
  - Updated overall residential design narrative to reflect district character and emphasize active frontages.
  - 4.2.1 (p.91): Refined building character and material guidance; added reference diagram.
  - 4.2.2 (p.92): Introduced district-based reference imagery.
  - 4.2.3 (p.93): Emphasized massing strategies for high-density housing to preserve daylight and views; encouraged contextual integration at ground plane.
  - 4.2.4 (p.93): Clarified façade and material guidance for both street-facing and internal façades.
  - 4.2.5 (p.93): Allowed mechanical vents on public-facing façades if integrated with building design.
  - Added hypothetical buildout diagram referencing design strategies (p.93).
- 4.3 Landscape (p.94): Prioritized amenitized rooftops with integrated planting. Added screening guidance for rooftop infrastructure based on architectural context.
- 4.4 Lighting (p.95): Updated to meet Aurora UDO lighting standards for site and parking areas.
- 5.1 Campus Parking Strategy (p.97):
  - Revised parking design to be phased with site development. Added coordination with TDM programs and structured parking guidelines to support a pedestrian-oriented campus.
  - Introduced sustainability elements, including phased solar canopy integration.
- 5.2 Site Parking (p.98):
  - Prohibited surface parking as a primary use beyond GDP Amendment 16 timeframe requirement. Encouraged integration with water quality elements and district character.
  - Refined screening requirements to support pedestrian movement and UDO standards.
- 5.3 Parking Phasing (p.99): Consolidated former Chapter 6 into Chapter 5. Added phasing diagram showing surface-to-structure parking transition.
- Appendix A: Sustainability (p.102–103):
  - Added requirement for projects to utilize LEED rating checklists for Sustainability enforcement (p.102).
  - Included onsite and streetscape water quality in Site Potential section (p.103).
  - Referenced Central Utility Plants for larger developments in Optimize Energy Use section (p.103).

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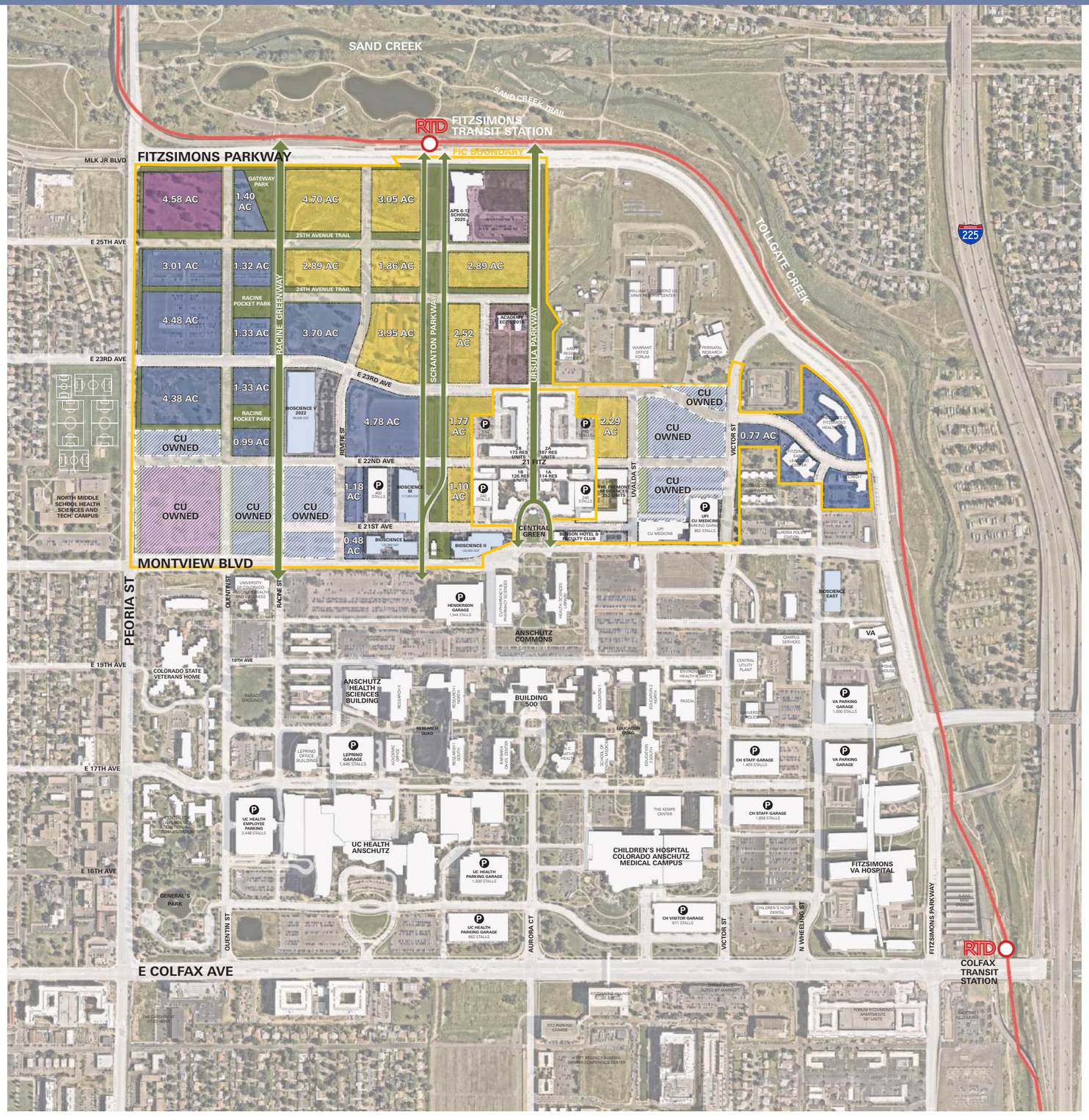
INTRODUCTION

Vision

The Fitzsimons Innovation Community (FIC) is set to become Colorado's leading mixed-use bioscience campus, attracting both biomedical and non-biomedical innovators. The future of bioscience research and innovation thrives in interconnected clusters where creative individuals share ideas and lessons, driving progress through both technical and social intersections. The Fitzsimons Redevelopment Authority (FRA) recognizes that to attract the groundbreaking companies shaping tomorrow's world, the physical design of the campus must reflect the values and culture of these cutting edge professionals. FIC will be a catalyst for economic growth, positioning the Campus as a premier hub for medical and bioscience innovation, while boosting economic development and leveraging the CU Anschutz Medical Campus (AMC). By increasing residential density and blending commercial and residential uses, FIC will create a vibrant urban district focused on bio-innovation. A network of multi-modal parkways will seamlessly connect the district to regional assets and transit systems, integrating with surrounding infrastructure. The design will prioritize sustainability, with green infrastructure that responds to the site's environmental context, ensuring resilience and ecological stewardship throughout the campus.

"The buildings, open space network, and streetscapes will be seamlessly integrated with the Fitzsimons Commons, the University of Colorado Medical Campus, surrounding neighborhoods, and the regional park system. "



Introduction

Located directly adjacent to the University of Colorado Anschutz Medical Campus (AMC), the Fitzsimons Innovation Community (FIC) builds upon, complements and supports the strengths of AMC with the goal of becoming one of the nation's leading innovation and research clusters.

The characteristics of an innovation campus are distinct and unique from conventional real estate development. First and foremost, the employees, researchers and tenants today are young, active, highly connected and collaborative. In order for the Campus to compete with the global research industry, it will provide not only superior research facilities, but also an environment that promotes a healthy lifestyle; the use alternative transportation; collegiality, and a sense of shared community. To achieve this environment, the Campus will create a unified public realm that includes urban amenities such as pedestrian-oriented streetscapes, an ample and connected bicycle network, a variety of urban parks and plazas, and mix of land uses with innovation uses at the core of the program. These elements will create a vibrant, safe 24-hour community.

The high-density, mixed-use campus will feature a range of spaces, including wet lab and dry lab facilities, studio innovation areas, co-working and creative spaces, general office spaces, research and development incubators, and flexible workspaces. It will also offer a variety of general and local-serving retail, dining, entertainment, and high-density housing options. The land will be equally divided between innovation, research, business, and residential uses, strategically located near the Fitzsimons Light Rail Station and Scranton Parkway, complementing the existing Fitz 21 residential community. Neighborhood-serving retail will be integrated throughout the campus, located at the base of multi-story buildings as development progresses. Larger parcels at key intersections will be dedicated to civic and institutional uses, fostering campus typologies that both celebrate the character of the campus and provide ample space for phased, multi-building projects to accommodate the needs of larger organizations.

The buildings, open space network, and streetscapes will be seamlessly integrated with the Fitzsimons Commons, the University of Colorado Medical Campus, surrounding neighborhoods, and the regional park system. The public open spaces, which include water quality landscape areas, will be designed to serve employees, visitors, residents, and neighbors, fostering activity and engagement beyond the typical workday. These spaces will offer opportunities for walking, jogging, or simply relaxing on a park bench, in open lawn areas, or under shade trees. Water quality treatment areas will also serve as attractive and functional landscapes, contributing to environmental sustainability while enhancing the overall public realm. Cafés with outdoor seating along primary streets and adjacent to these open spaces will encourage informal, collaborative gatherings, further activating the area.

In addition to supporting the livelihood and success of the Campus through specific urban design principles, it will be equally important to execute that goal in a manner that is environmentally friendly at the global, regional and local levels. Principles of sustainability will be considered in the design of all projects within the Campus, including the public realm, open spaces, streets, building core and shell, and tenant build-out. As an innovation and health-related campus, the FIC should advance best practices in sustainable and healthy city building.

Urban Design Guidelines

The most interesting and rich urban environments grow and evolve over time with input from a variety of designers.

The FIC is envisioned to build-out over many decades by many different developers and designers. The purpose and intent of these guidelines is to establish a cohesive urban framework that will guide the growth and evolution of this campus, while allowing creativity and flexibility to organically grow and change over time.

These guidelines provide assurances to city officials, university and city planners, neighbors, property owners, developers and other stakeholders that the infrastructure, parks and buildings will be of a consistently high quality from the commencement of development through the full build-out of the Campus. The buildings will support the technological requirements, flexibility and growth of the tenants to ensure that the Campus becomes an innovative, ecologically sensitive, bio-medical hub for the Rocky Mountain Region.

These guidelines will also serve as a reference document for the Fitzsimons Redevelopment Authority (FRA). This document will facilitate the review of all infrastructure, landscape, buildings and structures proposed for the Campus, to ensure that the design intent and quality are consistent with the objectives of the General Development Plan (GDP).

Design Review Process

The Fitzsimons Redevelopment Authority (FRA) will appoint seven (7) Board Members to the Design Review Board (DRB). Three (3) members shall constitute a quorum. All DRB members shall be real estate or design professionals. One of the FRA's appointments shall be a representative from the City of Aurora, as recommended by the City Manager, and one shall be a representative of the University of Colorado, as recommended by the Chancellor. The DRB will have the responsibility of reviewing, approving, approving with conditions, or denying all site plans, building architecture, landscape plans, lighting plans, signage plans, and signs for all physical improvements within the FIC. The DRB shall seek to achieve compliance with the GDP and these Design Guidelines. The DRB will meet with applicants in a timely manner and will provide written comments, conditions and approvals in writing to the Applicant and the City of Aurora.

The Fitzsimons Innovation Community shall be under the jurisdiction of both the city and the FIC DRB. The City and DRB will endeavor to collaborate and coordinate reviews and approval actions to provide an efficient process for applicants. The City and DRB may further share information, preliminary review results, and may attend one another's review procedures when convenient to facilitate this objective. The City's review of Site Plans, Architecture and Landscape Architecture will be based on GDP criteria. Fitzsimons Innovation Community will be under the jurisdiction of the Fitzsimons DRB. Architectural plans may be submitted concurrently to the DRB with a Site Plan submittal to the DRB and City of Aurora. In addition, architectural building plans may be submitted to the Building Department concurrently with DRB review.

Upon FRA approval, the DRB will provide an approval letter to the City of Aurora. Upon receipt of the approval letter, the City of Aurora will approve the plans using the City of Aurora's shortest development review process provided that the requirements of the GDP have been met. DRB approval and FRA authorization is required prior to final City Site Plan approval and issuance of building permits.

Site Plans are intended to create a more detailed plan for the implementation of the GDP. The Public Improvement Plans (PIP) shall be submitted concurrently with the Site Plan and shall include information regarding streets, sewer, water, storm drainage and traffic. Generally, the PIP areas are outlined graphically on Sheet 17-20 of the GDP.

Supplemental engineering reports may be provided to support the PIP, if necessary. These PIP's are based upon the Infrastructure Master Plan (IMP) submitted and approved with the GDP. The IMP outlines the general infrastructure for the project, including collector and arterial streets and the major water, sewer and storm drainage improvements to be completed.

All Site Plans, Site Plan Amendments and Architectural Amendments will be administratively reviewed and approved by the City according to the Aurora Zoning Code. Site Plan Amendments may be filed, processed and scheduled concurrently for staff review if required. The following outlines a Site Plan submittal approach that provides an efficient and expeditious review of Site Plans:

- The submittal shall include all information required by City of Aurora Site Plan Manual and the Submission Checklist in Apendix B of these Design Guidelines.
- 1st Site Plan submittal will be reviewed by DRB.
- Subsequent submittals, or amendments, will be reviewed by DRB and City of Aurora and may include architectural elevations and private landscape improvements.

The urban design and built environment should blend the latest best practices in sustainable, healthy and connected city building with a strong business development environment that supports and builds upon the Anschutz Medical Campus. The urban design guidelines establish a set of guiding principles which all supporting guidelines fulfill.

Create an Identifiable Campus

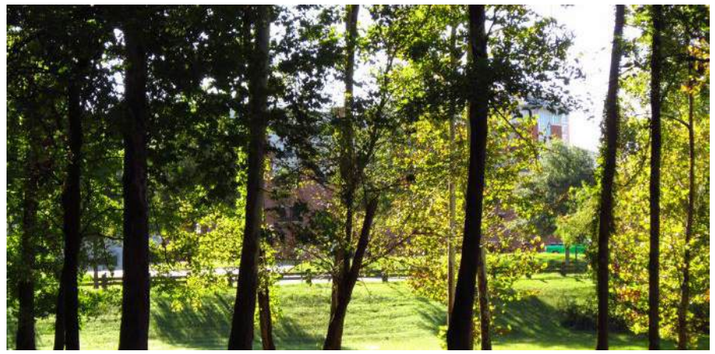
Create a regional and national identity as the 'Place' where innovation occurs, for both bio-medical and other ground-breaking industries.

- Design a cohesive public realm that showcases the environmental context of the region through urbanity and sustainability.
- Design a place that attracts entrepreneurs and tech/bio startup companies who prefer to locate in high density urban neighborhoods.
- Use building massing, gateways, lighting and high performance materials in street and public spaces to establish the campus identity as a unique 'place' within Aurora and the region.
- Design a network of smaller, intimate public plazas and spaces to foster the connectivity, chance encounters and collaboration that fuels innovation.
- Make a visible commitment to new techniques and technologies in public space - such as water, light, energy, nature, social contact, healthy activity and recreation.
- Foster architectural designs that incorporate cutting-edge technology, modern construction techniques, and the functional needs of the building's intended uses.
- Combine iconic landmark structures with quality background buildings to cultivate a balanced, diverse urban environment that prioritizes economic and environmental responsibility.
- Create clear and distinct district characters that respond to the surrounding infrastructure and adjacent architectural character.
  - **Campus Core:** A residential and civic-centered area near the CU Anschutz Medical Campus, Scranton Parkway, and Fitz 21 development, fostering collaboration and connectivity.
  - **Fairway:** A high-density district near the Light Rail Station and Sand Creek Park, offering a mix of residential, commercial, and recreational spaces with transit access.
  - **Water Gardens:** A mixed-use district with sustainable water quality treatment landscapes that enhance the campus's aesthetic and ecological value while providing spaces for community engagement with the environment.

Connected Campus

Establish a compact, interconnected and pedestrian friendly urban pattern and character of streets and public spaces at scales suited to individuals and small groups; within and outside of buildings.

- Design a walkable and bikeable street network.
- Utilize building types that connect internal public areas with external spaces, leading to a neighborhood fabric of linked open spaces.
- Create a grid of streets to facilitate connections through the campus, connecting the light rail station to campus users, AMC and adjacent neighborhoods.
- Create a culture that fosters professional networks and business connections.
- Establish an open network, technologically connected district (fiber optic internet connections, district WI-FI with substantial bandwidth, etc)
- Incorporate Smart City Technologies when appropriate.



Sustainable Campus

Create a campus that incorporates environmentally sustainable strategies and "green" technologies into the construction and function of the public realm and built environment.

- Utilize low carbon, high performance materials.
- Source materials locally and with low embedded energy.
- Work toward the incremental development of district systems for stormwater, parking, low energy lighting, fiber infrastructure, and energy.
- Work toward the incremental development of car share, electric plug-ins for vehicles, bike share facilities, coordinated shuttle systems and district parking strategies.
- Create a lot and block pattern that can be adapted to office, retail and residential uses to respond to market conditions over time.
- Site and building design should strive to meet LEED Gold and/or WELL Gold Criteria.
- Allow for a mix of residential, office, innovation and commercial uses to locate on the campus to create a mixed-use 24 hour campus.
- Encourage the creation of development projects that are environmentally responsive, prioritizing energy efficiency, water conservation, and the use of renewable resources to reduce environmental impact.

Healthy Campus

Create a built environment that encourages a healthy lifestyle and community.

- Create a well-connected street network that encourages walking and biking, integrating pedestrian-scale streetscapes with an emphasis on comfort, safety, amenities, and connectivity, while ensuring that buildings are responsive to the catalytic infrastructure provided for multi-modal transportation and open space.
- Locate, orient and design lobbies, stairways and interior public spaces to be visible, comfortable and connected from inside to outside, and from building to building.
- Incorporate multiple opportunities for food, drink, entertainment and gathering such as grocery, take-out, fast casual, pub, coffee shop, restaurant, food truck, and farmers markets.
- Encourage buildings that reduce energy consumption and have user-friendly features such as operable windows, light handling and shading devices, natural daylighting, low VOC materials, and other materials and systems that support healthy indoor air quality.
- Emphasize visibility and access to nature and outdoor spaces.
- Facilitate social engagements through an interconnected public realm with multiple gathering places.
- Create a smoke-free indoor and outdoor environment.

Mixed-Use Urban Environment

Foster opportunities to create an mixed-use urban environment.

- Apply leading urban practices and cutting-edge technologies in the public realm, including smart lighting, digital parking systems, and integrated stormwater management.
- Extend the mixed-use urban and co-working office model into the public realm to foster collaboration and engagement.
- Provide affordable small scale, short term and similar creative leasing opportunities.
- Provide a range of building types, floor layout and sizes and meeting and gathering spaces.
- Attract non-bio medical innovators and capitalize on the trend towards small innovative firms and individuals.
- Actively pursue companies that share the campus vision.
- Provide common, shared amenities that encourage idea sharing and cross-pollination among disciplines including: dining areas, outdoor plazas, large presentation spaces, gala space, conference rooms, fitness centers, car shares, bike shares, etc.
- Provide programming and events to foster a business development atmosphere through speaker series, business development classes, patent assistance, and social events.
- Create a campus phasing framework that allows market driven development to occur near-term and phase into a denser pattern over time beginning near catalytic sites at the edges (AMC and Light Rail) and builds towards the center.
- Create individual site phasing strategies that will allow the campus to grow into a dense urban environment over time. The location of buildings, parking entries, and outdoor spaces should anticipate a compact, urban campus that emphasizes connectivity.
- Provide flexible building designs that can adapt and be retrofitted for future uses.

Land Use

The Fitzsimons Innovation Community (FIC) is bordered by regional open space to the north and east, Anschutz Medical Campus (AMC) to the south, and low density residential to the west. Beyond its immediate borders, the FIC is largely surrounded by low density single family neighborhoods.

The FIC land plan is mindful of this context when allocating future land uses and urban design strategies to create a porous, safe and inviting public realm that connects adjacent neighborhoods and AMC to the station.

Transportation

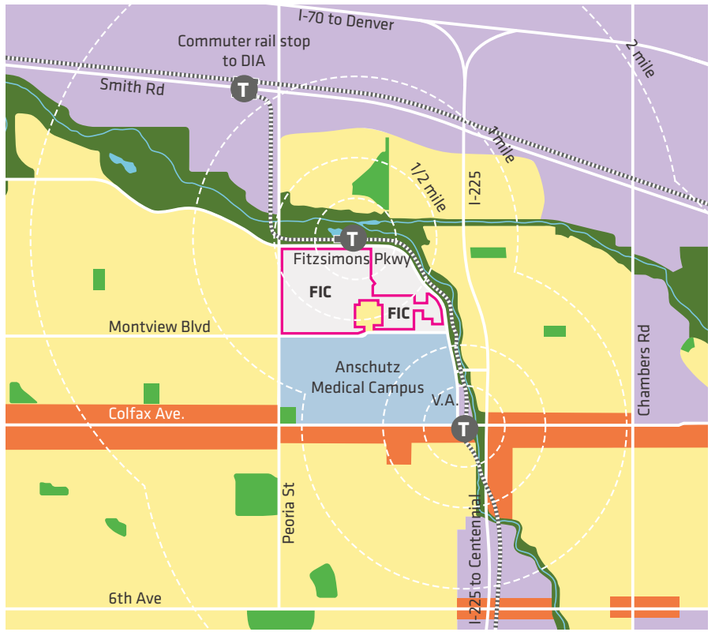
Proximity to I-70, I-225 and Colfax Avenue allows for regional automobile connectivity to Front Range employment centers and destinations including Downtown Denver, The Denver Tech Center, DIA, Golden and Boulder as well as significant residential populations.

The Light Rail Station, located immediately north of the FIC, will provide even greater regional connectivity and commuting options. Proximity to a Light Rail Station is becoming an increasingly valuable asset for attracting industry-leading bioscience companies and top talent.

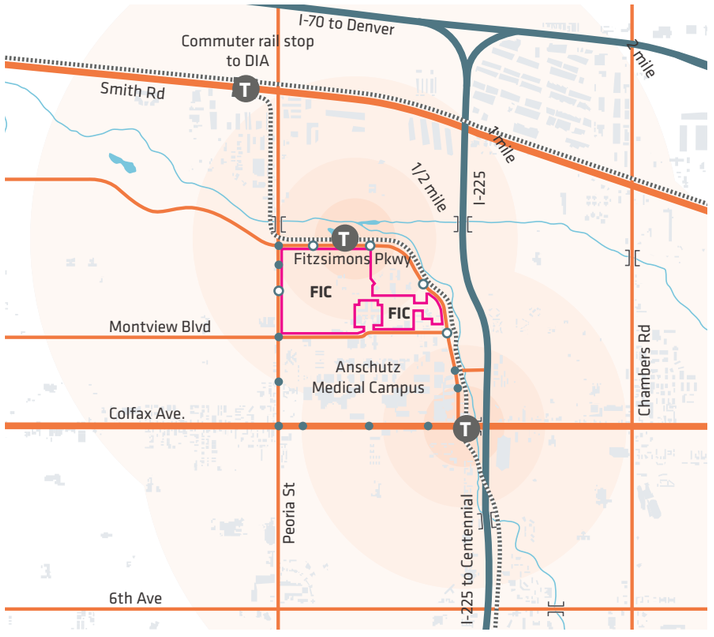
Open Space / Bicycle Network

FIC is located directly south of Sand Creek Park, which provides access to regional trails including the Sand Creek Regional Greenway and Colorado Front Range Trail. Additionally, there are numerous neighborhood parks, campus open spaces and a growing network of bicycle facilities located adjacent to the site.

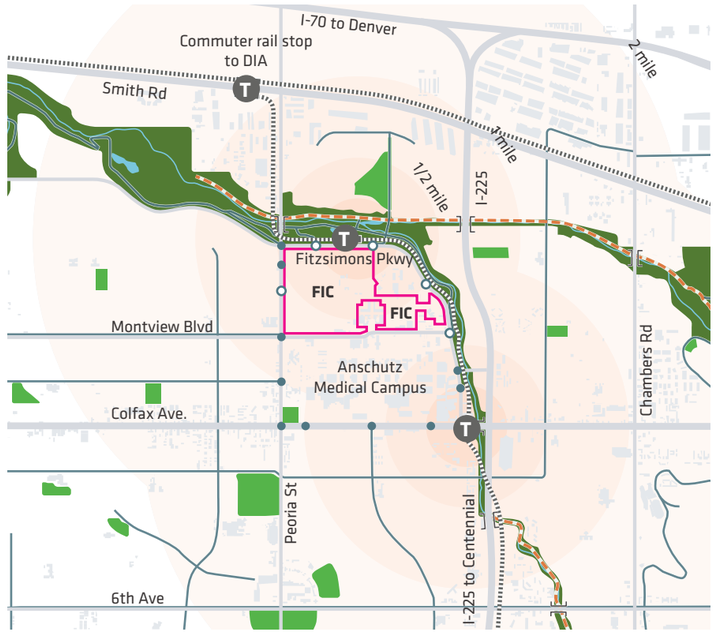
The FIC open space and street network is designed to allow for safe and comfortable bicycle and pedestrian connections that connect to existing open space facilities and set the stage for future connections beyond its borders.



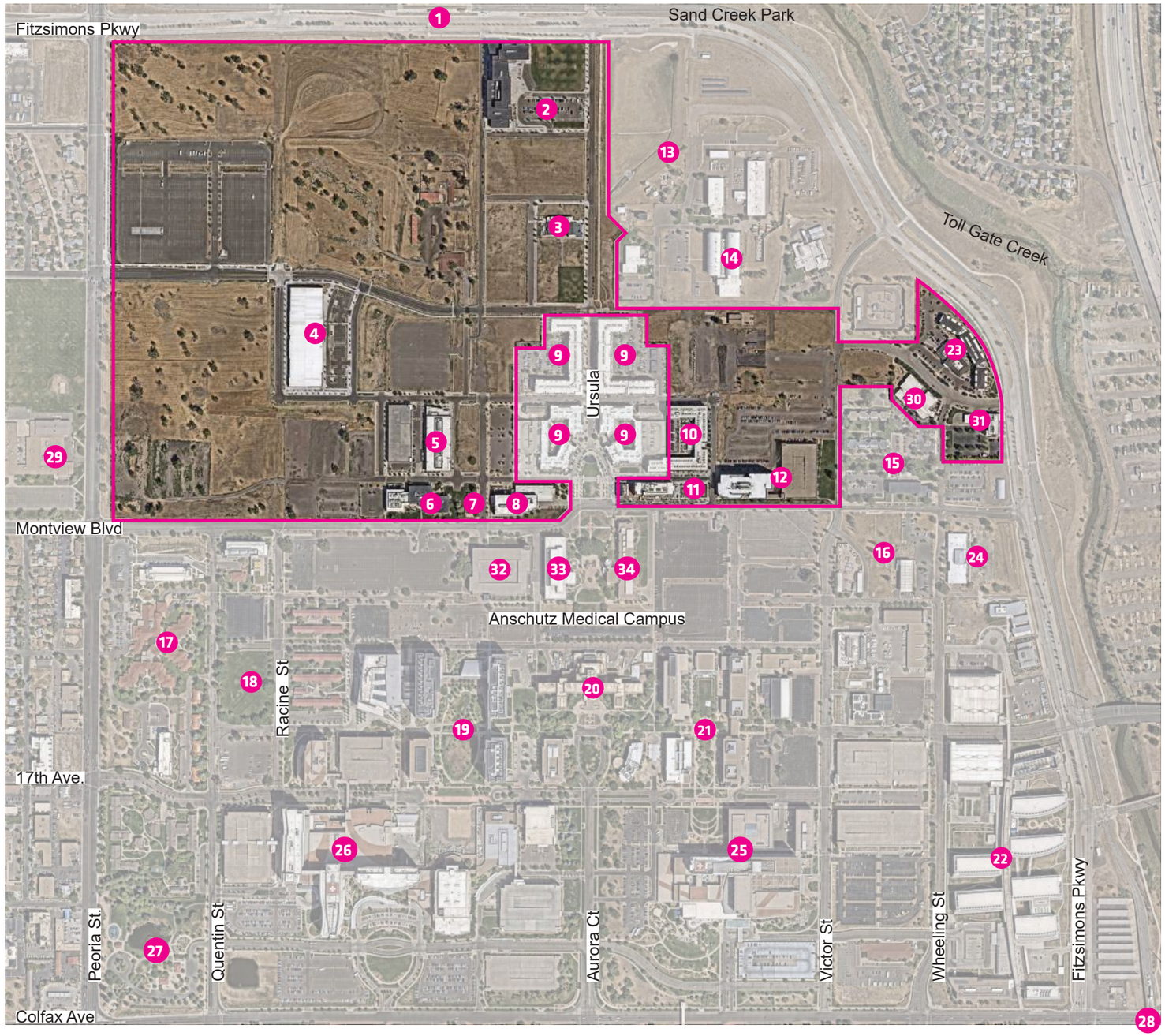
- Industrial
- Commercial
- Residential
- Anschutz Medical Campus
- Regional Open Space
- Park
- Light Rail Station
- Light Rail Alignment
- FIC Boundary



- Freeway
- Arterial
- Light Rail Alignment
- FIC Boundary
- Existing Signalized Intersection
- Future Signalized Intersection
- Light Rail Station



- Existing Bike Routes
- Proposed Bike Routes
- Light Rail Alignment
- Sand Creek Regional Greenway
- Regional Open Space
- Park
- Existing Signalized Intersection
- Future Signalized Intersection
- Light Rail Station
- FIC Boundary



1. Fitzsimons Light Rail Station
2. Aurora Public Schools
3. Compositive Academy ECE
4. Bio Science V
5. Bio Science III and Parking Garage
6. Bio Science I
7. Chapel
8. Bio Science II
9. 21 Fitzsimons Housing
10. Fitzsimons Housing
11. Benson Hotel and Market
12. U.P.I. Building and Parking Garage
13. Detention Pond
14. U.S. Army Reserve Center
15. Aurora Police District Station
16. Aurora Day Resource Center
17. Colorado State Veterans Home
18. Parade Ground
19. Research Quad
20. Fitzsimons Building (Building 500)
21. Education Quad
22. V.A. Hospital
23. Mainstreet Convalescent Center
24. Bioscience East
25. Children's Hospital Colorado
26. University of Colorado Hospital
27. General's Park
28. Colfax Light Rail Station
29. North Middle School Health Science and Technology Campus
30. Fitzsimons Early Learning Center
31. Fitzsimons Credit Union
32. Henderson Parking Garage
33. Skaggs School of Pharmacy and Pharmaceutical Sciences
34. Strauss Health Sciences Library

Fitzsimons Innovation Community (FIC) Project boundary

The Design Guidelines are organized around a series of campus-wide urban design frameworks. These coordinated frameworks create a platform for long-term growth and development that will knit the FIC into the community by linking the adjacent neighborhoods, AMC, and FIC planning areas to one another, the Light Rail Station, and Sand Creek Park.

The following diagrams illustrate how the FIC, through these guidelines, intends to connect with the surrounding community.

A fundamental step in achieving the urban design vision is to create an urban form that encourages a human scale, comfortable and walkable development pattern. The street and block pattern, street hierarchy, open space, landmarks, building orientation, and design are all important contributing factors which must be considered together. The following series of urban design diagrams provides an overarching vision for the FIC which is expanded upon and supported by the design guidelines.

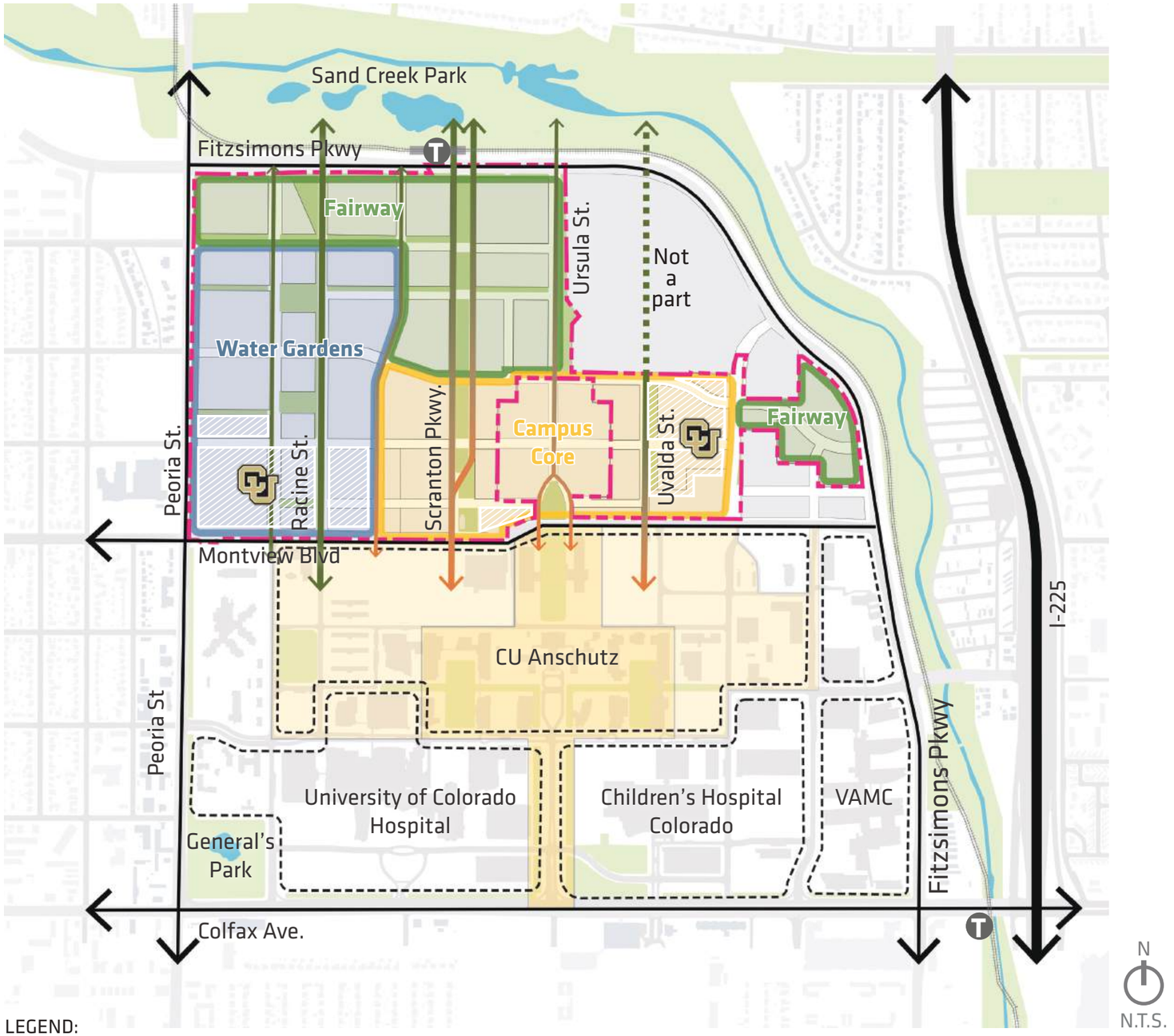
Block and District Network

A pedestrian scale street and block network connects to the existing and planned adjacent street network to provide connectivity through the site. The long sides of blocks are primarily oriented north/south allowing buildings to front streets that connect to the station, creating a continuous street edge and minimizing street crossings for pedestrians. Block sizes are large enough to allow for a variety of building types and densities, but incorporate pedestrian and bicycle connections to encourage walkability and bikeability.

The district approach ensures that streets are designed to reflect distinct characters, with each district offering a cohesive environment that responds to surrounding infrastructure and supports connectivity across the site.

- **Campus Core:** A high-density hub connecting to the CU Anschutz Medical Campus, with active ground floors, wider sidewalks, and multimodal access to transit and surrounding areas.
- **Fairway:** A vibrant, high-density district near the Light Rail Station and Sand Creek Park, prioritizing pedestrian and bike access, with tree-lined streets, local retail, and a seamless connection to green spaces.
- **Water Gardens:** A district incorporating green infrastructure and water quality landscapes, with pedestrian-friendly streetscapes, parks, and multi-use pathways, promoting sustainability, gathering spaces and mobility.

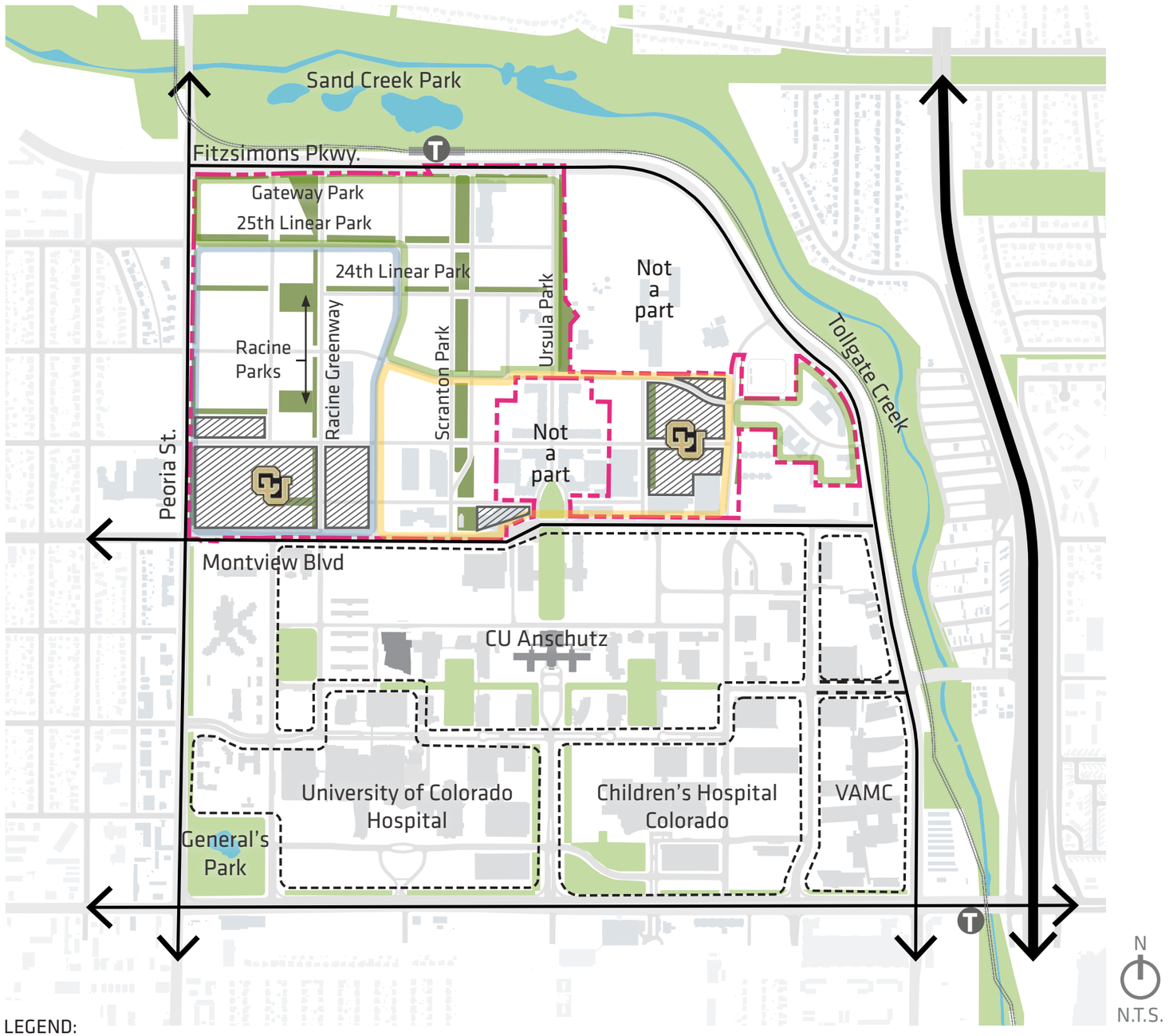
Block and District Diagram



Open Space Network

A network of parks, linear parks, parkways, and pedestrian-scale streets links AMC, adjacent neighborhoods, and FIC to one another, the Light Rail Station, and Sand Creek Park. This system enhances access for pedestrians and cyclists, offering spaces for both recreation and community gathering. Integrated water quality treatment elements further enhance the ecological value, supporting stormwater management and beautifying the environment.

Open Space Diagram



Land Use Organization

The land use framework anticipates a wide mix of uses with innovation and residential uses at the core of the program due to proximity to AMC and the goal of creating a high density mixed-use urban center. Initial market analysis suggests that this site will be able to support innovation office and research uses with residential and commercial uses and limited Civic and Institutional uses.

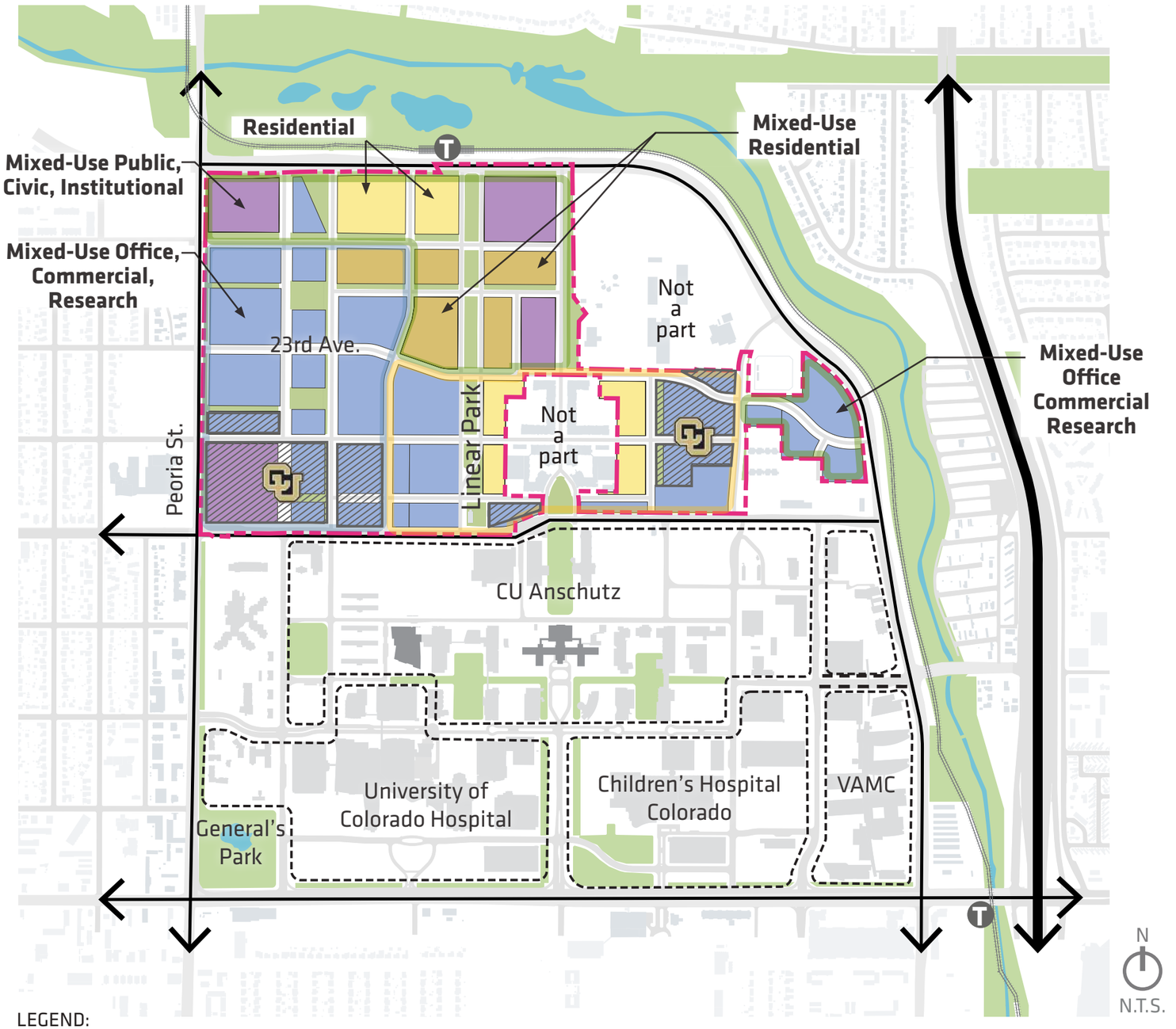
The Mixed-Use Office/Commercial/Research area is located in the central and western portions of the site, with regional commercial development strategically placed near arterial streets to ensure easy access to transit corridors. This area is expected to include wet and dry labs, studio innovation spaces, co-working and creative areas, general office space, research and development facilities, incubators, flex spaces, and local specialty retail.

The Mixed-Use Public/Civic/Institutional area is positioned near the CU Anschutz Medical Campus and larger parcels, emphasizing gateway locations that accommodate campus-scale developments for institutional and civic purposes, fostering a dynamic and collaborative environment.

The Residential planning area is primarily situated along Fitzsimons Parkway, adjacent to Sand Creek Park, Scranton Parkway, Ursula Street, and the proposed Open Space network. These areas promotes high-density, transit-oriented development while maintaining strong connections to community amenities.

The Mixed-Use Residential area is centrally located between Ursula Street and Racine Street, near the proposed Open Space network. This flexible area can accommodate residential, office, commercial, or research uses, allowing for adaptability in response to changing market conditions.

Land Use Diagram



Gateways and Landmarks

Primary gateways into the campus should be anchored by prominent building features that signal arrival to the FIC, with key views into the campus framed by signature architecture or public art. Landmark buildings present strong architectural features at the building corners and edges facing the public realm. These features are distinguished by their materiality and height, creating visually striking facades that respond to environmental conditions and reflect the best practices in material and construction methods. Above all others, these landmark and gateway moments invoke the Campus's commitment to forward-thinking innovation and progress.

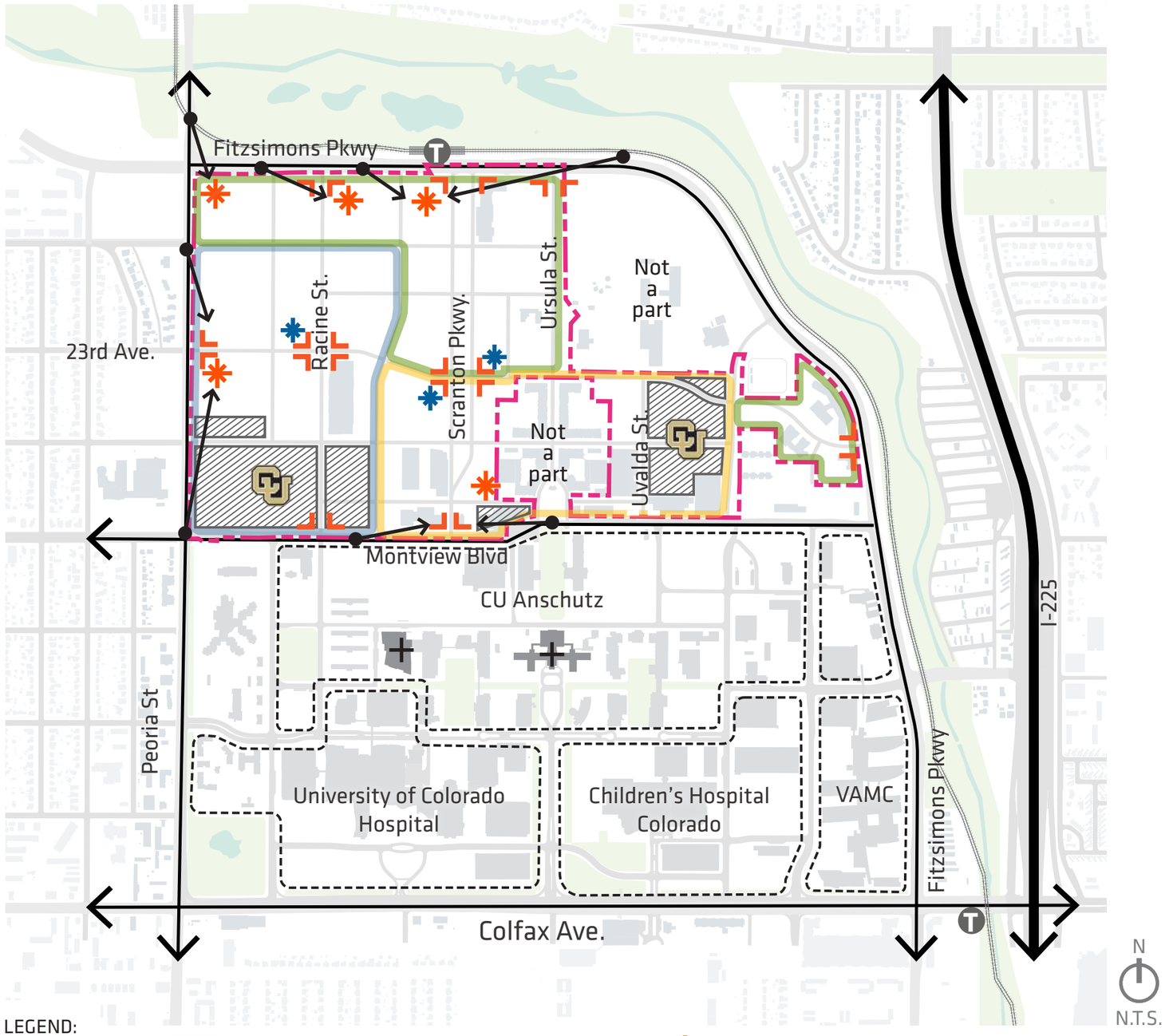
Specifically, gateways and landmarks should be planned in accordance with the Gateway and Landmark Diagram (at page right). Additional landmarks may be appropriate as the campus develops.

Primary Landmarks are high-density buildings designed with distinct architectural features and strong elements that meet the ground plane on building corners facing the public realm to anchor and reinforce primary gateways. Primary landmarks serve as entry monuments into the campus and are designed with materials that convey a sense of timeless quality, durability, and unique design expression to draw the eye and create an enduring sense of place.

Secondary Landmarks are medium-density buildings that are designed with high-quality materials along corners and facades facing the public realm and are meticulously detailed. Secondary landmarks present distinct architectural features that create an enduring sense of place within the FIC interior.

In all cases, building corners and facades designated as Gateways, Primary and Secondary Landmarks shall strongly emphasize the connection between ground floor activation and the public realm. This connection is further articulated by coordinated architectural landscape design that reinforces the area as a community anchor.

Gateway and Landmark Diagram



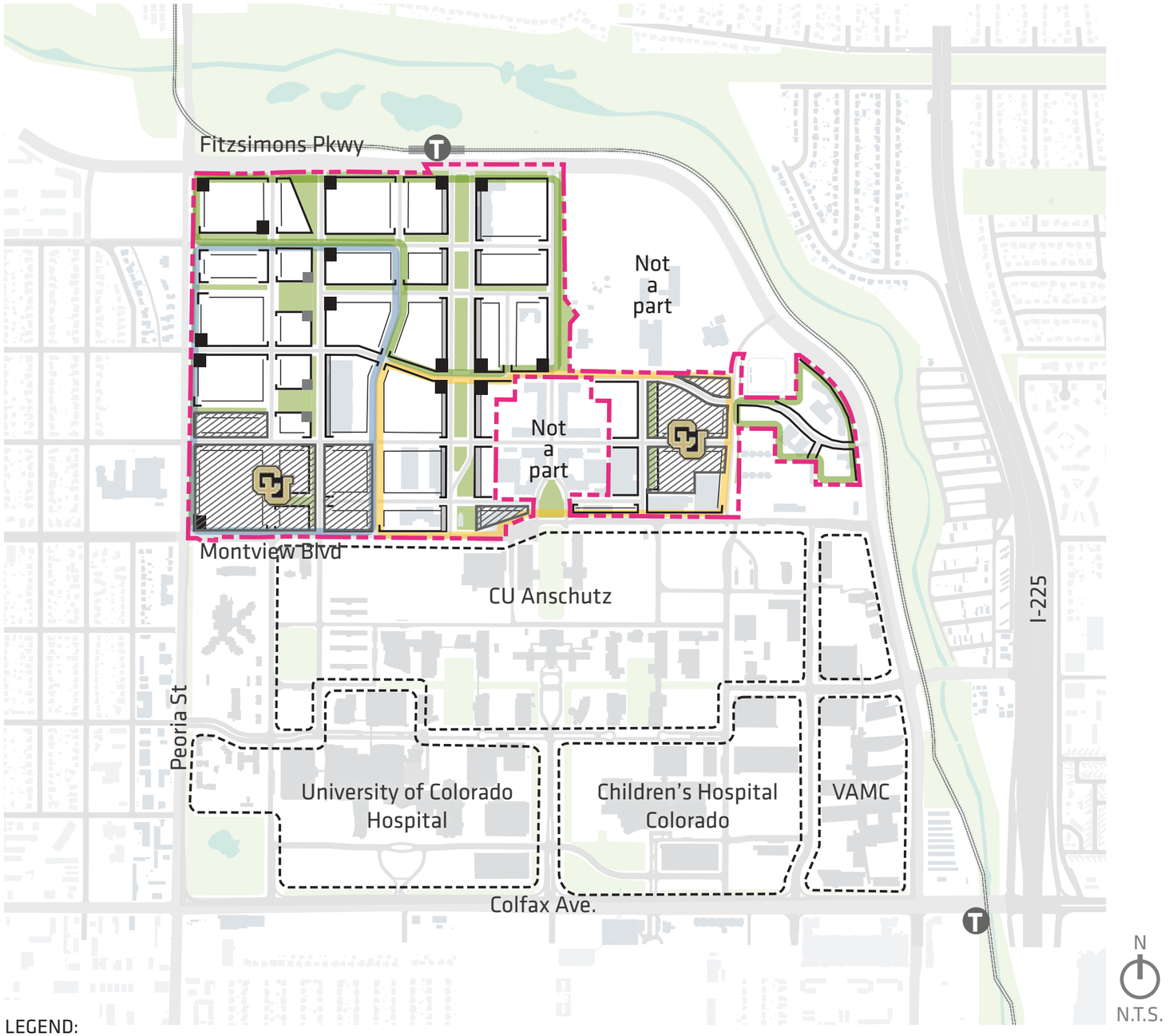
Urban Form

Buildings front primary streets with parking located behind buildings or in parking structures. Shallow build-to zones define an urban street wall along primary streets, however, quirks and kinks in the building are allowed to create visual interest. Quality façade treatments, building articulation, and entry features should be used to break up the mass and form of buildings and create an interesting street edge. A consistent street wall establishes a vibrant public realm, shaping the streetscape with active frontages that encourage pedestrian interaction and reinforce a dense, urban character.

Ground floor transparency will be maximized to create pedestrian level interest and a visual connection between the street and interior spaces, enabling a strong sense of community and increasing informal oversight of public areas. Public entrances and lobbies orient towards streets, parks and plazas making them an extension of the open space network.

Primary building frontages for each FIC parcel are outlined in the Urban Form Diagram (at page right) with special emphasis on primary streets and open space.

Urban Form Diagram



Building Height and Massing

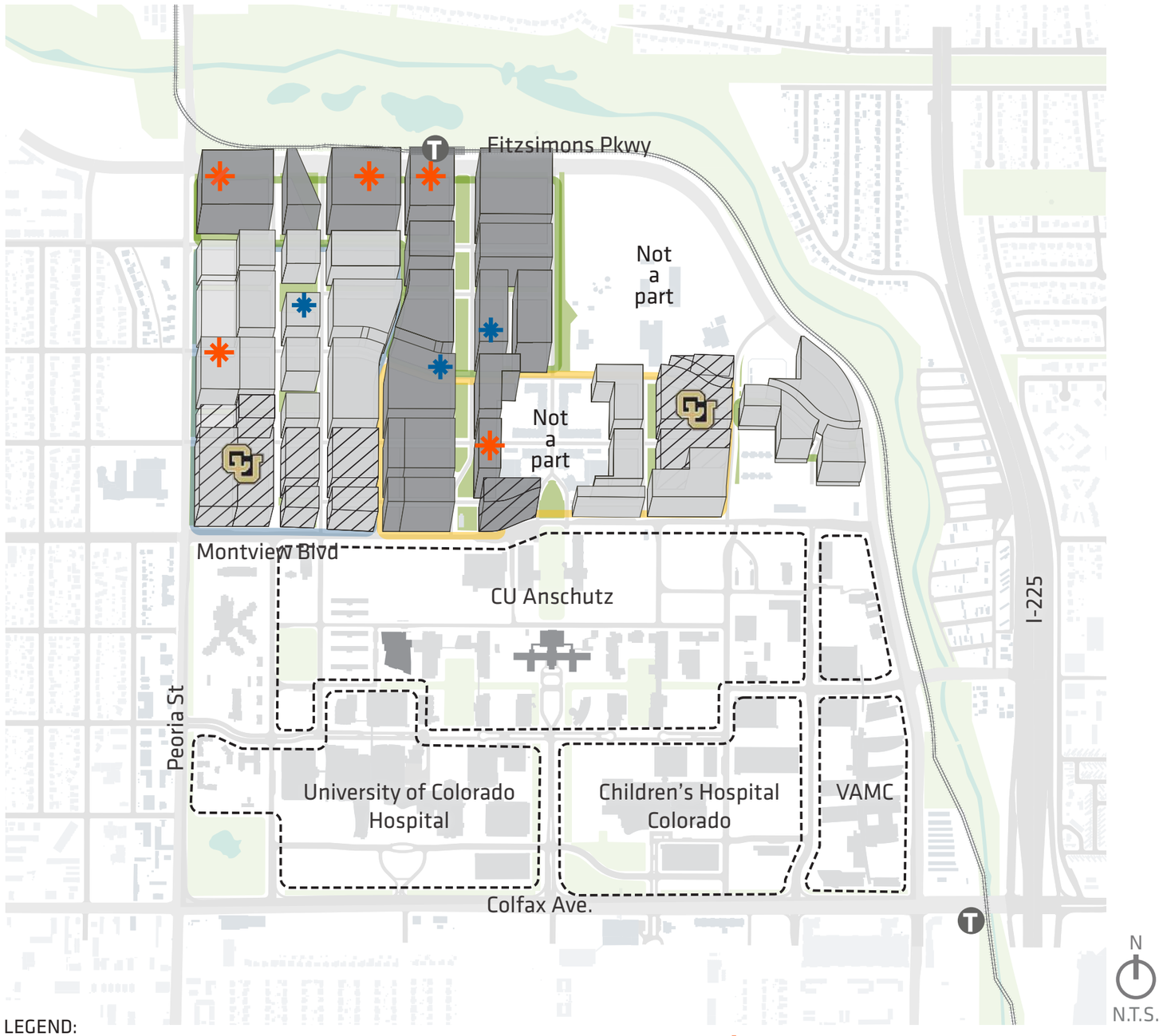
At build-out, the Campus is envisioned as a mixed-use urban distric of four- to twelve-story buildings with taller buildings located at special locations within the Campus centered along Fitzsimons Parkway and Scranton Boulevard, to take advantage of the site context and connections to Sand Creek Park, Fitzsimons Light Rail Station and the CU Anschutz Medical Campus. Buildings along Peoria orient generally east/west to minimize the visual impact on neighborhoods to the east, maximize solar orientation, and maximize mountain and downtown views from within the buildings.

The tallest buildings should be located at key moments to provide campus identity along significant view corridors such as I-225, the Light Rail, Peoria Street, Scranton Parkway and Fitzsimons Parkway.

Building typology and massing should coordinate with district identities outlined within these Design Guidelines. Specifically, buildings on north side of Montview Blvd should coordinate with civic typology and massing of those on the south side of the street.

The GDP does not restrict building heights, but it does limit the overall development square footage to +/- 17.4 million. This diagram recommends as urban design strategy based upon ultimate allowable build-out. The DRB shall track development build-out over time.

Building Height and Massing Diagram



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2

PUBLIC REALM DESIGN GUIDELINES

2.1.1. Vehicles

The existing urban street grid is largely intact to the west of Peoria Street. South of Montview Boulevard, the street grid is currently interrupted due to large surface parking lots. The 2022 AMC Facilities Master Plan depicts reinstating the street grid between 19th Avenue and Montview Boulevard.

The FIC street network is designed as an urban street grid that will connect to existing streets to the west and future street alignments to the south as depicted in the AMC Master Plan. FIC and AMC should continue to coordinate planning efforts as development occurs to ensure street connectivity.

The urban street grid is intended to create a porous and accessible Campus to distribute traffic. On-street parallel parking throughout the campus slows traffic and creates a buffer between traffic lanes and pedestrian zones, as well as adding to the parking supply.

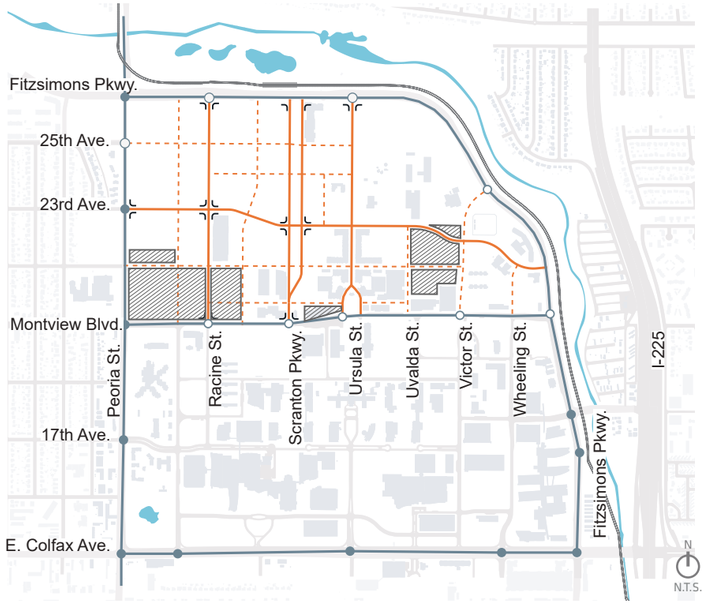
Vehicular gateways are distinct points of entry that uniquely correlate with specific institutions and parking destinations. Special architecture should be incorporated at gateways to identify primary campus entries.

2.1.2. Campus Shuttle

It is important to plan for shuttle access to the Light Rail Station that includes the FIC and AMC. The urban design framework, street and signal location, and phasing plan allow for future long-term shuttle access between the Light Rail Station, FIC and AMC. Space for shuttle stops and shelters need to be designed into the streetscape along shuttle routes.

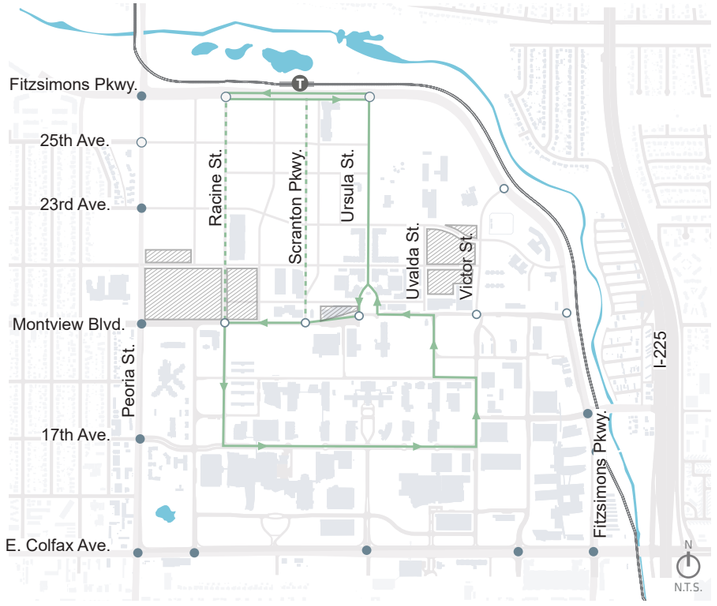
Shuttle routes are envisioned along major pedestrian corridors such as Scranton Boulevard, Racine Street, Ursula Street, and Uvalda Street, connecting the FIC and AMC. FRA should collaborate with the University to integrate future shuttle routes through the FIC. Once routes are established, FIC and street designers should locate and design shuttle stops in a manner that fit with the overall public realm design intent and serve the public.

Circulation



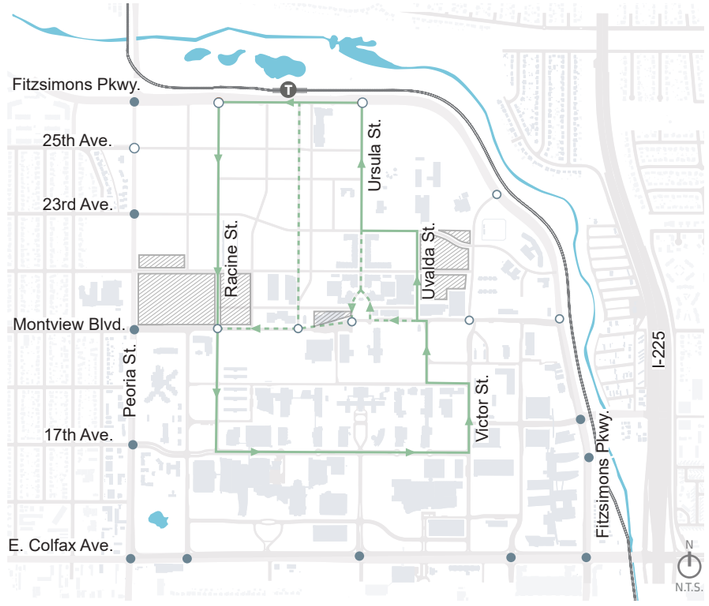
Perimeter Streets
Primary Street
Secondary Street
Gateway
Existing Signalized Intersection
Future Signalized Intersection
Light Rail Station
CU Property

Potential Near Term Campus Shuttle



Future potential shuttle route
Potential Shuttle stop
Existing Signalized Intersection
Future Signalized Intersection
Light Rail Station
CU Property

Potential Long Term Campus Shuttle



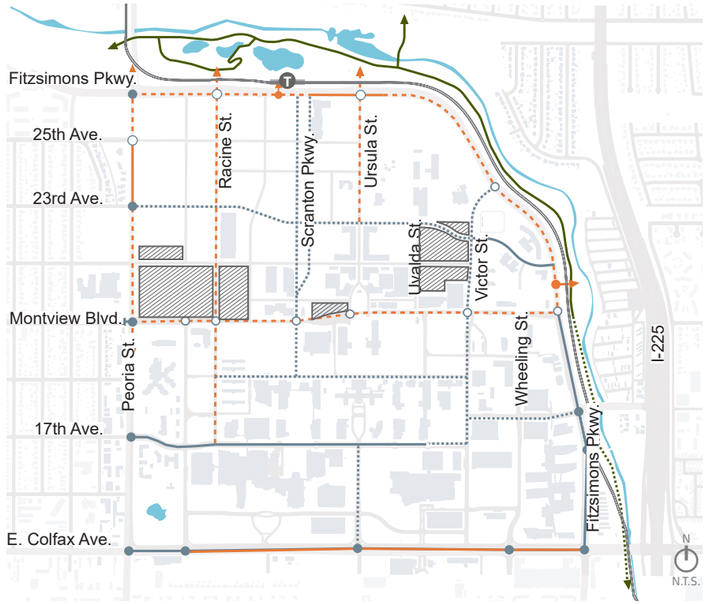
Future potential shuttle route
Potential Shuttle stop
Existing Signalized Intersection
Future Signalized Intersection
Light Rail Station
CU Property

2.1.3. Bicycles

Commuting by bicycle is becoming an increasingly popular alternative mode of transportation, especially among the young innovators. The FIC bicycle network capitalizes on proximity to Sand Creek Trail and the Light Rail Station by providing on-street bike lanes and off-street facilities that integrate with and connect to the existing adjacent bicycle network.

A multi-use path along Peoria Street and Fitzsimons Parkway provides a safe, continuous bicycle connection linking employees and surrounding neighborhoods to the Light Rail Station and regional trail system. The Racine Greenway serves as the primary north-south route for off-street bicycle connections, connecting from the AMC through the FIC to Sand Creek Park and the regional trail network. Scranton Boulevard includes on-street bicycle paths, facilitating connections to the Light Rail Station through the FIC campus and to the AMC. The integration of bicycle paths supports alternative modes of transit, reflecting the FIC's commitment to a healthy and sustainable lifestyle.

Bicycle Network



- Existing Sand Creek Trail
- Proposed Sand Creek Trail
- Existing off-street bicycle facility
- Proposed off-street bicycle facility
- Existing bike lane
- Proposed bike lane
- Existing Signalized Intersection
- Future Signalized Intersection
- Existing Hawk Signal
- Light Rail Station
- CU Property

2.1.4. Pedestrians

The street network is intended to function as part of the open space system with an emphasis on bringing people through the site, connecting FIC, AMC and residential neighborhoods to the Light Rail Station and Sand Creek Park. Wherever possible, the proposed urban street grid aligns with the residential neighborhood streets to the west of the campus, and provides direct pedestrian access into and through the site.

Primary and secondary streets feature wide sidewalks, pedestrian-scale materials, street lighting, generous landscape zones, and shade trees, ensuring safe, comfortable pedestrian connections. The linear park along 25th Avenue connects to surrounding neighborhoods, completing the linkage between the open space network and providing an integrated approach to pedestrian pathways and park spaces.

Pedestrian connections internal to the campus's urban blocks further facilitate pedestrian movements through blocks.

Pedestrian Network

- Existing Park and Open space
- Proposed Linear Park with Pedestrian and Bicycle Facilities
- Plaza or Pocket park
- 'Pedestrian' Route along streets
- 'Through block' Route
- Existing Hawk Signal
- Future Safe Pedestrian Crossing
- CU Property

The Light Rail connects the Campus to regional suburban neighborhoods, Downtown Denver and DIA. A significant number of employees are expected to arrive via Light Rail. As such, Scranton Parkway will become a primary pedestrian entrance to the Campus.

Sand Creek Park is a significant community and regional asset, linking to the broader Sand Creek Regional Trail network and offering two access points to the FIC along Racine Street and Ursula Street. Racine Street is envisioned as the primary pedestrian entrance to both the campus and Sand Creek Park, due to the density of surrounding development, while Ursula Street will serve as a important route for pedestrian and recreation access to and from the park.

Parking areas will also be a significant source of pedestrian traffic. Each parking structure or surface parking area should be strategically located and designed to encourage people to walk along the streets before entering their intended destination, thereby further activating the streetscape.

2.2.1. Hierarchy

Designing an urban TOD that promotes a healthy lifestyle and the use of alternative modes of transportation requires a connected, pedestrian and bicycle friendly grid of streets where people can easily and safely move around without a car. A fundamental step in achieving this vision is to create an urban framework that encourages a more human scale, walkable and bikeable development pattern. The proposed street network is intended to perform as part of the open space system with an emphasis on bringing people through the site, on foot and bike, connecting AMC and existing neighborhoods to the Light Rail Station and Sand Creek Park. Wide sidewalks, pedestrian and street lighting, generous landscape and/or amenity zones, and shade trees create safe, comfortable pedestrian connections. Curb extensions should be incorporated where feasible to minimize pedestrian crossing distances.

Future signals will be located along Fitzsimons Parkway, Peoria Street, and Montview Boulevard when warranted by a future traffic study.

A hierarchy of streets identified as Perimeter Streets, Primary Streets, Designated Parkways, Linear Parks, Greenways, and Secondary Streets establish the overall character of the public realm.

Perimeter Streets

Perimeter streets are existing streets adjacent to FIC, including Fitzsimons Parkway and Peoria Street. Due to the function of these streets and existing adjacent uses, the characters along FIC edge are tailored to each street's unique function. Montview Boulevard is designated as a Special Perimeter Street due to its role as the seam between the AMC and the FIC. Special care should be taken in the design of streetscape, building frontages, pedestrian crossings, and park space along Montview Boulevard to ensure a cohesive and integrated transition between the two campuses.

Primary Streets

Primary Streets are the primary 'address streets'. Buildings should front these streets in urban configurations. These streets also serve as primary pedestrian and bicycle connections that link FIC to the Light Rail Station, AMC and adjacent neighborhoods. As such, these streets are envisioned as multi-modal streets that integrate bicycle, pedestrian and automobile circulation in a safe manner.

Scranton Parkway and Ursula Street are Primary Streets to emphasize connectivity to the Light Rail Station, FIC and AMC. 23rd Avenue is a primary east-west connection and is designated as a Primary Street, intended to orient the fronts of buildings toward this key thoroughfare. It serves as a major link between the Fitzsimons Innovation Community and the surrounding neighborhoods, reinforcing a strong urban streetscaoe and promoting active street-level engagement along its corridor.

Designated Parkways, Linear Parks and Greenways

Parkways, linear parks, and greenways serve as connective corridors, enhancing mobility while integrating landscaped open spaces that support recreation, sustainability, and the public realm. Designed with a pedestrian-first approach, they provide seamless connections, balancing urban infrastructure with natural elements. Featuring shaded pathways, multimodal access, drought-tolerant plantings, and public amenities, these spaces promote walkability, foster recreation, and strengthen the campus identity while incorporating landscaped water quality treatment areas that enhance both ecological function and community vibrancy.

Secondary Streets

Secondary Streets provide increased connectivity and access through the site. They are characterized by well-designed pedestrian zones with sidewalks, amenity zones, street trees, and on street parking providing connectivity to Primary Streets.

If a development parcel does not have frontage along a Primary Street, buildings should front Secondary Streets with primary façades and primary pedestrian entries, and surface parking should be located behind or to the side of the building.

Tertiary Ways

Tertiary Ways are any roadway that functions as a commercial and residential access drive. These are typically private drives providing access to internal parking lots, parking structures or building service areas. Tertiary Ways should be located and designed in a manner that will allow them to transition to streets in the future as necessary.

2.2.2. Streetscape Water Quality Treatment Areas

As an urban center shaped by its natural surroundings, the Fitzsimons Innovation Community sits within the Sand Creek Drainage Basin, balancing the preservation of riparian ecosystems with urban water quality management. This is particularly vital in Major Drainage Basin D, where the Water Gardens District requires on-site water quality treatment before stormwater enters the system. With the site's natural slope increasing northward from 24th Avenue to Fitzsimons Parkway, streets will be designed to respond to these topographic shifts, integrating drainage solutions that align with the site's natural context.

Streets and infrastructure within the Water Gardens District—including Racine Street, Quentin Street, 24th Avenue, 25th Avenue, and Fitzsimons Parkway—incorporate Water Quality Landscape Treatment Areas that provide developments the opportunity to integrate stormwater management solutions into a cohesive, ecologically responsive system. These treatment areas not only manage stormwater but also establish a distinct identity for the district, reinforcing its connection to the natural environment.

A range of streetscape strategies, such as Streetside Stormwater Planters and Bump-out Stormwater Planters, are combined with linear parks and open space networks to create a seamless landscape system that blends urban infrastructure with the surrounding ecological context. This approach extends throughout the campus and into Sand Creek Park, strengthening environmental resilience and visual continuity.

Required volumes for Water Quality Areas are outlined and should be referened within the Master Drainage Study (MDS). When designing streetscape water quality treatment areas, the following resources should be referenced:

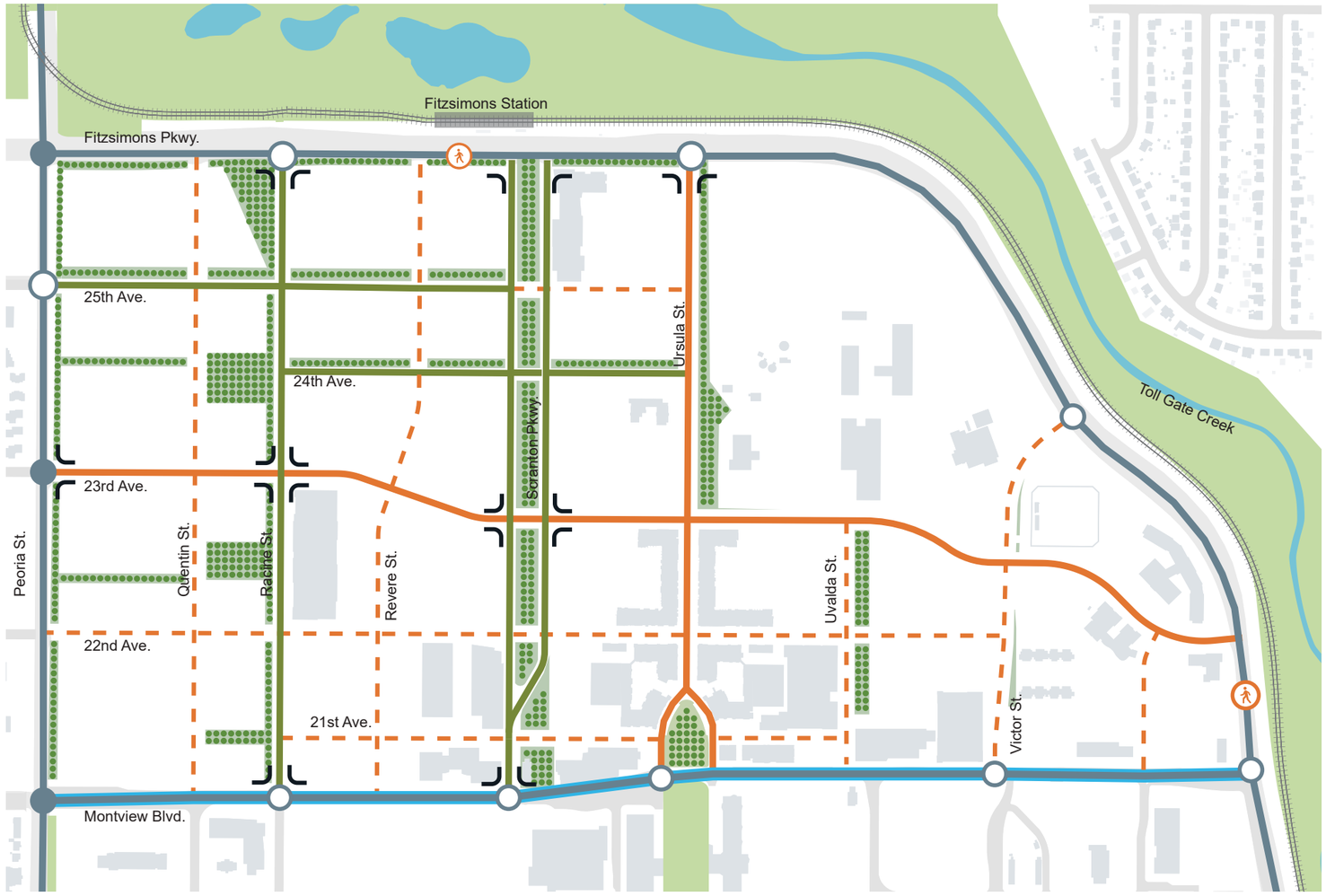
EPA Low-Impact Development Design Strategies
https://cfpub.epa.gov/watertrain/pdf/LID_National_Manual.pdf

Mile High Flood District Criteria Manual Volume 3: Stormwater Quality
https://www.mhfd.org/criteria-manual-volume-3

City of Denver Ultra-Urban Green Infrastruture Guidelines
https://www.denvergov.org/files/assets/public/v/1/doti/documents/standards/pwes-013.0-ultra_urban_green_infrastructure_guide.pdf

NACTO Urban Street Stormwater Guide
https://nacto.org/publication/urban-street-stormwater-guide/

Open Space and Circulation Network



Legend

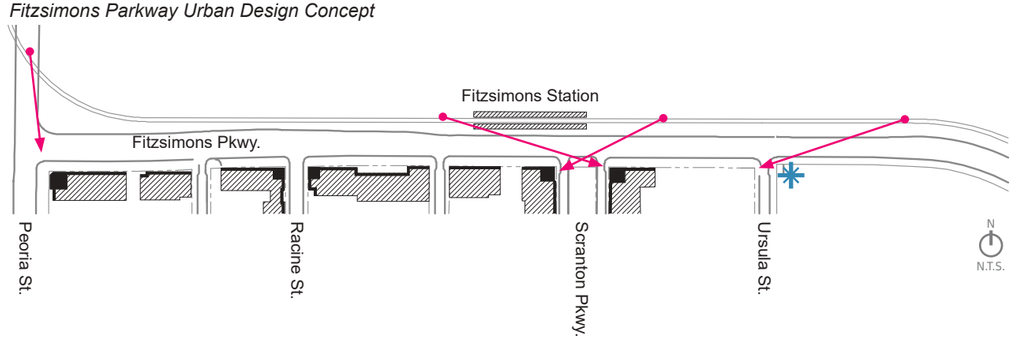
- Perimeter Street
- Perimeter Street (Special)
- Primary Street
- Parkways, Linear Parks and Greenways
- Secondary Street
- Existing Signalized Intersection
- Proposed Signalized Intersection
- Existing Hawk Signal (pedestrian activated signal)
- Proposed Hawk Signal (pedestrian activated signal)
- Proposed Pedestrian Realm Gateway

Fitzsimons Parkway Urban Design Concept

Fitzsimons Parkway is an existing four lane, median divided urban collector with +/- 80' wide R.O.W. Fitzsimons Parkway is the front door to FIC and AMC for anyone arriving via Light Rail.

Buildings front on to Fitzsimons Parkway to create an edge and campus identity. Enhancing safe crossings between the Fitzsimons Innovation Community and Sand Creek Park is essential for ensuring a seamless and accessible connection, promoting pedestrian and cyclist safety while strengthening links to the surrounding open space network. Shallow build-to zones locate buildings at or near the R.O.W. to create a pedestrian scale street edge with parking behind buildings. Special architecture should be located at key intersections that dintinguish key gateways to the campus. Parking structures without ground floor active uses or liner buildings should not be located along Fitzsimons Parkway.

Fitzsimons Parkway Urban Design Concept

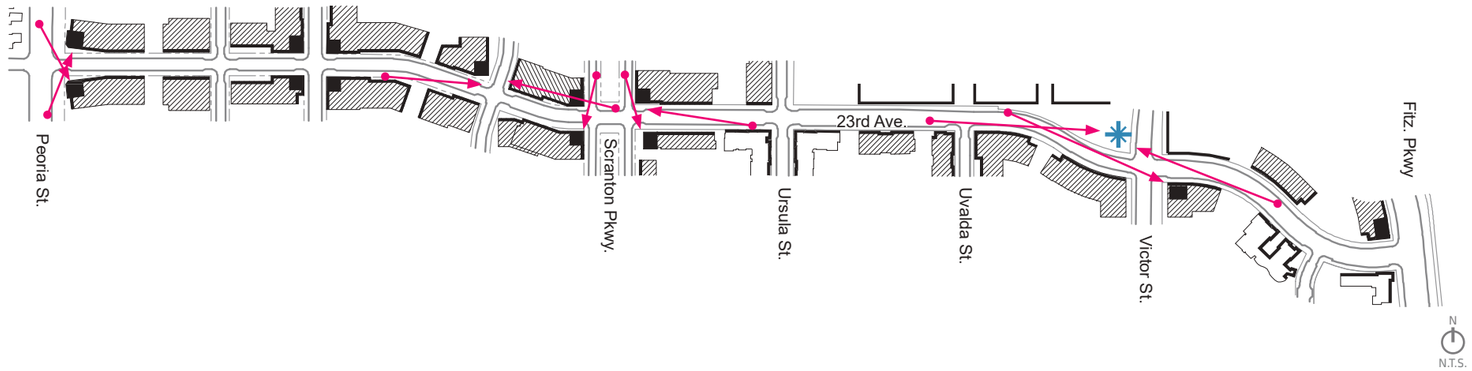


23rd Avenue Urban Design Concept

23rd Avenue is the primary east/west connection through the campus. The streetscape is characterized by well-designed pedestrian zones with wide sidewalks and amenity zones, shade trees, on-street parking, and bicycle facilities. Buildings front on to 23rd Avenue with primary façades and pedestrian entries. Shallow build-to zones locate buildings at, or near the R.O.W. to create a pedestrian scale environment.

Surface parking is located behind the buildings and parking structures without ground floor active uses or liner buildings should not be located along 23rd Avenue.

23rd Avenue Urban Design Concept

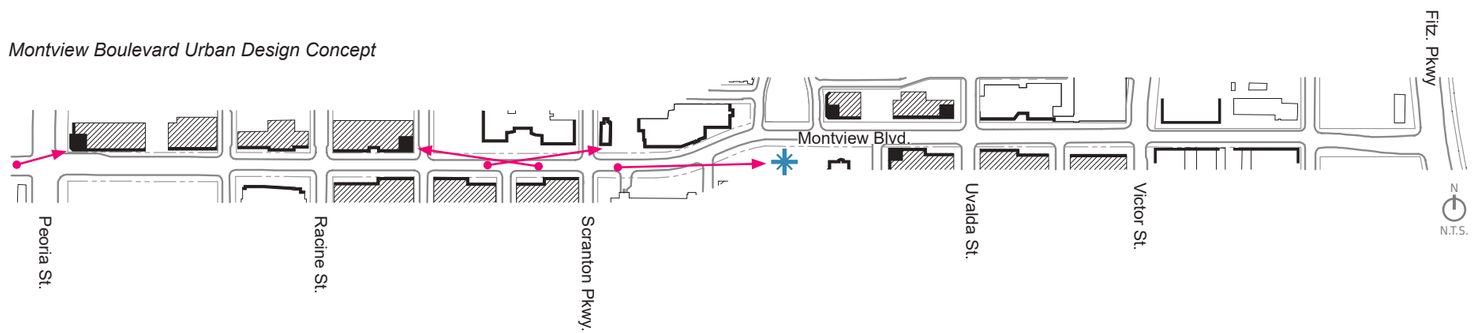


Montview Boulevard Urban Design Concept

Montview Boulevard should become a 'seam' between AMC and FIC. This street should be designed with higher quality finishes in order to create a signature address and identity. Safe and convenient bicycle and pedestrian facilities along Montview, as well as connections across Montview, promote walking and cycling between AMC and FIC.

Buildings front Montview Boulevard. Shallow build-to zones locate buildings at, or near the R.O.W. to create a pedestrian scale environment. Ground floor retail and restaurant uses are encouraged along Montview Boulevard to create an active street environment and capitalize on existing and future employment uses. Surface parking should not be located between buildings and Montview Boulevard. Parking structures without ground floor active uses or liner buildings are not allowed to be located along Montview Boulevard.

Montview Boulevard Urban Design Concept



Legend

Building with good or excellent facade

Building with special facade

Special building or architecture at corner

Object

Important view

Peoria Street Urban Design Concept

Peoria Street is an existing six lane urban arterial, with +/- 90' wide R.O.W., that borders the western edge of the Campus. A linear park that includes a detached, multi-purpose trail will be located along the east side of Peoria Street that connects the Montview Boulevard and Fitzsimons Parkway bicycle facilities. Buildings may front along Peoria; however, preference should be given to fronting buildings along Primary and Secondary Streets that intersect with Peoria Street. This is intended to create intuitive gateways into the site, and create pedestrian friendly, active streets that connect into the neighborhoods. Enhanced architecture should be incorporated into building façades along Peoria Street.

Scranton Parkway Urban Design Concept

Scranton Parkway is the central civic corridor connecting the AMC through the FIC to the Light Rail Station and Sand Creek Park. Streetscape is characterized by well-designed pedestrian zones with wide sidewalks and amenity zones, shade trees, on-street parking, and bicycle facilities. Buildings front on to Scranton Parkway with primary façades and pedestrian entries. Shallow build-to zones locate buildings at, or near the R.O.W. to create a pedestrian scale environment.

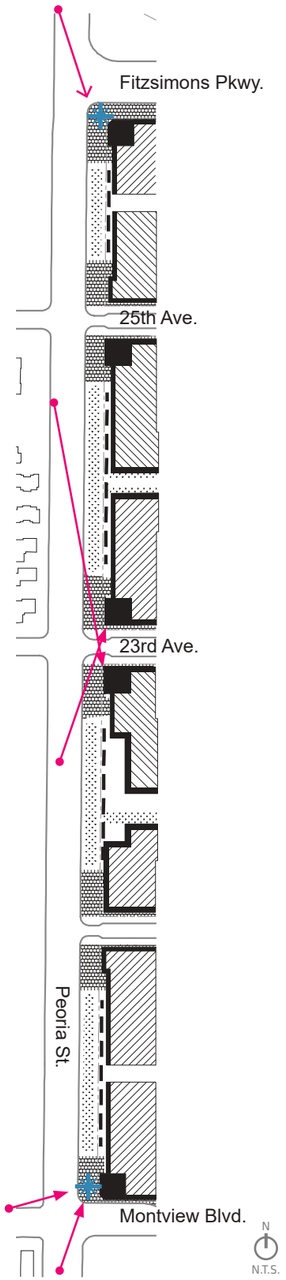
Surface parking shall not be located between a buildings's primary facade and the street. Parking structures without ground floor active uses or liner buildings are not allowed to be located along Scranton Parkway.

Where a development project borders two Primary Streets, the DRB shall determine which street takes precedence as the primary frontage.

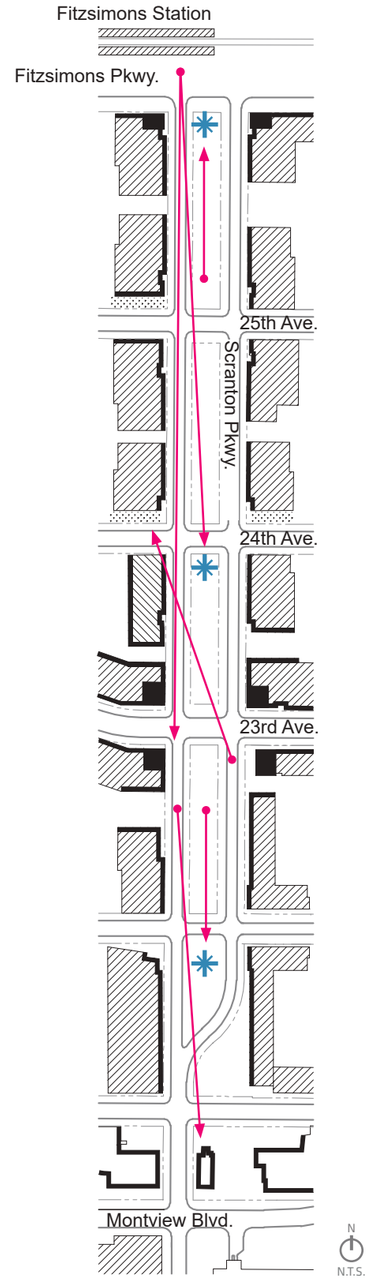
Legend

- Building with good or excellent facade
- Building with special facade
- Special building or architecture at corner
- Plaza
- Linear park
- Object
- Important view
- Landscape buffer zone, building or enhanced parking garage facade

Peoria Street Urban Design Concept



Scranton Parkway Urban Design Concept



2.2.3. Streetscape

This section defines the role and design character of the various street types found on Campus.

Streetscape design will establish the overall character of the FIC by creating rhythm and visual impact, and highlighting areas of significance. Because there will be multiple disciplines and users on the Campus, the streetscape and open spaces are intended to provide a common thread that ties all the various disciplines and user groups together. Common materiality, furnishings, and wayfinding helps visitors understand they are on the FIC.

Streetscape design varies based upon specific street functions. Primary Streets that are expected to have higher pedestrian activity may incorporate more detailing and upgraded paving materials. This will enhance the pedestrian experience by creating a more unique and dynamic space. Secondary Streets and Tertiary Ways that are expected to primarily serve parking areas will be treated with a simplified streetscape design.

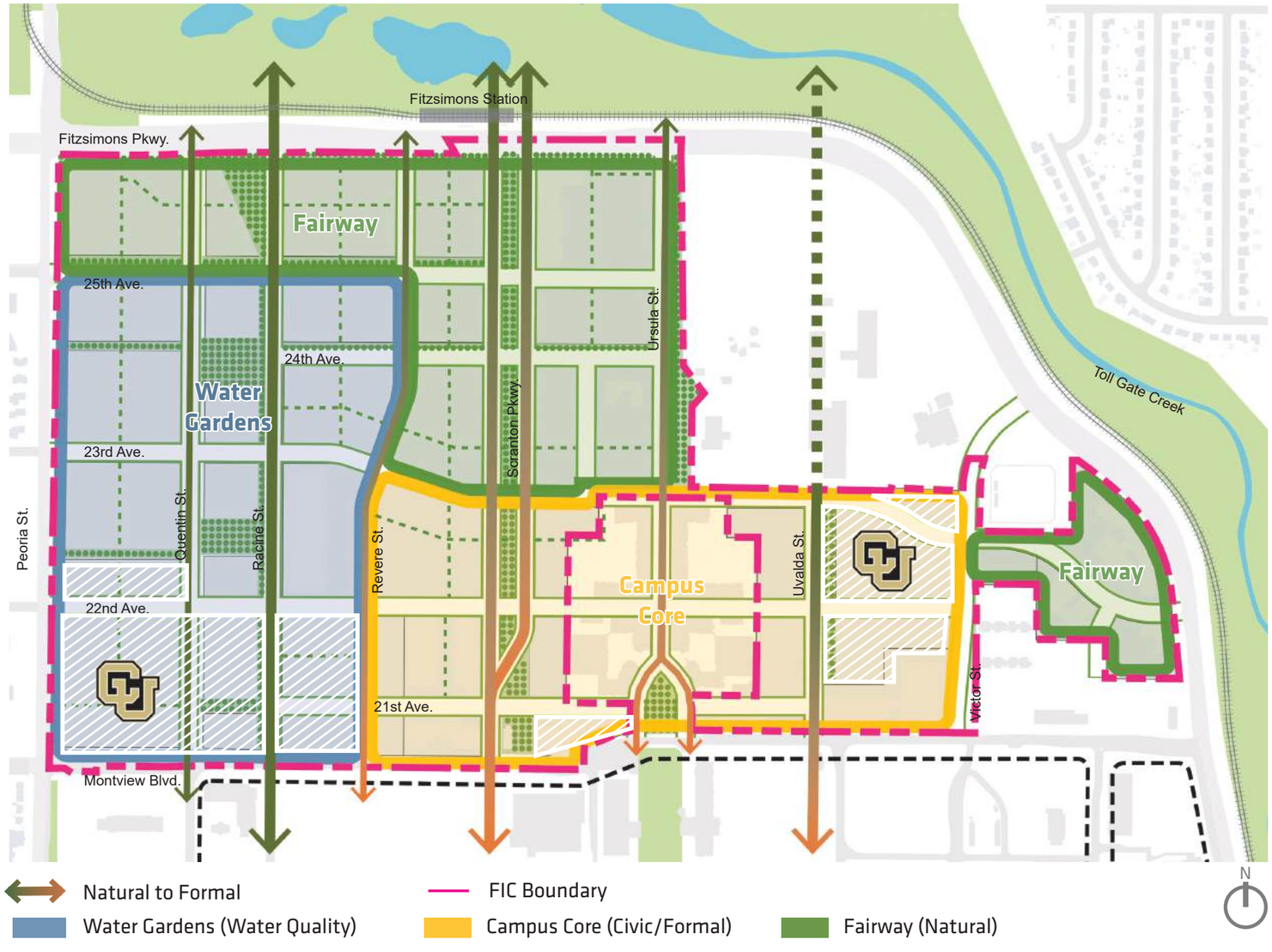
Site furnishings should be coordinated with and located adjacent to building entries and within the amenity zone. Utility access should be coordinated to not be placed in front of primary building entries. The location and layout of the streetscapes are designed to be compliant with the City of Aurora's standards.

These Urban Design Guidelines will take precedence over City of Aurora Article 14: Landscaping where applicable.

Street Character

As streets integrate with the site's topography and connect to the surrounding context, it is essential to establish distinct streetscape characters that enable development to actively engage with the public realm.

- **Campus Core District** – Streets function as formal civic corridors, creating a seamless transition between the Fitzsimons Innovation Community and CU Anschutz Medical Campus, ensuring design continuity and a cohesive urban identity.
- **Fairway District** – Streets incorporate water quality treatment areas and natural landscape groupings, responding to Sand Creek Park's ecological framework. The site's natural slope enhances visual and physical connections to the riparian environment, blending urban and natural elements.
- **Water Gardens District** – Streets serve as key stormwater management components, integrating green infrastructure through streetscape planters, linear parkways, and greenways. The character transitions from a structured urban form near Montview Boulevard to a more naturalized landscape approaching Fitzsimons Parkway and Sand Creek Park, reinforcing the district's environmental identity.




Civic Integration
Formal Campus Space
Landscape as Infrastructure
Sand Creek
FORMAL
NATURAL
Campus Core
Fairway
Montview Boulevard
21ST AVENUE
22ND AVENUE
23RD AVENUE
24th AVENUE
25th AVENUE
Fitzsimons Parkway

Peoria Street (Perimeter Street)

Peoria Street is a six lane arterial that defines the western edge of FIC. In order to create a unified Campus identity and provide a buffer from the busy street environment, a wide linear park is envisioned along the eastern edge of Peoria Street from Montview Boulevard to Fitzsimons Parkway. The linear park should include a multi-use path that links future bicycle facilities along Montview Boulevard, E. 23rd Avenue and Fitzsimons Parkway.

Occupiable buildings should prioritize fronting along east/west streets and orient their sides along Peoria Street. This is intended to create intuitive gateways and pedestrian scale street enclosure along streets that enter the site and connect to existing neighborhoods. Enhanced architecture and transparency should be incorporated into building façades along Peoria Street.

Intent

- Create safe pedestrian and bicycle connections between neighborhoods and Campus to Sand Creek Park and AMC.
- Create distinct campus gateways.
- Create campus identity along Peoria Street.

Design Guidelines

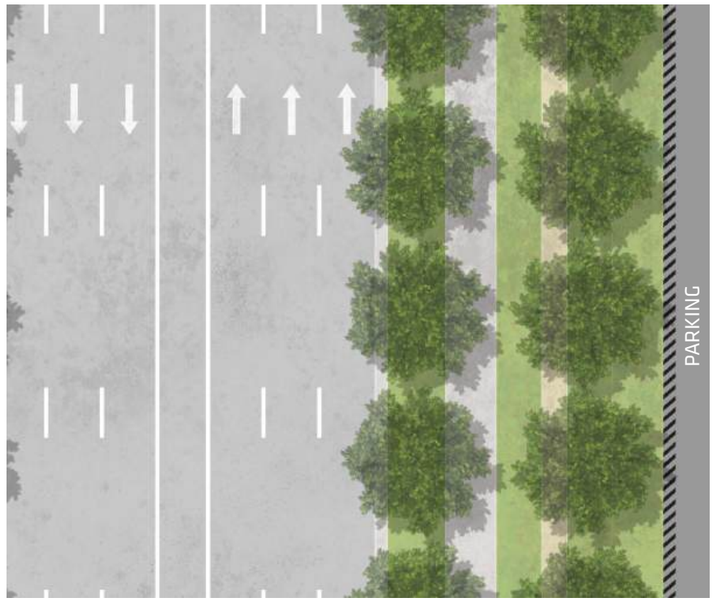
- Peoria Street east edge: Wide linear park (35'-45' wide).
- Multi-use Path: Minimum 10' wide cast in place concrete with medium broom finish.
- Jogging Path: The crusher fine path should be located adjacent to the multi-use path to encourage jogging and provide a soft trail connection to Sand Creek Park. The crusher fine path should be located closer to the street to allow sidewalk connections between building entries and concrete path.
- Bike Racks: Located near building entries and/or windows for oversight, with a minimum 4 per building entry.
- Build-to zone (Office / Commercial): 0'-10'.
- Parking Structure: 20' minimum setback to provide landscape buffer between linear park and parking structure.
- Parking Lots: 10' minimum setback with a low wall 42" high of materials similar to the main building with landscape on both sides within the 10' zone.
- Explore opportunities for water quality integration.
- Landscape: Deciduous trees at 25'-35' on center. See section 2.4 for recommended species.
- Understory: Drought tolerant xeriscape plantings. Consider using plants that create a buffer between street and multi-use path.
- Street Lighting: See section 2.2.5.
- Bench: 1 per building entry and 2 per block within linear park.
- Trash Receptacle: Surface mounted at edge of paving, 1 per building entry.
- Splash strip at back of curb.

Note 1: Setback and build-to zones shall be measured from eastern edge of linear park.

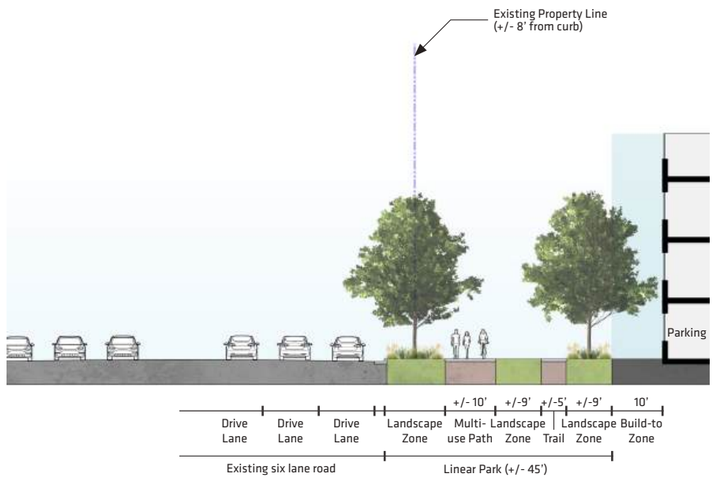
Note 2: See section 2.3 Open space for Perimeter linear park.

Keymap

Scenario 1: Parking structure along Peoria St. Linear Park



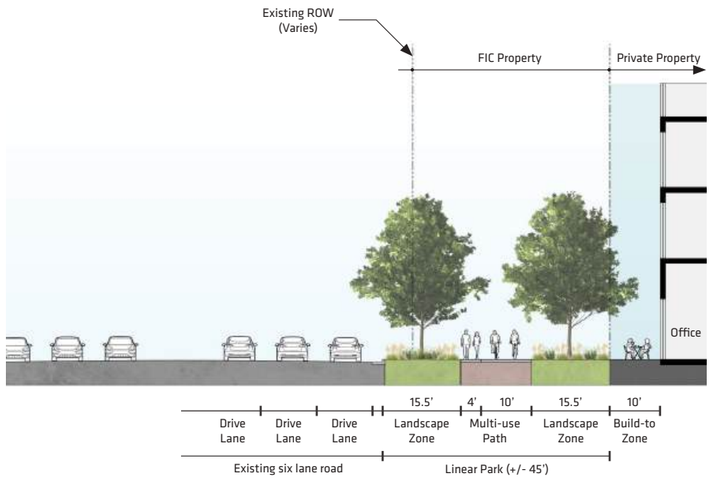
Plan view



Section Looking North

Scenario 2: Office building along Peoria St. Linear Park

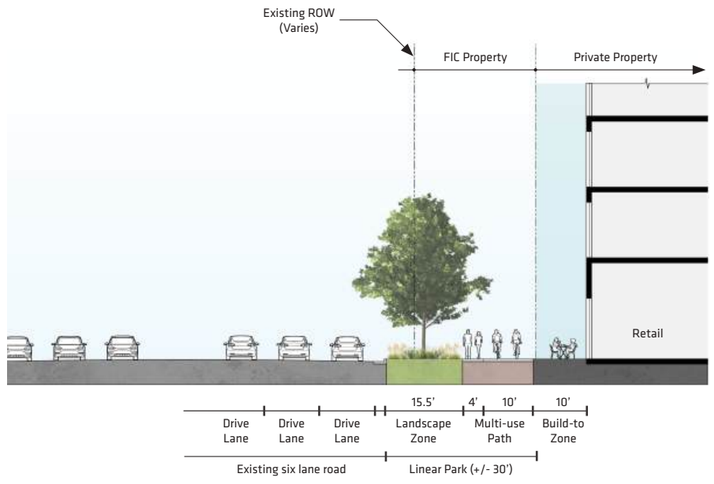
Plan view



Section Looking North

Scenario 3: Retail building along Peoria St. Linear Park

Plan view



Section Looking North

Fitzsimons Parkway (Perimeter Street)

Fitzsimons Parkway serves as the main entry to the FIC and AMC for those arriving via light rail or through Sand Creek Park. As the northern boundary of the FIC, the south side of Fitzsimons Parkway is envisioned to feature an urban linear park, incorporating elements of water quality design to meet water quality requirements between Scranton Boulevard and Peoria Street. This park will seamlessly connect the natural environment of Sand Creek Park with the FIC.

Intent

- Create a front door to the Light Rail Station and Sand Creek Park.
- Connect Peoria multi-use path to Ursula multi-use path.
- Create a campus identity along Fitzsimons Parkway that compliments the planting pallete of Sand Creek Park.

Design Guidelines

- Provide a setback to allow for multi-use trail connections, landscape and amenity zone between existing curb and private property. This will be owned and managed by FIC as part of park and open space network.
- Multi-use Path: Minimum 10' wide cast in place concrete with medium broom finish.
- Crusher fine Path: Minimum 4' wide. Crusher fine path should be located closer to the street to allow sidewalk connections between building entries and concrete path.
- Building frontage: Primary facade.
- Build-to zone: 0'-10'.
- Parking Structure: Liner building or active ground floor use required.
- Parking Lots: Not allowed between a buildings' primary facade and the street.
- Curb-cuts are limited.
- Integrate water quality treatment landscape areas within amenity zone.
- Street Lighting: See section 2.2.5.
- Amenity Zone: Since there is no parking along Fitzsimons Parkway, the southern street edge is envisioned as a wide linear park. The amenity zone is located between the multi-use path and the building face.
  - Bench: 1 per building entry, minimum.
  - Bike Racks: Embedded, centered in scoring pattern. 4 per building entry, minimum.
  - Water Quality Landscape: Deciduous water tolerant trees in minimum 9'x10' planting bed, filled with bioretention growing media and topped with rock mulch. Maximum depth of infiltration area: 24".
  - Landscape: Deciduous tree in minimum 5'x10' planting bed with rock mulch, crusher fines, or environmentally sensitive planting bed material; or in minimum 5'x5' tree grate.
  - Trees: Deciduous trees at 25'-35' on center. See section 2.4 for recommended species.
- Provide splash strip at back of curb.

Note: Setback and build-to zone shall be measured from southern edge of linear park.

Fitzsimons Parkway Concept

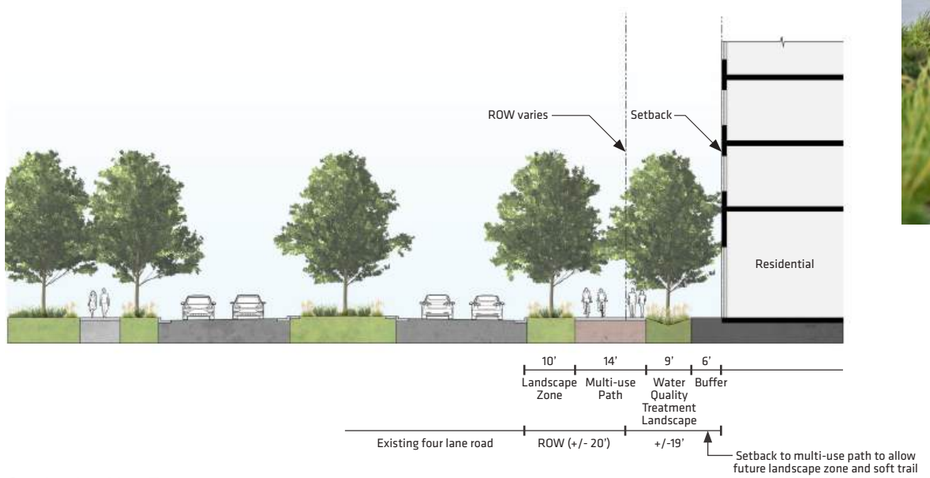
Plan view

Scale=1":30'

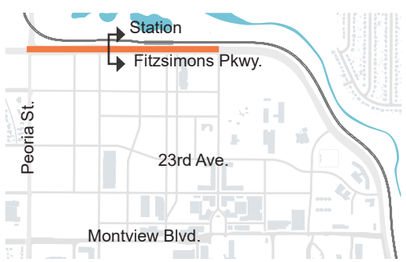
0' 10' 30'

N

Note: Setback and build-to zone shall be measured from southern edge of linear park.



Section Looking East



Keymap

Montview Boulevard (Perimeter Street)

Montview Bouldevard is envisioned as a 'seam' between FIC and AMC.

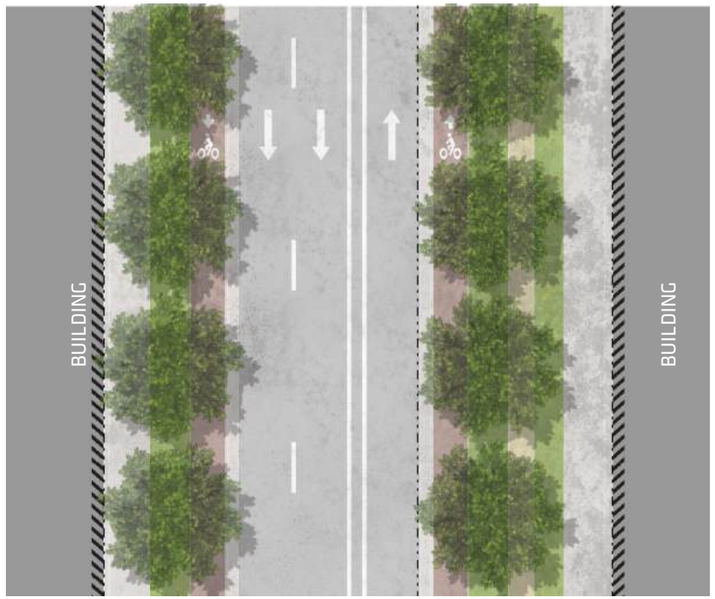
Intent

- Create an 'address street' with enhanced streetscape materials.
- Front buildings along Montview to create a shared identity between the FIC and the AMC.
- Provide safe and convenient bicycle facilities.
- Provide safe pedestrian and bicycle crossings.

Design Guidelines

- Bicycle Facility: Directional Cycle Track behind curb minimum 7' wide, cast in place concrete, broom finish minimum. Consider use of porous concrete to reduce run-off and showcase sustainable materials in the public realm.
- Sidewalk: Minimum 8' wide cast in place concrete, broom finish minimum. Consider higher quality materials such as concrete, stone paver units, porous concrete, or paver materials to create a special character.
- Building frontage: Primary Facade.
- Build-to zone: 0'-10'.
- Parking Structures: Liner building or active ground floor use required.
- Parking Lots: Not allowed between a building's primary facade and the street.
- Curb-cut are limited.
- Explore opportunities for water quality treatment within the landscape/ amenity zone.
- Street Lighting: See section 2.2.5.
- 2.5' wide cast in-place concrete curb and gutter.
- Amenity Zone: Since there is no parking along Montview, the amenity zone can be designed as significant landscape feature with ped and street lights that buffers pedestrians from the street and creates a unique identity along Montview. Connections between the cycletrack and sidewalk, through the amenity zone, should be limited to where building entries are located and bicycle park's.
  - Bench: 1 per building entry, minimum.
  - Bike Racks: Embedded, centered in scoring pattern. 4 per building entry, minimum.
  - Trash Receptacle: Surface mounted at edge of paving, 1 per building entry, minimum.
  - Landscape: Deciduous tree in minimum 5'x10' planting bed with rock mulch, crusher fines, or environmentally sensitive planting bed material; or in minimum 5'x5' tree grate.
  - Trees: Deciduous trees at 25'-35' on center. See section 2.4 for recommended species.

Montview Boulevard Concept

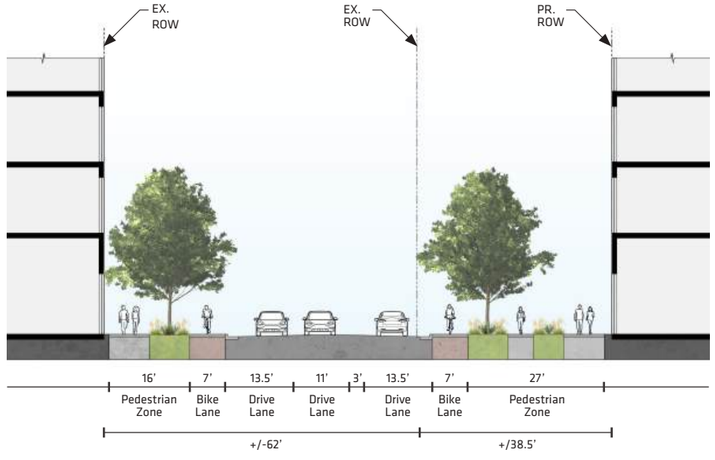


Plan view

N

Scale=1":30'

0' 10' 30'



Section Looking East

Keymap

23rd Avenue (Primary Street)

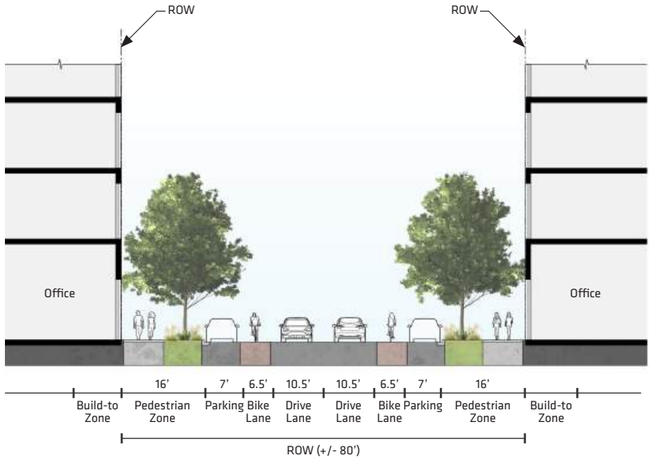
23rd Avenue is the primary east/west automobile and bicycle connection through FIC, linking to surrounding neighborhoods. The street is intended as multi-modal street balancing the needs of pedestrians, bicycles and automobiles. This streetscape is characterized by well-designed, durable pedestrian zones with wide sidewalks and amenity zones, shade trees, on-street bicycle facilities and on-street parking. Quality detailing, finishes and materials create a special identity. Special care should be taken to design intersections that minimize potential conflicts between pedestrians, automobiles and bicycles.

Design Guidelines

- Bicycle facility: On-street bike lanes.
- Sidewalk: Cast in place concrete, broom finish minimum, minimum 8' wide.
- Building frontage: Primary facade.
- Build-to zone: 0'-10'.
- Parking Structures: Liner building or active ground floor use required.
- Parking Lots: Not allowed between a building's primary facade and street
- Curb cuts are limited.
- Curb extensions at intersections are encouraged where turn lanes are not required.
- Street Lighting: See section 2.2.5.
- On street parking.
- 2.5' wide cast in-place concrete curb and gutter.
- Amenity Zone:
  - Bench: 1 per building entry, minimum.
  - Bike Racks: Embedded, centered in scoring pattern. 4 per building entry, minimum.
  - Trash Receptacle: Surface mounted at edge of paving, 1 per building entry, minimum.
  - Landscape: Deciduous tree in minimum 5'x10' planting bed with rock mulch, crusher fines, or environmentally sensitive planting bed material; or in minimum 5'x5' tree grate.
  - Trees: Deciduous trees at 25'-35' on center. See section 2.4 for recommended species.
  - Explore opportunities for water quality treatment integrates with landscape zone
  - 18" wide concrete band 'step-out' zone, behind curb.

23rd Avenue Concept

Plan view



Section Looking East

Keymap

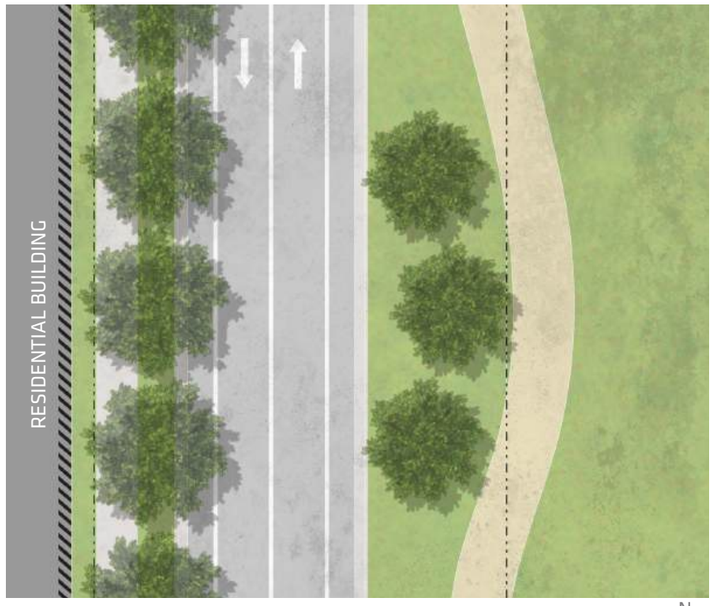
Ursula Street north of 23rd Avenue (Primary Street)

This streetscape is characterized by well-designed, pedestrian zones with wide sidewalks and landscape zones. A detached, multi-use path located east of the roadway will connect existing and future residents located south of 23rd Avenue to Sand Creek Park and the Light Rail Station.

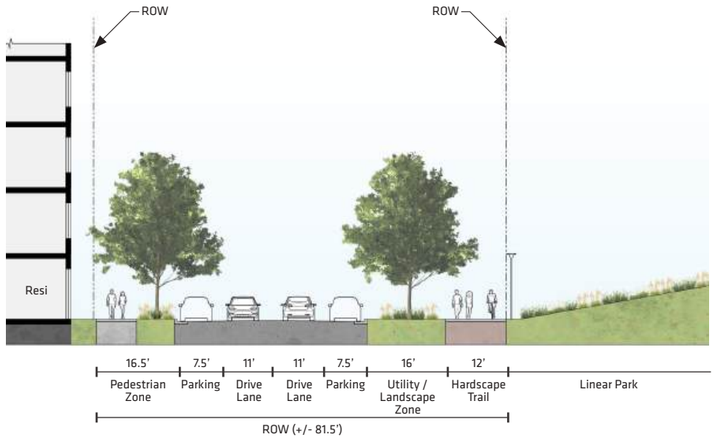
Design Guidelines

- Multi-use Path: Minimum 10' wide cast in place concrete with medium broom finish.
- Bicycle Facility: Off-street path.
- Sidewalk: Cast in place concrete, broom finish.
- Building frontage: Primary Facade.
- Build-to zone: 10'-20' for residential buildings, 0'-10' for commercial buildings and mixed-use buildings with active ground floor uses.
- Parking Structures: Liner building or active ground floor required.
- Parking Lots: Not allowed between a building's primary facade and street.
- Curb cuts are limited.
- Curb extensions at intersections are encouraged where turn lanes are not required.
- Explore opportunities for water quality treatment integrates with landscape zone.
- Street Lighting: See section 2.2.5.
- On-street parking.
- 2.5' wide cast in-place concrete curb and gutter.
- Amenity Zone: Trees in planting cut-outs or crusher fines.
  - Bench: 1 per building entry, minimum.
  - Bike Rack: Embedded, centered in scoring pattern. 4 per building entry, minimum.
  - Trash Receptacle: Surface mounted at edge of paving, 1 per building entry, minimum.
  - Landscape: Deciduous tree in minimum 5'x10' planting bed with rock mulch, crusher fines, or environmentally sensitive planting bed material; or in minimum 5'x5' tree grate.
  - Trees: Deciduous trees at 25'-35' on center. See section 2.4 for recommended species.
  - 18" wide concrete band 'step-out' zone, behind curb.

Ursula Street Concept



Plan view near Fitzsimons Pkwy.



Section near Fitzsimons Pkwy Looking North

Keymap

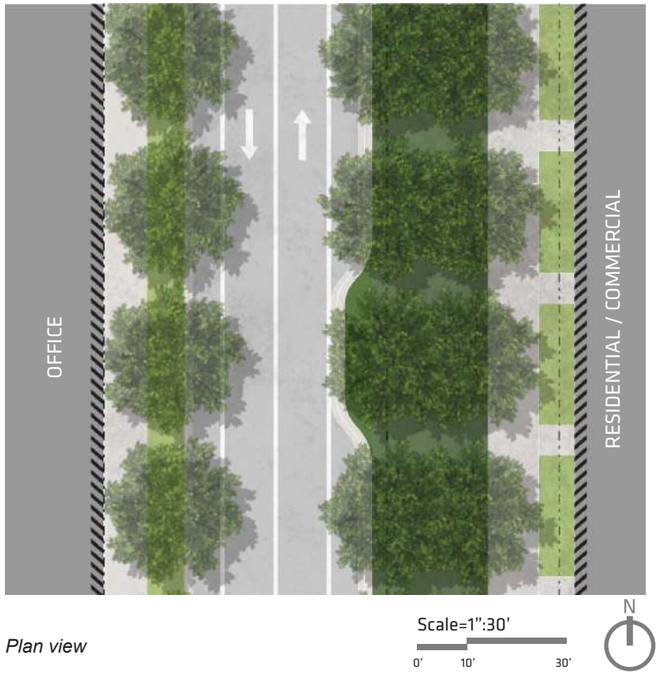
24th and 25th Avenue (Linear Park)

24th and 25th Avenues are east-west secondary streets that provide key connections through the Fitzsimons Innovation Community (FIC), linking the open space network together and to the surrounding neighborhoods. These streets are distinguished by a combined linear park and streetscape along the north side, integrating Water Quality Treatment Areas with spaces for both active and passive recreation. This design enhances stormwater management while creating a functional and engaging public realm that supports ecological sustainability and community interaction.

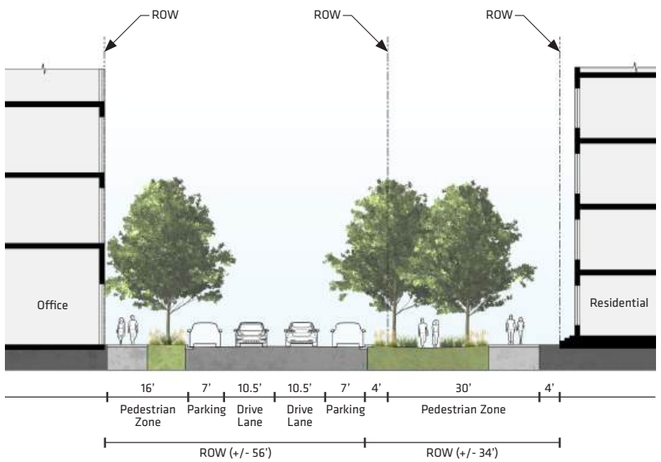
Design Guidelines

- Bicycle Facility: None.
- Sidewalk: Cast in place concrete, broom finish. Minimum 8' wide.
- Building frontage: Primary Facade.
- Build-to zone: 0'-20' for residential buildings with ground floor commercial use or unit entrances, 10' - 20' for residential buildings, 0'-10' for non-residential building, 0'-10' for mixed-use with commercial ground floor building.
- Setback: None
- Parking Structures: Liner building or active ground floor use required, 0'-10' build-to zone for non-residential building, 10'-20' build-to zone for residential liner building. Access to parking structures that cross linear park space is prohibited.
- Parking Lots: Not allowed between building's primary facade and the street.
- Curb cuts are limited.
- Curb extensions at intersections are encouraged where turn lanes are not required.
- Street Lighting: See section 2.2.5.
- 2.5' wide cast in-place concrete curb and gutter.
- Water Quality Treatment Landscape Area
  - Bumpout Stormwater Planter and Bioswale combined with Linear Parks
  - Water Quality Landscape: Deciduous water tolerant trees in minimum 9'x10' planting bed, filled with bioretention growing media and topped with rock mulch. Integrated planting bed into linear park when applicable to create a uniform landscape. Maximum depth of infiltration area: 24".
  - Landscape: Deciduous tree in minimum 5'x10' planting bed with rock mulch, crusher fines, or ecological planting bed material; or in minimum 5'x5' tree grate.
  - Trees: Deciduous trees at 25'-35' on center or in natural groupings. See section 2.4 for recommended species.

24th Avenue Street Concept



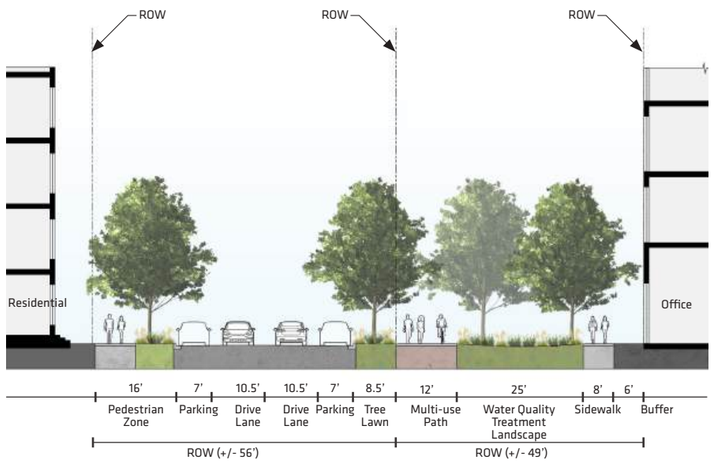
Plan view



Section Looking East

25th Avenue Street Concept

Plan view



Section Looking East

24th and 25th Avenue Linear Parks

24th and 25th Avenues feature linear parks that serve as key east-west connectors within the Fitzsimons Innovation Community open space system, linking Scranton Parkway to the Racine Greenway and neighboring communities. These urban linear parks help define the site's identity, fostering engagement with surrounding developments while offering a mix of active and passive recreation spaces. The design integrates strategic water quality treatment areas through Low Impact Development, sidewalks, shade trees, open recreation spaces, pedestrian amenities, and pedestrian-scale lighting, acting as an extentsion of the streetscape.

Intent

- Connect campus parks and parkways, providing a green link within the FIC and surrounding communities.
- Engage with surrounding developments, activating open space amenities.
- Meet water quality treatment requirements while creating an attractive and sustainable landscape.
- Establish a cohesive campus identity.

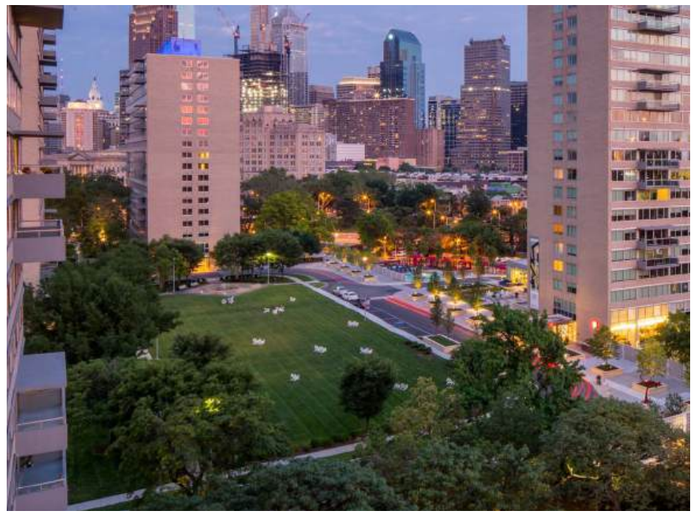
Design guidelines

- Include benches, pedestrian lighting, bike racks, and wayfinding for pedestrians.
- Use native, drought-tolerant plants for water quality treatment and reduced water usage.
- Install attractive pedestrian lighting or bollards for safety and usability at night.
- Select tree species that thrive in urban settings and enhance the park atmosphere.
- Ensure adjacent developments provide pedestrian access to the linear park.
- Integrate Low Impact Development plantings to meet water quality treatment requirements for nearby sites.

Amenities

- (1) Discovery Play Areas - Located along 25th Avenue
- (2) Picnic Shelters - (1) Located along 24th Ave, (1) Located along 25th Ave

Keymap



Urban linear park

Linear park used tor recreation

Parkway used for seating and picnic shelthers.

Linear park with natural seating and water quality landscape

Scranton Parkway (Parkway)

Scranton Parkway is a grand, entry into FIC from the Light Rail Station. It is the primary pedestrian and bicycle connection between the Light Rail Station, FIC and AMC. This streetscape is characterized by well-designed, durable pedestrian zones with wide sidewalks and amenity zones, on-street bicycle facilities and on street parking. Quality finishes, detailing and special landscape create a special experience along this street.

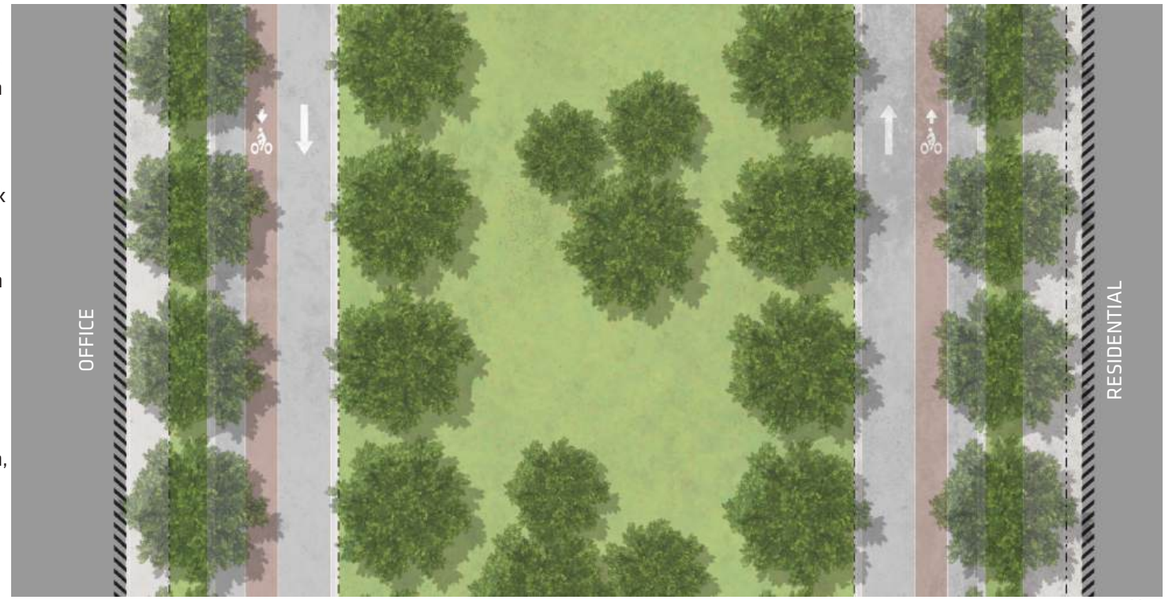
The median is envisioned as a wide linear park that introduces a formal landscape into an otherwise dense urban environment. The streetscape and park will be designed together to create a cohesive character and feel.

A pedestrian activated crossing signal will be located at the northern end of Scranton Parkway to facilitate safe crossing of Fitzsimons Parkway. The location of this crossing should be closely coordinated with the design of Scranton Parkway.

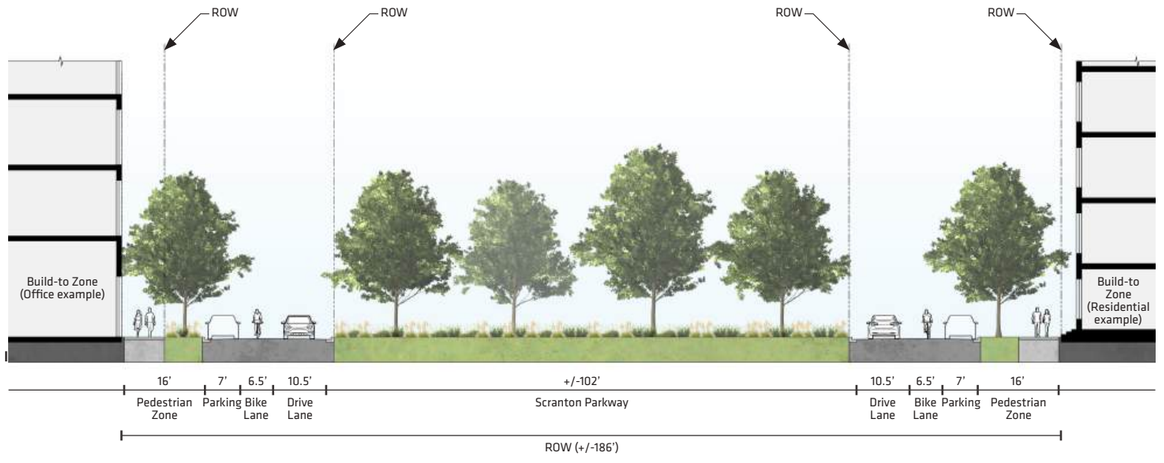
Design Guidelines

- Bicycle Facility: On-street bike lanes.
- Sidewalk: Stone or concrete pavers or Cast in place concrete, broom finish, min 8' wide.
- Building Frontage: Primary facade.
- Build-to zone: 0'-20' for non-residential buildings, 0'-10' for mixed-use buildings with active ground floor uses..
- Parking Structures: Liner building or active ground. Floor required.
- Parking Lots: Not allowed between a building's primary facade and the street.
- Curb cuts are limited.
- Curb extensions at intersections are encouraged where turn lanes are not required.
- Explore opportunities for water quality treatment integrated into the landscape zone.
- Street Lighting: See section 2.2.5.
- On-street parking.
- 2.5' wide cast in-place concrete curb and gutter.
- Amenity Zone: This street should be different than typical campus street character. The amenity zone should create a uniform feel along Scranton Parkway while designed to accommodate a variety of adjacent land uses. Consider drought tolerant landscape materials such as tall grasses set in a crusher fine ground plane to accommodate pass-through to on-street parking and amenities.
  - Bench: 1 per building entry, minimum.
  - Bike Racks: Embedded, centered in scoring pattern. 4 per building entry, minimum.
  - Trash Receptacle: Surface mounted at edge of paving, 1 per building entry, minimum.
  - Landscape: Deciduous tree in minimum 5'x10' planting bed with rock mulch, crusher fines, or environmentally sensitive planting bed material; or in minimum 5'x5' tree grate.
  - Trees: Deciduous trees at 25'-35' on center. See section 2.4 for recommended species.
  - 18" wide concrete band 'step-out' zone, behind curb.

Scranton Parkway Concept



Plan view



Section Looking North

Keymap

Keymap

Scranton Parkway

Scranton Parkway is the civic spine of the open space system, serving as a grand urban gesture that unites AMC, FIC, and the Light Rail Station. More than a connector, it establishes a strong site identity with its wide, linear median designed as an urban parkway. Featuring high-quality materials, pedestrianized edges, shade trees, lighting, and public amenities, it functions as both a gateway and a central gathering space for the campus.

Intent

- To create a grand, iconic parkway connection between the Light Rail Station, FIC and AMC.
- To provide flexible open areas and recreation opportunities.
- To provide a safe, comfortable pedestrian connection from the station to FIC and AMC.

Design Guidelines

- Provide flexible, usable open spaces particularly adjacent to residences.
- Create a uniform landscape gesture that anchors the open space network.
- Provide ample shade to create a comfortable pedestrian connection to the Light Rail Station.
- Creatively use grades to create 'rooms', overlooks and special moments.
- Include public art at special locations within the parkway, as appropriate.
- Strengthen the link between AMC and Sand Creek Park by integrating streetscape and landscape features that respect and enhance the distinct aesthetic and functional qualities of both assets.

Amenities

- (3) Picnic Shelters
- (1) Basketball Court - Half Court
- (1) 30,000 SF combined Turf Area

Keymap

Civic character

Urban forest canopy.

Parkway used for intimate pic-nics.

Art within Parkway

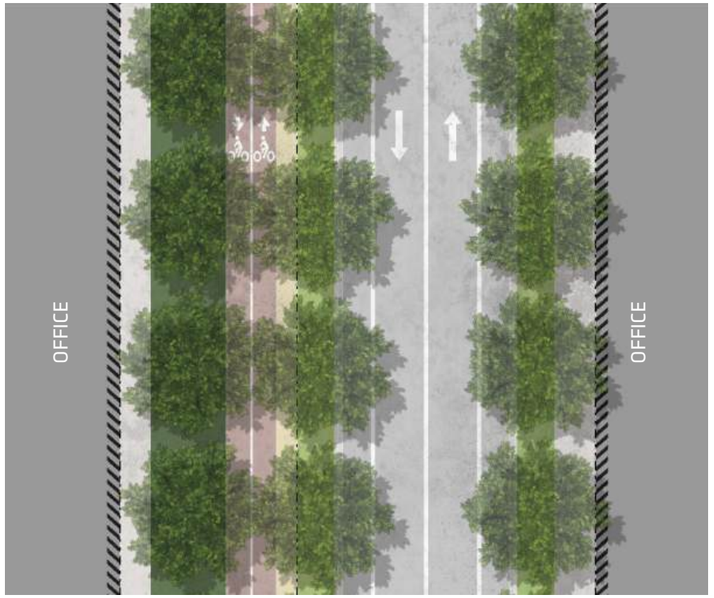
Racine Street (Greenway)

Racine Street is a key north-south connection through the FIC for pedestrians, cyclists, and vehicles, linking the AMC to Sand Creek Park. Designed as a multimodal corridor, it balances mobility needs while integrating a water quality treatment greenway from Montview Boulevard to 25th Avenue. This greenway achieves site required water quality treatment within the Water Garden District and provides a environmental amenity for all user types. The streetscape features wide sidewalks, a two-way bicycle path, a softscape trail, amenity zones, shade trees, off-street bicycle facilities, and on-street parking, all defined by high-quality materials and detailing. Intersections should be carefully designed to prioritize safety, minimizing conflicts between pedestrians, cyclists, and vehicles while ensuring strong connections to the Racine Greenway through adjacent developments.

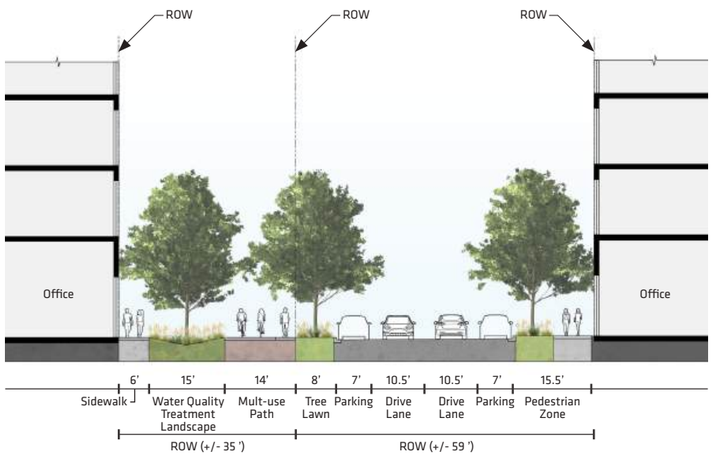
Design Guidelines

- Bicycle facility: Off-street bike lanes.
- Sidewalk: Cast in place concrete, broom finish minimum, minimum 6' wide.
- Building frontage: Primary facade.
- Build-to zone: 0'-10'.
- Parking Structures: Liner building or active ground floor use required. Access to parking structures that cross greenway is prohibited.
- Parking Lots: Not allowed between a building's primary facade and street
- Curb cuts are limited to the east side of Racine.
- Curb extensions at intersections are encouraged where turn lanes are not required.
- Street Lighting: See section 2.2.5.
- On street parking.
- 2.5' wide cast in-place concrete curb and gutter.
- Water Quality Treatment Landscape Area
  - Water Quality Landscape: Deciduous, water-tolerant trees planted in a minimum 15' wide greenway. Planting area filled with bioretention growing media and topped with rock mulch. Integrates natural stones, gravel, and other permeable materials to improve water filtration and drainage. Maximum depth of infiltration area: 24".
  - Landscape: Deciduous tree in minimum 5'x10' planting bed with rock mulch, crusher fines, or environmentally sensitive planting bed material; or in minimum 5'x5' tree grate.
  - Trees: Deciduous trees at 25'-35' on center or in natural groupings. See section 2.4 for recommended species.
- Build To Zone:
  - Bench: 1 per building entry, minimum.
  - Bike Rack: Embedded, centered in scoring pattern. 4 per building entry, minimum.
  - Trash Receptacle: Surface mounted at edge of paving, 1 per building entry, minimum.

Racine Street



Plan view



Section looking North

Keymap

Racine Greenway

The Racine Greenway is a linear park designed to create a comfortable, pedestrian-friendly, and multi-modal corridor along Racine Street. Featuring an urban landscape of drought-tolerant plantings, water filtration landscapes, and a mix of understory and shade trees, it reflects a strong commitment to sustainable practices. This zone will include a two-way bike path, softscape trail, sidewalk, water-quality treatment areas, a double row of trees, pedestrian-scale lighting, and site furnishings, enhancing both functionality and aesthetics while promoting active transportation and ecological resilience.

Intent

- To connect between the CU Anschutz Medical Campus through FIC and to Sand Creek Park and the regional trail system.
- To promote a healthy lifestyle by connecting softscape trails and bicycle paths to the regional trail network.
- To bring 'fingers' of Sand Creek Park into the urban environment.
- To accomodate Water Quality Treatment Requirements for adjacent developments and the streetscape through Low Impact Development stormwater management.
- To create a uniform campus identity while taking into account the environmental factors of the site.

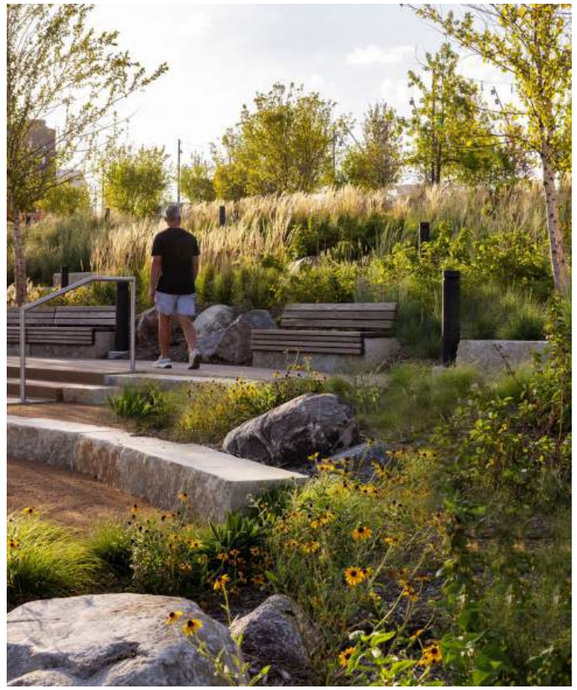
Design Guidelines

- Include benches, pedestrian lighting, bike racks, and wayfinding for pedestrians.
- Create pedestrian and bicycle connections.
- Use native, drought-tolerant plants for water quality treatment and reduced water usage.
- Install attractive pedestrian lighting or bollards for safety and usability at night.
- Select tree species that thrive in urban settings and enhance the park atmosphere.
- Ensure adjacent developments provide pedestrian and bicycle access to the linear park.
- Integrate Low Impact Development plantings to meet water quality treatment requirements for nearby sites.

Keymap

Greenway with hardscape pathways and planting areas

Greenway as Ecological Area



Stepped Boulders provide spaces for interaction with Greenways

Greenway incorporating Water Quality as a Natural Landscape

Quentin Street (Secondary Street)

A secondary street in the western portion of the site, adjacent to Racine Street, features water quality treatment planting areas on both sides of the street and wider sidewalks on its eastern side. These elements enhance connectivity to adjacent development blocks as well as the park network along Racine Street.

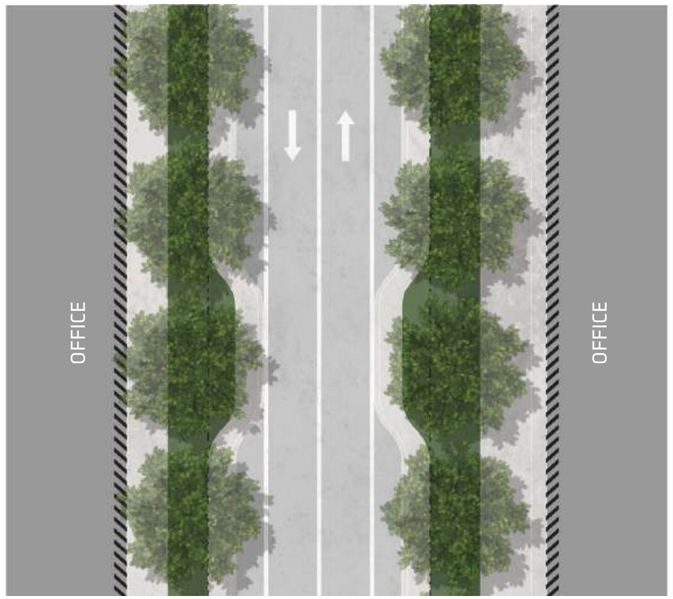
Intent

- Create sustainable and urban streetscape environment.
- Connect Montview Boulevard to Fitzsimons Parkway
- Create a campus identity within the Water Gardens District.

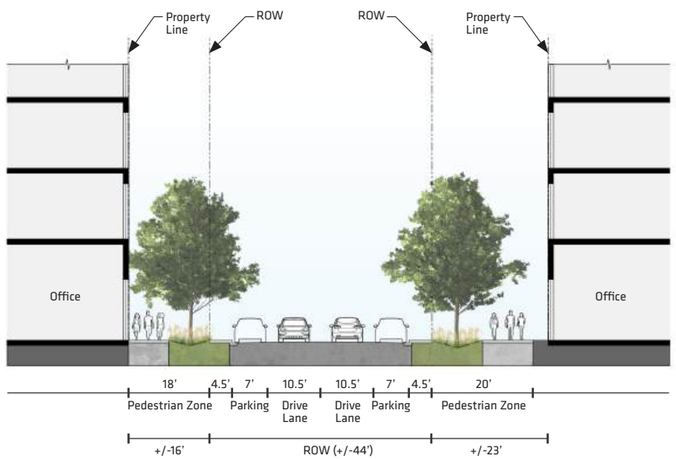
Design Guidelines

- Sidewalk: Cast in place concrete, broom finish. Minimum 8' wide.
- Building Frontage: Primary facade unless a parcel fronts on a primary street and/or open space, secondary facade is acceptable.
- Build-to zone: 0'-10' for commercial buildings and mixed-use buildings with active ground floor uses.
- Parking Structures: Allowed along secondary streets.
- Parking Lots: Allowed along street with 10' landscape setback, or low wall. However, when a building fronts a secondary street, parking is not allowed between the building and the street.
- Curb extensions at intersections are encouraged where turn lanes are not required.
- Street Lighting: See section 2.2.5.
- On-street parking.
- 2.5' wide cast in-place concrete curb and gutter.
- Landscape Zone
  - Water Quality Landscape: Deciduous water tolerant trees in minimum 8'x12' planting bed, filled with bioretention growing media and topped with rock mulch. Maximum depth of infiltration area: 24".
  - Trees: Deciduous trees at 25'-35' on center. See section 2.4 for recommended species.
  - 18" wide concrete band 'step-out' zone, behind curb.
- Build To Zone:
  - Bench: 1 per building entry, minimum.
  - Bike Rack: Embedded, centered in scoring pattern. 4 per building entry, minimum.
  - Trash Receptacle: Surface mounted at edge of paving, 1 per building entry, minimum.

Quentin Street



Plan view



Section looking North

Keymap

Uvalda Street (Primary Street)

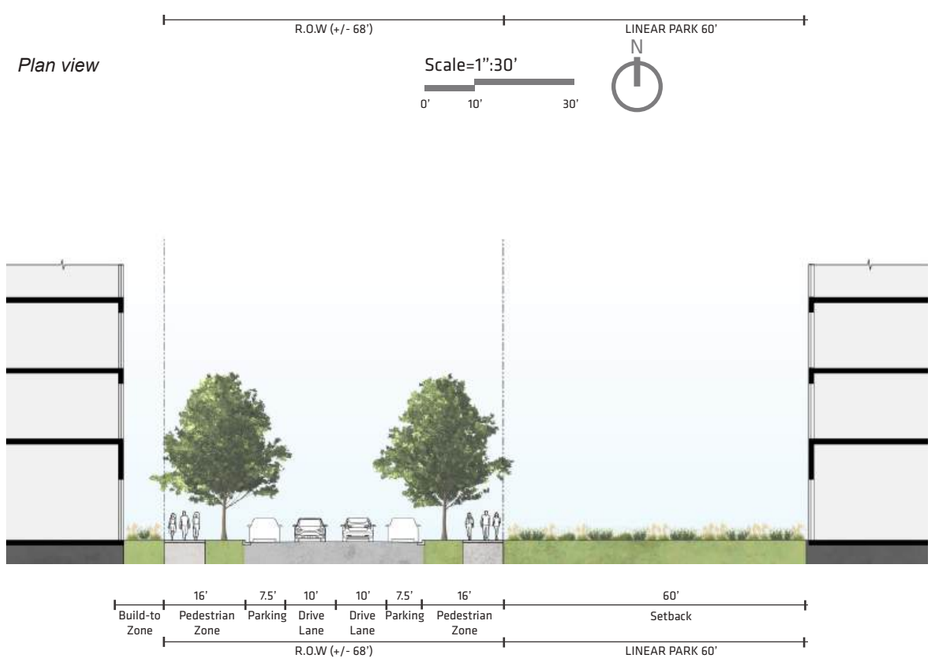
Uvalda links 23rd Street to Montview Boulevard and is anticipated to extend south of Montview in the future to create a strong pedestrian link between FIC and University Quad. It is intended to be an organizing feature for future development located between Ursula Street and Victor Street.

Design Guidelines

- Bicycle Facility: None.
- Sidewalk: Cast in place concrete, broom finish. Minimum 8' wide.
- Building frontage: Primary Facade.
- Build-to zone: 10'-20' for residential buildings, 0'-10' for non-residential building, 0'-10' for mixed-use with commercial ground floor building.
- Setback: 10' at east side of Uvalda to allow for wider pedestrian connections.
- Parking Structures: Liner building or active ground floor use required, 0'-10' build-to zone for non-residential building, 10'-20' build-to zone for residential liner building.
- Parking Lots: Not allowed between building's primary facade and the street.
- Curb cuts are limited.
- Curb extensions at intersections are encouraged where turn lanes are not required.
- Explore opportunities for water quality treatment integrates with landscape zone.
- Street Lighting: See section 2.2.5.
- 2.5' wide cast in-place concrete curb and gutter.
- Amenity Zone: Trees in planting cut-outs or crusher fines, or other streetscape treatment, which enhances the public realm.
  - Bench: 1 per building entry, minimum.
  - Bike Rack: Embedded, centered in scoring pattern. 4 per building entry, minimum.
  - Trash Receptacle: Surface mounted at edge of paving, 1 per building entry, minimum.
  - Landscape: Deciduous tree in minimum 5'x10' planting bed with rock mulch, crusher fines, or environmentally sensitive planting bed material; or in minimum 5'x5' tree grate.
  - Trees: Deciduous at 25'-35' on center. See section 2.4 for recommended species.
  - 18" wide concrete band 'step-out' zone, behind curb.

Uvalda Street Concept

Plan view



Section Looking North

Keymap

Secondary Street

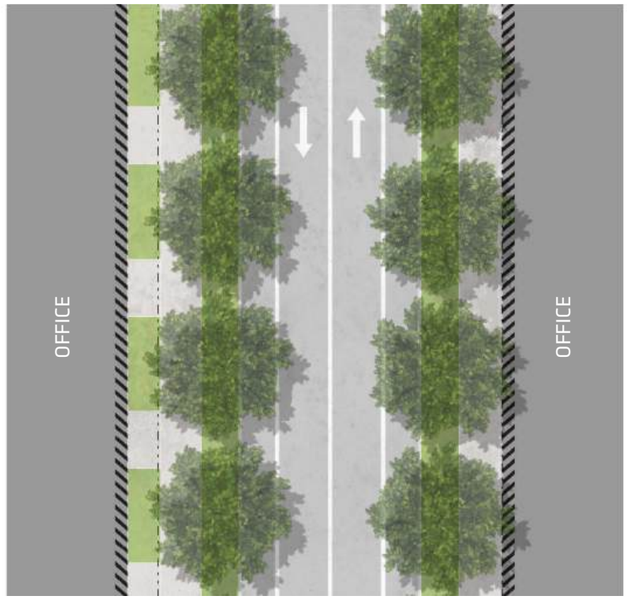
Secondary Streets break up super-blocks, providing increased connectivity and access to parking areas. They are characterized by well-designed pedestrian zones with sidewalks, amenity zones, street trees, and on street parking. The following guidelines apply to secondary streets which are not otherwise addressed within Chapter 2.2 Streets.

If a development parcel does not have frontage along an Primary Street, buildings should front Secondary Streets with primary façades and primary pedestrian entries. Surface parking should be located behind or to the side of the buildings.

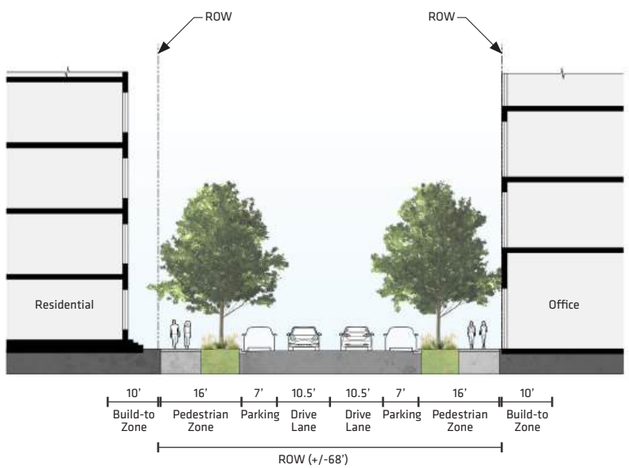
Design Guidelines

- Sidewalk: Cast in place concrete, broom finish. Minimum 8' wide.
- Building Frontage: Primary facade unless a parcel fronts on a primary street, secondary facade is acceptable.
- Build-to zone: 10'-20' for residential buildings, 0'-10' for commercial buildings and mixed-use buildings with active ground floor uses.
- Parking Structures: Allowed along secondary streets.
- Parking Lots: Allowed along street with 10' landscape setback, or low wall. However, when a building fronts a secondary street, parking is not allowed between the building and the street.
- Curb extensions at intersections are encouraged where turn lanes are not required.
- Street Lighting: See section 2.2.5.
- On-street parking.
- 2.5' wide cast in-place concrete curb and gutter.
- Amenity Zone:
  - Bench: 1 per building entry, minimum.
  - Bike Rack: Embedded, centered in scoring pattern. 4 per building entry, minimum.
  - Trash Receptacle: Surface mounted at edge of paving, 1 per building entry, minimum.
  - Landscape: Deciduous tree in minimum 5'x10' planting bed with rock mulch, crusher fines, or environmentally sensitive planting bed material; or in minimum 5'x5' tree grate.
  - Trees: Deciduous trees at 25'-35' on center. See section 2.4 for recommended species.
  - Explore opportunities for water quality treatment integrates with landscape zone.
  - 18" wide concrete band 'step-out' zone, behind curb.

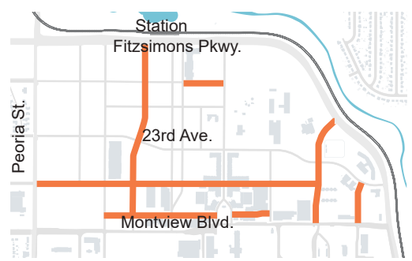
Secondary Street Concept



Plan view



Section



Keymap

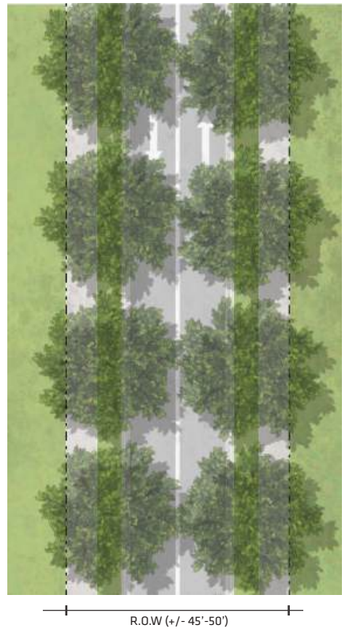
Tertiary Ways

Tertiary Ways are any roadway that functions as a commercial and residential access drive. These are typically private drives providing access to internal parking lots, parking structures or building service areas and are intended to emphasize connectivity between parcels. Tertiary Ways should be located and designed in a manner that will allow them to transition to streets in the future as necessary.

Design Guidelines

- Amenity Zone
  - Deciduous tree in minimum 5'x10' planting bed with rock mulch or other environmentally sensitive and easily maintained planting bed.
  - 18" wide concrete band at back of curb.
  - 2.5' wide cast in-place concrete curb and gutter.
  - Head-in parking is allowed along drives near building entries.
  - Trash receptacle: One should be located at parking garage pedestrian entry and exit and at building entrances.
  - Sidewalk cast in place concrete with medium broom finish, saw cut scoring as shown.
  - Bicycle racks.

Tertiary Ways Concept



Plan view

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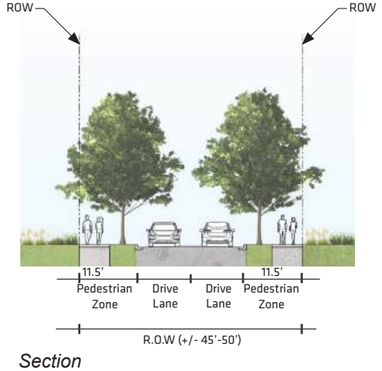
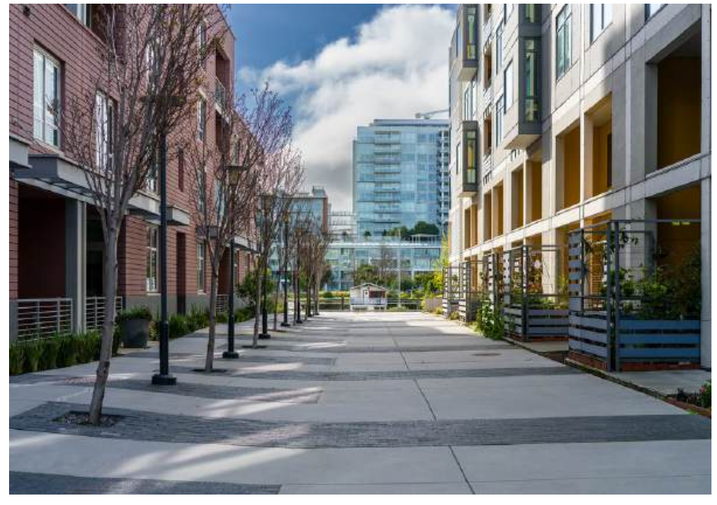


Section



Conceptual intersection where off-street bike lanes and cycle-track intersect (i.e. Racine Street and Montview Boulevard)

Design Guidelines

A. Crosswalk: 8' wide concrete crosswalk, tooled scoring at 2' x 2' interval. 18" wide concrete band on either side of crosswalk. Continue crosswalk pattern through bike lanes.

B. A.D.A. Ramps: Enhanced A.D.A. Handicap ramps.

C. Planting Bed: Edge of planting bed should stop 12' from ramp.

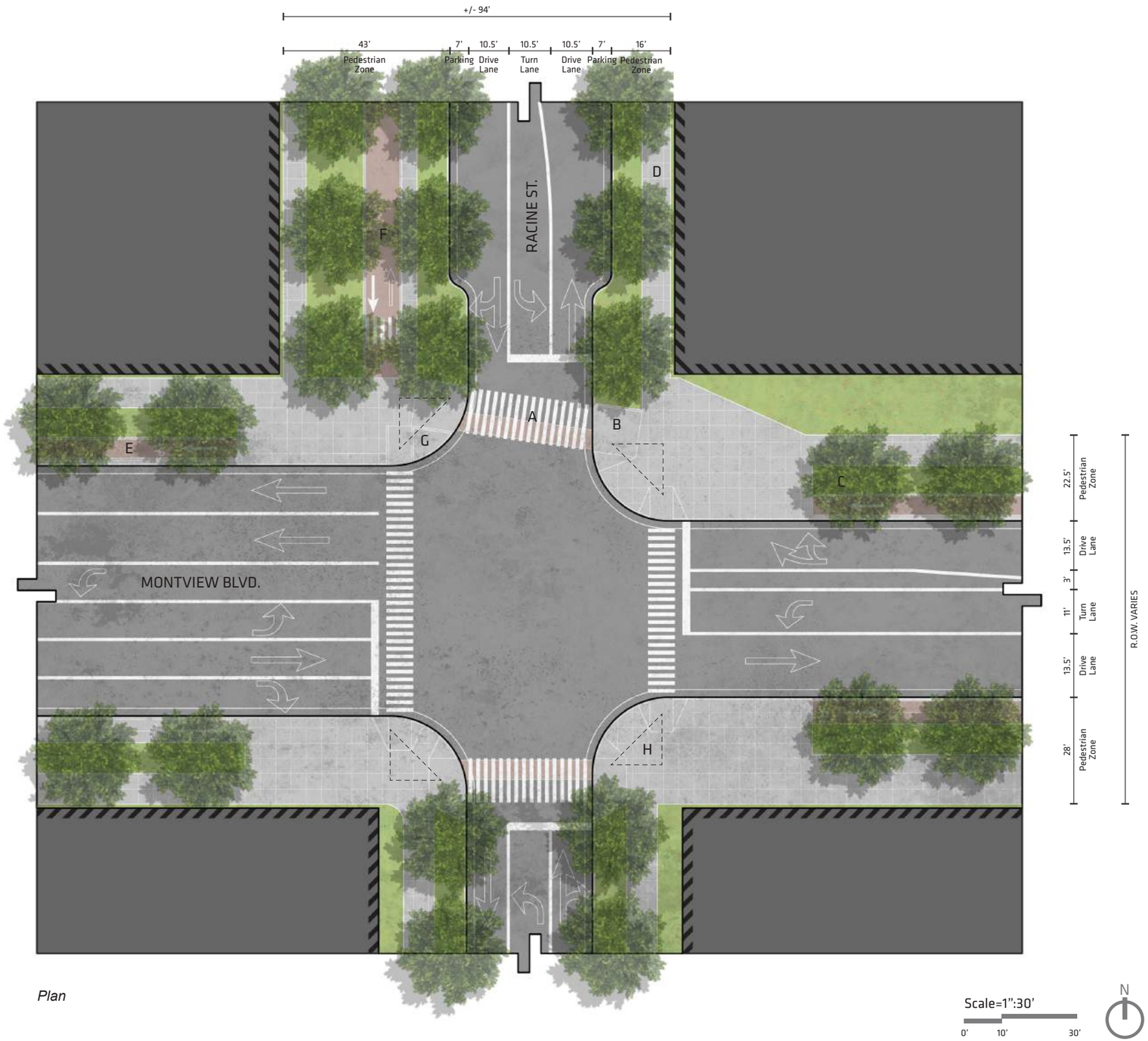
D. Sidewalk: Cast in place concrete, broom finish. Minimum 8' wide.

E. Bike Lanes: Stripe bike lane through intersection.

F. Cycle-track: Stripe cycle-track through intersection.

G. Minimize curb radius. 20' maximum.

H. Maintain sight triangle per C.O.A. Standards.



Plan

Keymap

Conceptual intersection where off-street bike lanes intersect multi-use path.
(i.e. Racine Street and Fitzsimons Parkway)

Design Guidelines

A. Enhanced Crosswalk: 8' wide concrete crosswalk, tooled scoring at 2' x 2' interval. 18" wide concrete band on either side of crosswalk. Continue crosswalk pattern through median refuge zone.

B. A.D.A. Ramps: Enhanced A.D.A. Handicap ramps.

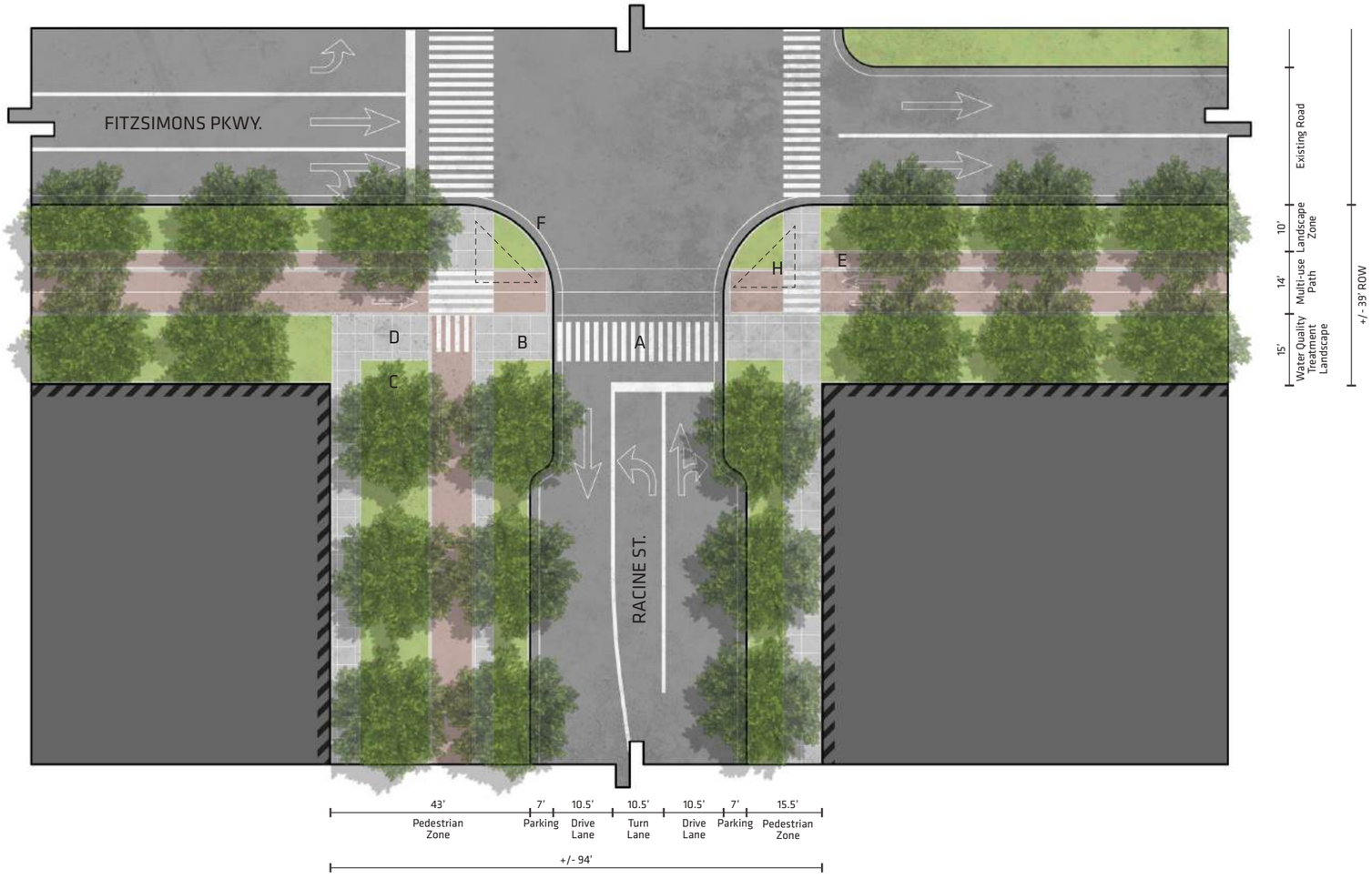
C. Planting Bed: Edge of planting bed should stop 12' from ramp.

D. Sidewalk: Cast in place concrete, broom finish. Minimum 8' wide.

E. Crusher fine softscape trail.

F. Minimize curb radius. 20' maximum.

G. Maintain sight triangle per C.O.A. Standards.



Plan

Keymap

Scale=1":30'
0' 10' 30'
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23rd Avenue and Scranton Parkway

Design Guidelines

A. Crosswalk: 8' wide concrete crosswalk, tooled scoring at 2' x 2' interval. 18" wide concrete band on either side of crosswalk. Continue crosswalk pattern through bike lanes.

B. A.D.A. Ramps: Enhanced A.D.A. Handicap ramps.

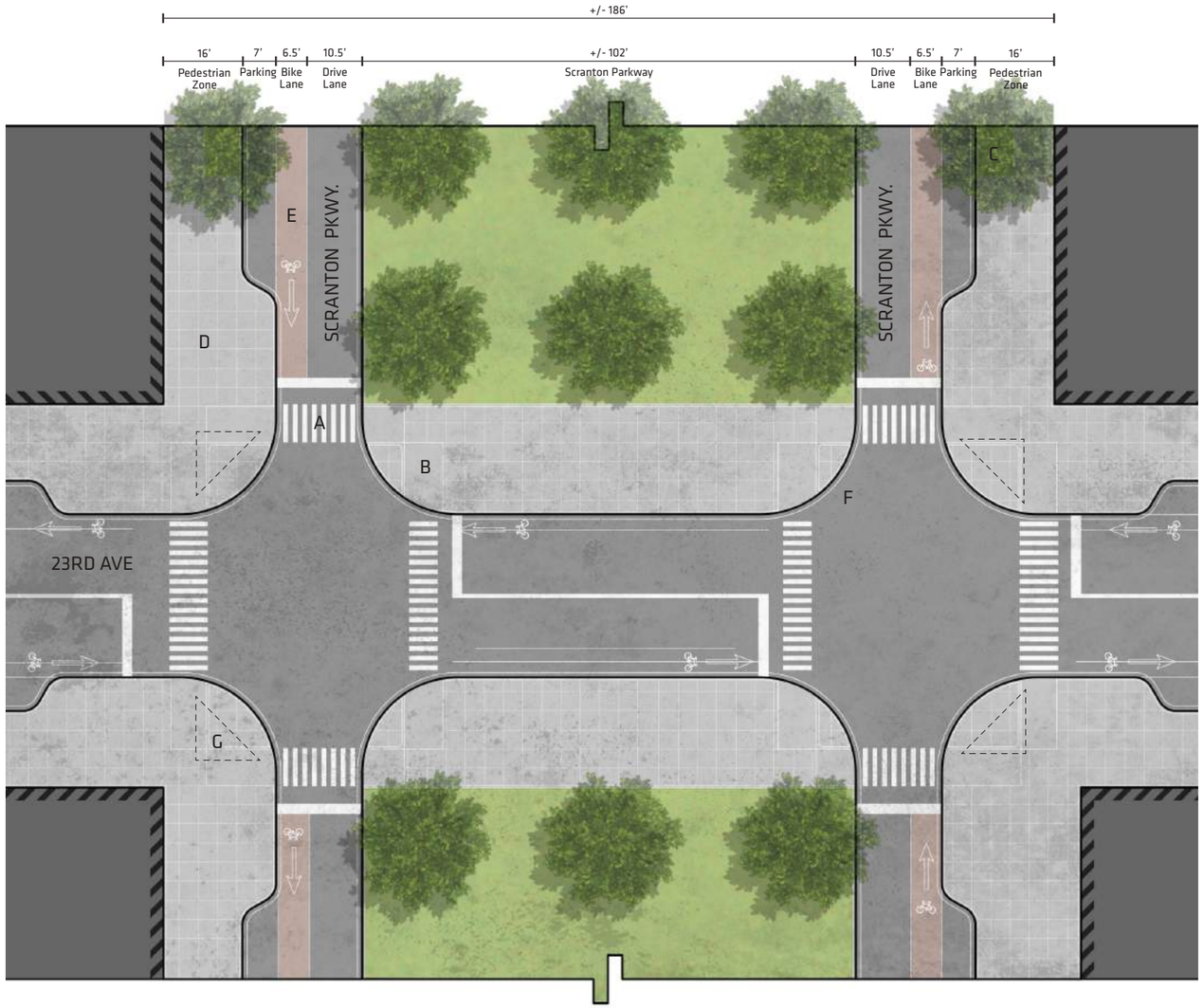
C. Planting Bed: Edge of planting bed should stop 12' from ramp.

D. Sidewalk: Cast in place concrete, broom finish. Minimum 8' wide.

E. Bike Lanes: Stripe bike lane through intersection.

F. Minimize curb radius. 20' maximum.

G. Maintain sight triangle per C.O.A. Standards.



Plan

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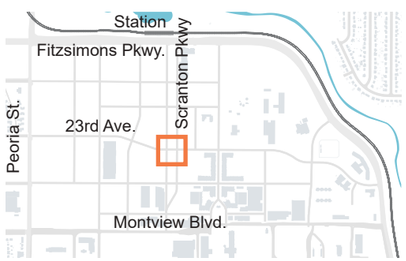


Keymap

2.2.4. Intersections

There are numerous intersections that have a variety of modes of transportation interacting that require special design consideration. Intersections must be carefully designed to create a highly walkable urban pattern that balances the need of pedestrians, bicyclist and automobiles. Crosswalks and bicycle facilities will be located and designed to alert drivers and increase pedestrian and cyclist safety when crossing streets and driveways.

Special care should be taken to design intersections to minimize potential conflicts between pedestrians, automobiles and bicycles. The following intersection guidelines demonstrate the intent of intersection design using selected multi-modal intersections as an example. This design intent should be carried throughout all intersection designs.

Typical Enhanced Intersection (i.e. Racine Street and 23rd Avenue)

Design Guidelines

A. Crosswalk: 8' wide concrete crosswalk, tooled scoring at 2' x 2' interval. 18" wide concrete band on either side of crosswalk. Continue crosswalk pattern through bike lanes.

B. A.D.A. Ramps: Enhanced A.D.A. Handicap ramps.

C. Planting Bed: Edge of planting bed or tree grate should stop 12' from ramp.

D. Sidewalk: Cast in place concrete, broom finish. Minimum 8' wide.

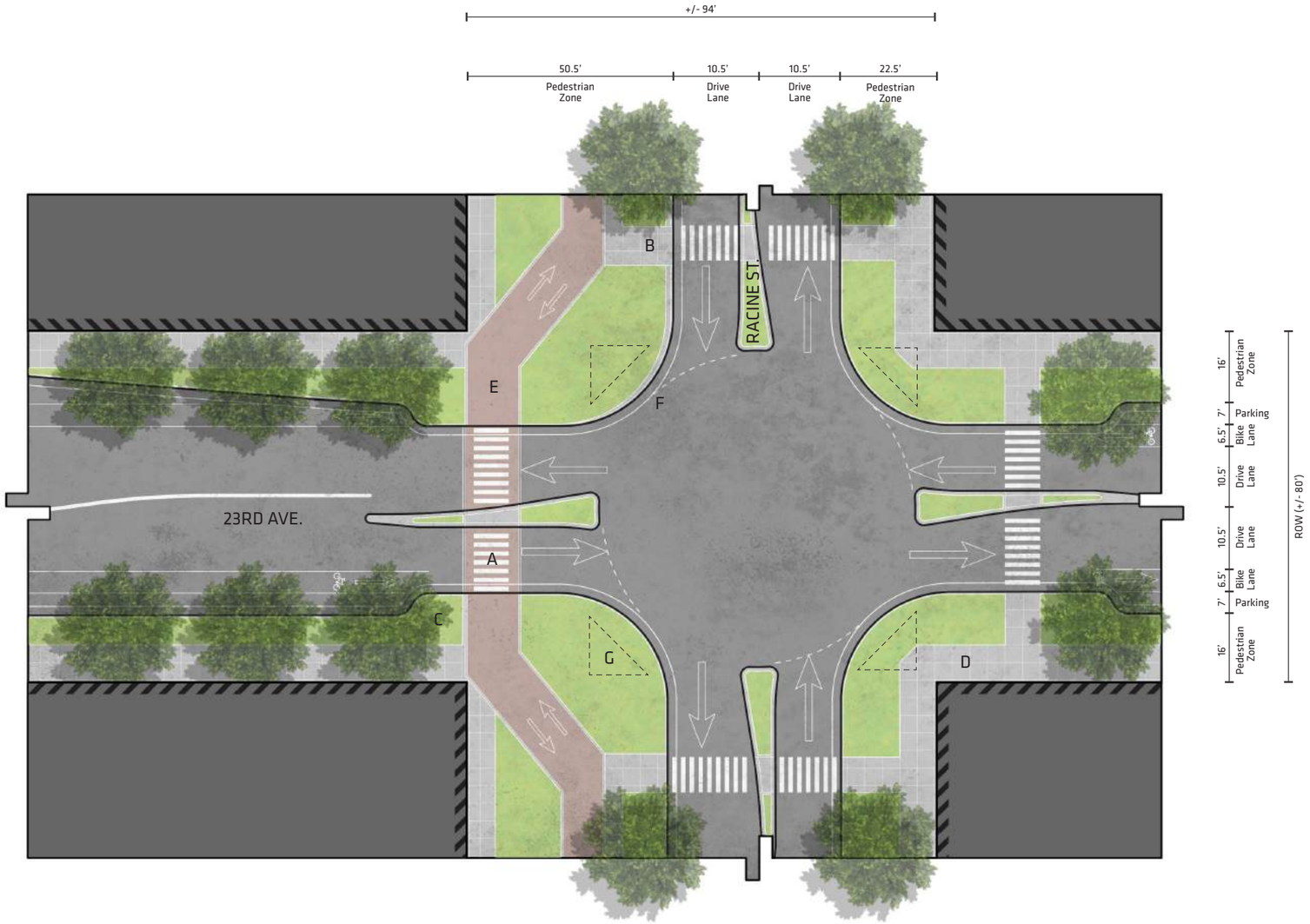
E. Bike Lanes: Stripe bike lane through intersection.

F. Minimize curb radius. 20' maximum.

G. Maintain sight triangle per C.O.A. Standards.

Note: Typical Enhanced Intersection without bike lanes should follow these recommendations except for bike lane recommendations.

Keymap



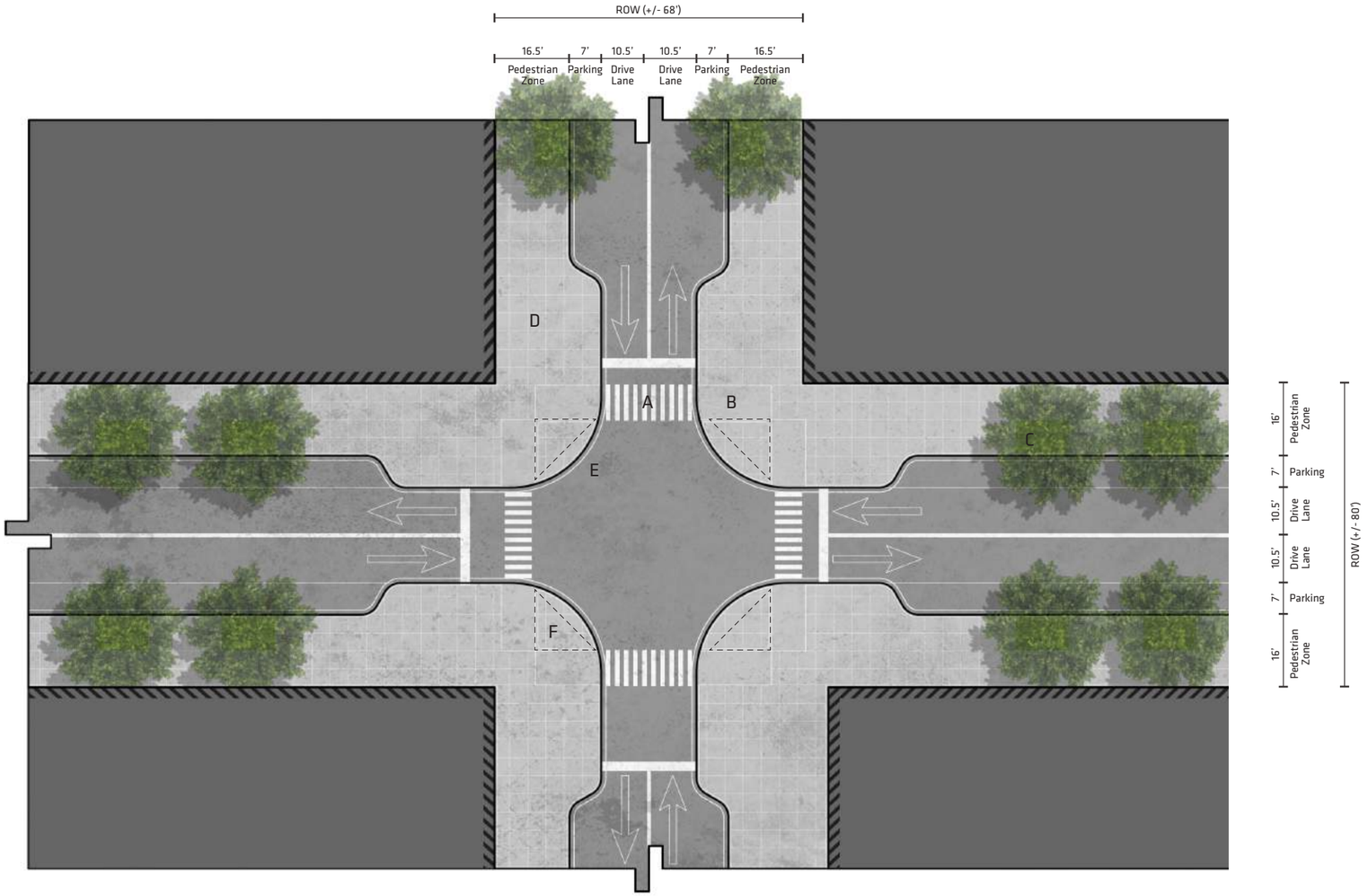
Plan

Intersection with curb-cuts where feasible

This is an example of a typical intersection on campus that does not require a left hand turn lane or bicycle lanes.

Design Guidelines

A. Typical Crosswalk: 8' wide striped crosswalk.
B. Standard City of Aurora handicap ramp.
C. Planting Bed: Edge of planting bed should stop 12' from ramp.
D. Sidewalk: Cast in place concrete, broom finish. Minimum 8' wide.
E. Minimize curb radius. 20' maximum.
F. Maintain sight triangle per C.O.A. Standards.



Plan

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2.2.5. Lighting

Lighting at the FIC will be designed to enhance the pedestrian experience and provide an element of identity and continuity throughout the site. Sufficient light levels will be provided for pedestrian and vehicular safety and comfort, while avoiding over-lighting of the parks and spillover light on adjacent properties. Where appropriate, fixture placement and selection will be used to reinforce the spatial and conceptual definition of the primary open spaces.

Light should be used to help define spaces and to allow for people to find their way. Additional lighting may also be provided to highlight or accent particular architectural details and open spaces.

One primary fixture family will be utilized to create a cohesive expression throughout the Campus along Primary and Secondary Streets. This fixture will form the backbone of the site lighting, but should be augmented by smaller scale landscape and accent lighting, and signature lighting along special streets that may include Montview Boulevard and Scranton Parkway. Additional fixture types may be used to provide the primary source of light along multi-use paths and in parks. This fixture type could include a wall mounted (sconce) version, a pole mounted version, or bollard type lights.

Light fixture examples represent ideas for public realm lighting. Actual fixture selection will be determined by a site-wide lighting and photometric study. DRB will work with FIC to select lighting designer, review photometric study and fixture selection.

General Street Lights Guidelines

- Pole mounted fixtures with fixture head at maximum of 35' high.
- Consider special lighting fixture to highlight Scranton Parkway.
- Programmable LED lights should be utilized. Exact wattage to be determined in photometric study.
- Spacing per Appendix C and D.
- Full cut-off fixture should be utilized.
- Minimum average footcandle of 3.0.

Pedestrian Lights Guidelines

- Fixture head height of 12'-16' high.
- Full cut-off fixture.
- 60'-75' on center. Spacing to be coordinated with trees.

* See appendix C for the detailed spec and locations of poles

SPECIAL STREETLIGHT / PEDESTRIAN LIGHT EXAMPLE (MONTVIEW)

WE-EF FLC 141

WAND / BOLLARD

Lumec OVB

SPECIAL STREETLIGHT (SCRANTON)

WE-EF VML TYPE 1

STREETLIGHT / PEDESTRIAN LIGHT (PRIMARY, SECONDARY AND TERTIARY STREETS)

WE-EF RFL 530/540

Perimeter Streets

The existing perimeter streets that border the FIC are each very different in their character and therefore require individualized solutions as they relate to their immediate context. Light fixture spacing should be carefully coordinated with the proposed pedestrian environment and landscape. When possible, light fixtures would be centered between trees and aligned with the center-line of the trees. This will create an ordered and linear arrangement of vertical elements along the street.

Fitzsimons Parkway Street Lighting; Pedestrian Lighting

The recently completed Fitzsimons Parkway, including its light fixture, is proposed to remain in its current condition. No additional fixtures will be added except at the intersections of new primary streets including Quentin Street, Racine Street, Scranton Parkway, Ursula Street, Uvalda Street, Victor Street and 23rd Avenue to the east. Typically a new fixture or pair of fixtures would be added at each intersection on the FIC side of Fitzsimons Parkway, framing the street as you enter the campus. Pedestrian lighting should be included along the multi-use path.

Peoria Street Street Lighting; Pedestrian Lighting

Street lighting should be designed to match the Campus lighting style to create an identity along Peoria Street. Pedestrian lighting along Peoria Street will be redesigned to compliment the linear park design and Campus lighting scheme. These fixtures should be carefully coordinated with the proposed street trees.

Montview Boulevard Street Lighting; Pedestrian Lighting

Montview Boulevard should be regarded at a 'seam' between FIC and AMC. The use of signature street and pedestrian light fixtures should be considered to create a unique identity and address that is shared by FIC and AMC.

Scranton Parkway Street Lighting; Pedestrian Lighting

Scranton Parkway is the signature street within the Campus. Special lighting should be selected that creates a unique identity along the parkway.

Primary and Secondary Streets Street Lighting

Fixtures at these locations should be located on both sides of the street with a staggered arrangement for maximum efficiency and flexibility. Fixtures shall be located equally between trees and centered on the tree.

Tertiary Way

Light fixtures at these locations should be located on one side of the street only. Fixture locations would be carefully coordinated with building entries, service locations, adjacent surface parking lighting and tree spacing. Consideration will be given to service truck access when locating fixtures to provide ample clearance for truck maneuvering. Building mounted fixtures will be used when pole mounted fixtures are not feasible or when narrow conditions would warrant as a means of simplifying the ground plan. If typical light patterns are interrupted for loading docks, service entries, etc., then they should be replaced in these instances with building mounted lights.

Pedestrian Walkways

Light fixtures located along pedestrian walkways within private development parcels should be located in a manner responding to architectural and landscape design elements. Pedestrian scale is important in these locations, so pedestrian scale fixtures should be utilized. Feature lighting of landscape and art elements will occur to provide a warm and inviting atmosphere. Where building entries occur adjacent to open spaces, the lighting will respond to help define the entry and the connection to the open space. Lighting may be integrated in site walls or landscape areas to minimize the appearance of fixtures and focus on the illuminated zones. Light style should respond to the architectural and landscape design elements, which occur within the immediate context.

Intersections

Intersections shall maintain relatively higher light levels through the use of symmetric fixture arrangements at all corners. Staggered light fixture arrangements will resolve their alignment to be symmetrical at all intersections.

Surface Parking Areas

Fixtures at parking lot locations shall be located in a grid layout with poles matching adjacent fixtures. Fixtures shall meet minimum light level requirements and also provide color rendition, uniformity, and minimum glare for enhanced security. Light trespass shall be minimized and internal "house-side" shields shall be used when required.

Parking Lot Design Guidelines

- Programmable LED lights should be utilized, exact wattage to be determined in photometric study.
- Pole spacing approximately 63' (pole every 7 spaces at 9' on center) on center to be coordinated with layout of landscape elements and photometric study.
- Dark sky fixtures should be utilized in parking areas to minimize light pollution.
- Unique or artistic lighting may be used in plazas and / or courtyards to create a distinct and attractive evening environment.
- Maximum 25' high parking lot fixtures.
- Maximum average foot candle of 3.0.

2.2.6. Furnishings

Site furnishings for the streetscape and open space have been developed to help define the character of the Campus. Elements comprising this include benches, bike racks, trash receptacles, and tree grates. This forms a network of pedestrian amenities that animate the site at the human scale and establish the design continuity necessary to create a unique sense of place.

Actual furnishings and amenities can be selected on a sub-area basis by the DRB based upon a more detailed design and costing study.

Streetscape Bench:
- Supplier: Landscape Forms
- Model: “Stay” backed
- Size: 69” length
- Material: Powdercoated Steel
- Color: Silver
- Surface Mount

Newspaper Corral:
- Supplier: Landscape Forms
- Model: custom
- Size: 69”w x 51”h x 27” deep
- Material: Powdercoated Steel
- Color: Silver
- Surface Mount

Trash / Recycling Receptacle:
- Supplier: Landscape Forms
- Model: “Chase Park”
- Size: 88”, 168”, 248”
- Material: Powdercoated Steel
- Color: Silver
- Embedded

Bike Rack:
- Supplier: Landscape Forms
- Model: “Ring”
- Size: Installed: 1.25” deep by 25” wide by 32” high.
- Material: Powdercoated steel or stainless steel
- Quantity: Site total must meet City of Aurora Code Article 15, Chapter 146

Tree Grate:
- Supplier: Urban Accessories
- Model: “Fan”
- Sizes: 3’, 42”, 4’,5’, 6’, 8’ SQ3’; 4’, 5’, or 6’ RD; 4’x6’, 4’x8’ REC.
- Material: Standard raw cast gray iron.

Trash Receptacle

Tree Grate

Bike Rack

Streetscape Bench

2.3.1. Public Park Space

The open space network is comprised of a variety of public spaces and places, of different sizes and scales, connected to each other by highly pedestrianized streets, trails, and pedestrian walkways. The FIC open space network is designed to link existing neighborhoods, existing open spaces on the AMC to one another, the Light Rail Station, and Sand Creek Park.

Where appropriate, softscape trails and bike paths provide connections through the Campus to regional networks to encourage walking, running and bicycling.

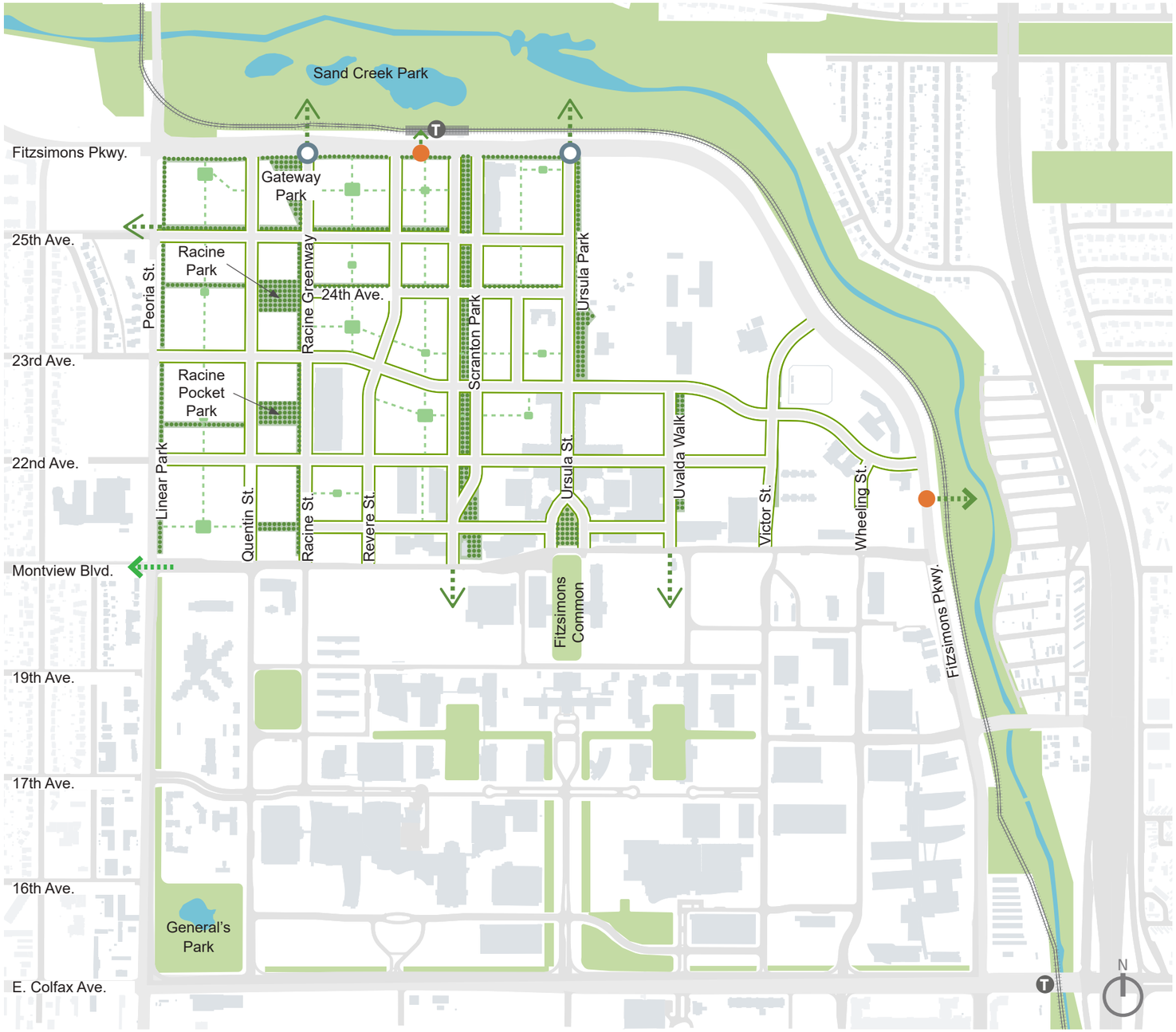
Public Park Space

Each park has a distinct character and function within the overall network but are generally envisioned as distinct urban places that can be used at various times of the day and week by people within the Campus and the broader community. Each space will be developed and programmed in detail as it is realized over time.

Public open space should be designed to serve a wide variety of people expected to use this campus at various times of the day, including employees enjoying lunch breaks or outdoor meetings, students taking a break between classes or group study sessions, stay at home parents playing with their children during the day, morning and evening dog walkers, informal 'pick-up' sports in the evenings or weekends, or weekend picnics.

Publicly Accessible, Private Open Space

A collection of smaller, privately maintained public plazas, 'outdoor rooms', courtyards, and/or quads creates a finer grain open space network that links to the public realm creating a highly porous and walkable Campus that encourages outdoor meetings, co-mingling, idea sharing and cross-pollination. Public lobbies should be considered part of the open space network by connecting to streets, parks, or courtyards.



Legend

- Existing Park and Open space
- Proposed Park and Open space
- Privately owned, Publically Accessible Plaza or Pocket park
- 'Pedestrian' Route
- 'Through block' Ped Route
- Light Rail Station
- Safe Pedestrian Crossing

Integrated Stormwater Landscapes

The integrated stormwater landscape strategy is designed to meet both the functional and aesthetic needs of stormwater management while enhancing the public realm. By incorporating urban-scale stormwater management elements into park spaces and linear trails, this approach promotes ecological health, water quality, and community connectivity. The strategy integrates bioswales, rain gardens, permeable pavements, and native landscapes that align with the riparian ecology of Sand Creek Park. This helps meet water quality requirements, manage stormwater runoff, reduce flooding, and contribute to the overall environmental sustainability of the area. Volumes required within the park are outlined in the Master Drainage Study (MDS), which should be referenced during the design of integrated stormwater landscape facilities.

24th and 25th Avenue Linear Parks
The stormwater design for the 24th and 25th Avenue Linear Parks focuses on incorporating bioswales and rain gardens within the park corridors. These features will be strategically placed along the streetscape edges and within the parks to capture and treat runoff before it enters the broader stormwater system. Native, drought-tolerant plant species will be selected to filter and manage stormwater. Special care will be taken to ensure that water quality landscapes are integrated with the park's amenities, balancing active and passive zones to enhance the overall park experience.

Fitzsimons Parkway Linear Park
The Fitzsimons Parkway Linear Park will feature a series of stormwater planters along the park's perimeter to meet water quality requirements. The design will include bioswales adjacent to multi-use pathways to capture runoff from adjacent streets and surrounding developed parcels. These planters will help filter and manage stormwater while maintaining the park's aesthetic and functional value.

Racine Greenway
The Racine Greenway will incorporate a linear bioswale designed to reflect the landscape and ecological features of Sand Creek Park. This natural system will manage stormwater runoff from surrounding developments and the streetscape, while also providing multi-modal connectivity. The greenway will serve as both a stormwater treatment system and a multi-use corridor, linking Sand Creek Park, the FIC campus, and the AMC, enhancing the area's connectivity while fulfilling water quality requirements.

Quentin Street
The Quentin Street corridor will feature stormwater streetscape planters integrated with curb facilities to slow down and filter stormwater runoff. These features will be seamlessly incorporated into the streetscape, creating a visually appealing and sustainable corridor. Special attention will be given to the implementation of tree canopies within the stormwater facilities to reduce long-term maintenance needs, ensuring the area remains green and sustainable.

Legend
- Proposed Stormwater Landscape Area
- Proposed Park and Open space
- Privately owned, Publically Accessible Plaza or Pocket park
- Light Rail Station

Gateway Park

Gateway Park serves as the primary connection between the Fitzsimons Innovation Community and Sand Creek Park, functioning as both a campus quad and a neighborhood park. As one of the largest open spaces, it should provide community amenities while ensuring clear pedestrian connections to Sand Creek Park. Designed to be open and inclusive, the park should foster a sense of community through accessible design and active and passive recreation, including green spaces, fitness areas, shaded seating, and pathways. Prioritizing wayfinding, connectivity, and recreation, Gateway Park should be a vibrant public space that enhances campus identity and encourages social interaction.

Intent

- To create an urban open space designed to be used throughout the day by employees, residents and visitors.
- To be open and inviting for employees, residents, adjacent neighborhoods and visitors.
- To facilitate connections to Sand Creek Park.

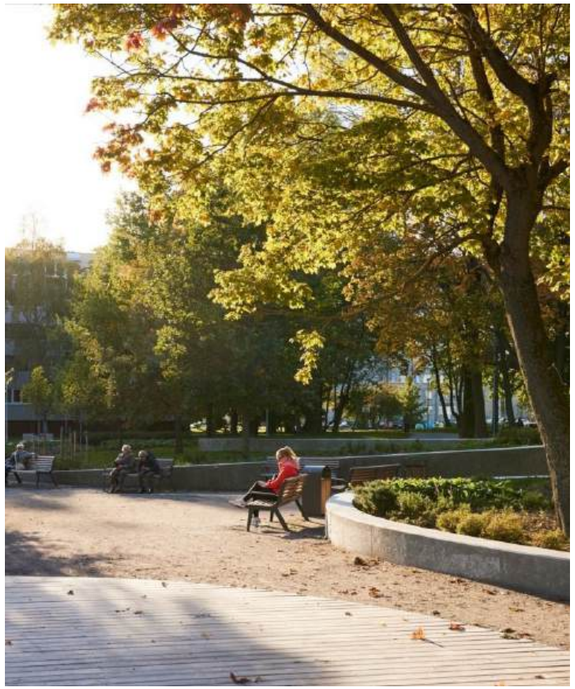
Design Guidelines

- Provide a mix of sunny and shady locations for lunch breaks and small group gatherings or meetings.
- Provide space for active and passive recreation.
- Provide views into the park and avoid blind spots to increase eyes on the park'.
- Use creative landscape grading techniques to create different experiences and 'rooms' within the park.
- Use a variety of tree species to create seasonal visual interest.

Amenities

- (2) Pickleball Courts
- (1) Basketball Court - Half Court
- (1) Tennis Court
- (1) 1/4 AC Dog Park

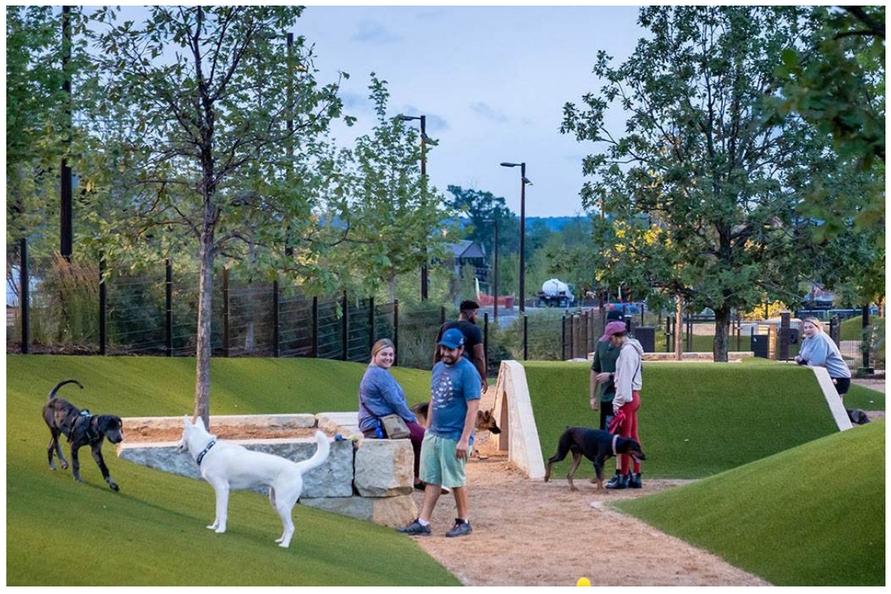
Keymap



Tree canopy and user activation

Park integrated with site topography

Active recreation



Dog park

Racine Park / Racine Pocket Park

The pocket parks between Racine Street and Quentin Street are designed as vibrant gathering spaces that connect surrounding developments, the Racine Greenway, and the broader Fitzsimons Innovation Community campus open space network. These parks will function as both a campus quad and a small-scale park, promoting inclusivity and engagement. They should be open, welcoming, and flexible enough to host a variety of public and private events, strengthening community ties and enhancing interaction to surrounding sites.

Intent

- To create an urban, flexible open space designed to be used throughout the day by employees, residents and visitors.
- To be open and inviting for employees, residents, adjacent neighborhoods and visitors.
- To create a gathering space for surrounding developments as well as providing clear connection to the open space network.

Design Guidelines

- Provide a mix of sunny and shady locations for lunch breaks and small group gatherings or meetings.
- Provide a large, flexible open area to accommodate public and private events during the day or evenings.
- Provide space for informal recreation.
- Provide views into the park and avoid blind spots to increase eyes on the park'.
- Provide strategies that engage surrounding site that provide a seamless transition between proposed developments and the pocket parks.
- Use creative landscape grading techniques to create different experiences and 'rooms' within the park.
- Use a variety of tree species to create seasonal visual interest.

Amenities

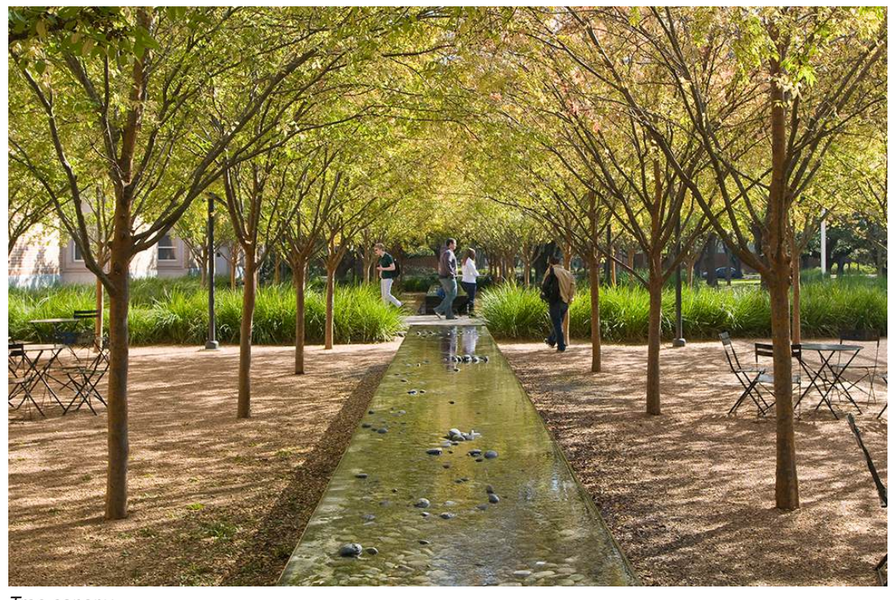
- (1) 30,000 SF Lawn Area - Racine Park
- (2) Picnic Shelters - (1) Racine Park, (1) Racine Pocket Park
- (2) Permanent Game Activity Areas - Racine Pocket Park

Keymap

Informal gathering

Park enclosure

Central Turf Amenity Lawn



Tree canopy

Perimeter Linear Park

The perimeter of the FIC is defined by a linear park that creates a comfortable pedestrian environment along arterial streets. An urban landscape consisting of drought tolerant plantings and understory and shade trees to showcase a commitment to sustainable practices. This zone is envisioned to include a multi-use path, softscape trail, a double row of trees, pedestrian scale lighting, and furnishing.

Intent

- To connect adjacent neighborhoods, FIC and AMC to Sand Creek Park and the regional trail system.
- To promote a healthy lifestyle by connecting softscape trails and bicycle paths to the regional trail network.
- To bring 'fingers' of Sand Creek Park into the urban environment.
- To create a uniform campus identity.

Design Guidelines

- Provide pedestrian amenities including benches, pedestrian lighting, bike racks, and wayfinding.
- Provide pedestrian and bicycle connections.
- Utilize a palette of native and drought tolerant plants to minimize water usage.
- Create a series of outdoor rooms that may include places to sit, public art, or fitness stations.
- Incorporate handsome pedestrian lighting or lighted bollards to create a safe and usable environment in the evenings.
- Utilize tree species that both thrive in an urban environment and create a park atmosphere.
- Buildings should be setback from existing curb to provide space for the linear park.
- Adjacent development projects should provide pedestrian and bicycle connections to the linear park.
- Fitzsimons Parkway Linear Park to incorporate water quality treatment landscaped areas to accomodate stormwater treatment from surrounding development sites per Drainange Basin D requirements.

Keymap

Urban linear park with office building frontage

Linear park with pedestrian amenities

Linear park with hardscape and softscape paths

Linear park with wide multi-use path

Ursula Linear Park

This small urban park creates usable open space adjacent to the multi-use path being constructed by the city along the east edge of Ursula Street. This park could include children's play areas or a dog park to support future residential development. Design of this park should be coordinated with the design of the multi-use path and potentially the future detention pond expansion to integrate the east side of Ursula into the larger open space system.

Intent

- To create usable park space adjacent to residential land uses.
- To connect to the Light Rail Station and Sand Creek Park.
- To connect to future improvements in the existing detention area.

Design Guidelines

- Consider a children's play area with natural play features.
- Consider incorporating a dog park for use by future residents.
- Allow the softscape trail to meander at wider sections of the park.

Amenities

- (1) Playground per PROS D&DC manual requirements

Natural play area

Mid-Block Linear Parks

Mid-Block Linear Parks are envisioned as key east-west connections, breaking up large development blocks within the Fitzsimons Innovation Community while enhancing walkability and access to open space. These parks serve as pedestrian-oriented corridors that provide shaded, comfortable routes between buildings and reinforce the district's identity as a walkable, connected campus.

Intent

- Facilitate east-west pedestrian connections across the Fitzsimons Innovation Community.
- Break up superblocks to enhance walkability and accessibility between Peoria Linear Park and Quentin Street.

Design Guidelines

- Establish clear, direct pedestrian connections between key destinations.
- Incorporate shade trees and landscaping to create a comfortable walking environment.
- Utilize durable, high-quality materials for pathways and seating areas. Provide pedestrian amenities, including benches, lighting, bike racks, and wayfinding elements.
- Ensure unobstructed visibility and active edges to enhance safety and encourage use. Incorporate building entrances and access along Mid-Block Linear Parks.
- Design spaces to accommodate small gatherings, informal seating, and connectivity.

Mid-Block Linear Park

Uvalda Linear Park (CU Property)

Located along the eastern edge of Uvalda Street. Uvalda Walk is envisioned as a wide, multi-use path, flanked by shade trees, pedestrian amenities and pedestrian scale lighting. Linking future development between Montview Boulevard and 23rd Avenue.

Intent

- To create a special connection between future development along Uvalda Street from 23rd Avenue to Montview Boulevard, and eventually south of Montview Boulevard to the University's Education Quad.

Design Guidelines

- Work with the University to design a continuous connection from 23rd Avenue to the Education Quad.
- Explore the possibility of creating a multi-use path connection between Ursula Street and Uvalda Street along 23rd Avenue.
- Provide pedestrian amenities including benches, pedestrian lighting, bike racks, and wayfinding.
- Utilize a palette of native and drought tolerant plants to minimize water usage.
- Utilize trees species that both thrive in an urban environment and create a park atmosphere.

Keymap

2.3.2. Publicly Accessible Private Open Space

Publicly accessible, privately maintained open spaces such as plazas, courtyards or outdoor rooms are an important part of the overall open space network. Each development block is encouraged to include some form of outdoor space that is connected to the public realm either directly, or by a publicly accessible walkway.

Semi-public spaces within the Campus are by design smaller, more intimate public use parks, typically located between buildings but connected to public streets.

Semi-public spaces should be designed to encourage use by both employees and the public. This should include walkways, smaller lawn areas, linear planting beds, and trees to provide shade and promote small gathering areas for users to enjoy an outdoor lunch or conduct a small meeting with their co-workers. These spaces are intended to be designed using contemporary materials that reflect the interior and exterior design of the surrounding structures.

See Section 3: Commercial Site Plan Design Guidelines, and Section 4: Residential Site Plan Design Guidelines.

Publicly accessible plaza serves as building entry

Publicly accessible private plaza is a place to relax

Publicly accessible private plaza break down large blocks

Mid-block pedestrian connection

To create a streetscape that is safe and comfortable, it is imperative to implement a comprehensive street tree plan. Trees help soften the hard urban edges while creating a shaded pedestrian path. Street tree species for the Fitzsimons Innovation Community have been chosen based on form, height, spread, texture, color, urban suitability, drought tolerance, and other regional factors.

Tree species should vary from street to street to help form a visual identity of each street and to highlight points of interest within the FIC. They will also provide a sense of pedestrian scale and visual interest. The layout is intended to create diversity throughout the site and seamless transitions between properties within and surrounding the Park.

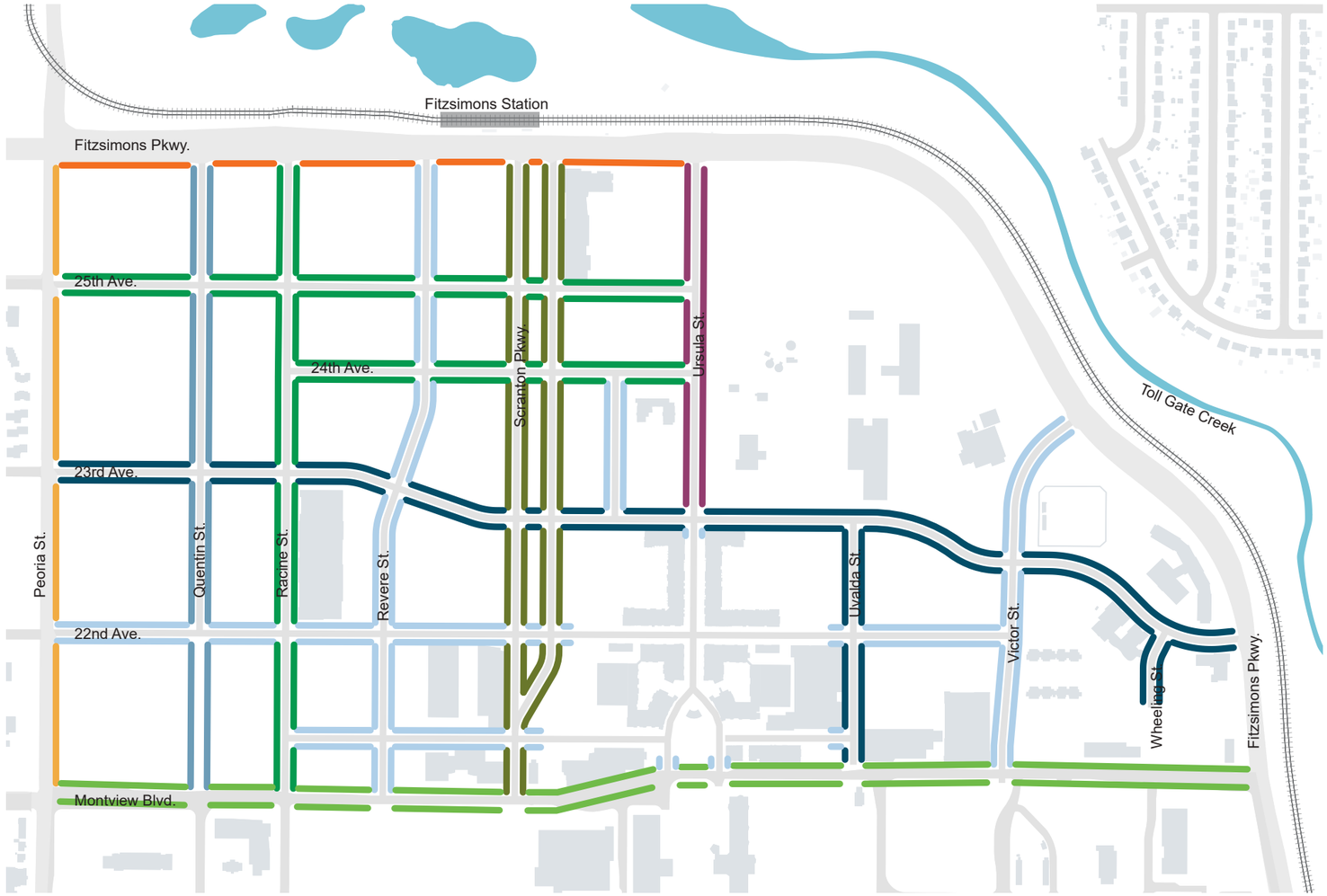
Determine if some existing golf course trees can be maintained at key locations such as Innovation Park, or along Peoria Street and Fitzsimons Park.

Tree Spacing

All streets within the Campus will include 3" caliper street trees spacing of 25'-35' on center. depending upon street design and tree species. This spacing may vary in certain locations due to building entries, service areas, and intersections. Limbs will be no lower than 8' above grade as measured from the base of the trunk or tree grate surface to ensure pedestrian safety and maintain proper visibility within the streetscape for both pedestrian and vehicular traffic.

Parking Lots

All permanent parking lots within the Campus will include trees and landscape that meet the intent of City of Aurora Code Section 146, Article 14.



Legend

- Peoria Street
- Fitzsimons Parkway
- Montview Boulevard
- Ursula Street
- Scranton Parkway
- Parkways, Linear Parks and Greenways
- Primary Street
- Secondary Street (Water Quality Street)
- Secondary Street

N

Fitzsimons Parkway

Fitzsimons Parkway trees have been selected to make a statement but also to compliment the adjacent Sand Creek Park. These trees have a round to irregular growth habit providing plenty of shade for bike and pedestrian use, as well as create a striking yellow to golden fall color.

Deciduous Tree Species Recommendations
(Alternate species in groups of at least 3)

- Shade Master Honeylocust
- Chinkapin Oak
- English Oak
- Japanese Pagoda Tree
- Maple Plane Tree

23rd Avenue

Street trees along these streets vary in form finding unity in their impressive canopies. The columnar oak is introduced to add additional variety and can be used as an accent to create a unique punctuation in the rhythm of street trees. A range of golden, rusty orange, and vibrant red color will wash 23rd Avenue and Racine Street in the fall.

Deciduous Tree Species Recommendations
(Alternate species in groups of at least 3)

- Greenspire Linden
- Maple Plane Tree
- Shade Master Honeylocust
- Autum Blaze Maple
- Chinkapin Oak
- Columnar English Oak
- Prospector Elm
- Turkish Filbert

Montview Boulevard

The street trees along Montview Boulevard have been selected for their primary oval growth habit. These trees are similar in height and will create a beautiful massing unifying the boulevard as a special place, while providing shade for pedestrians and bicyclists. Fall color along Montview will range in golden hues with a brilliant accent of red from the Autumn Blaze Maple.

Deciduous Tree Species Recommendations
(Alternate species in groups of at least 3)

- Turkish Filbert
- Autum Blaze Maple
- Maple Plane Tree
- Prospector Elm
- Valley Forge Elm
- Heritage Oak

Ursula Street

Ursula Street trees have primarily lacy canopies casting intriguing shadows on the ground, creating a unique quality of light, to be enjoyed by those using the street and multi-use path. This selection of trees is accompanied by the Japanese Pagoda tree offering creamy blooms in the late summer and early fall. The graceful Lacebark Elm and its mottled bark creates colorful patterns that pedestrians will enjoy.

Deciduous Tree Species Recommendations
(Alternate species in groups of at least 3)

- Shademaster Honeylocust
- Lacebark Elm
- Valley Forge Elm
- Japanese Pagoda Tree

Scranton Parkway

Scranton Parkway is envisioned as a stately entry to the FIC and AMC. A variety of impressive oaks have been selected to march down Scranton Parkway providing gracious canopies that invite pedestrian strolling and bicycle use. In the fall, the Parkway foliage transitions from rich lustrous greens to stunning rusty oranges and golden hues.

Deciduous Tree Species Recommendations
(Alternate species in groups of at least 3)

- Swamp White Oak
- English Oak
- Heritage Oak

Parkways, Linear Parks and Greenways

Street trees along these corridors are carefully selected for their resilience in bioretention environments, contributing both to stormwater management and seasonal interest. Deciduous, water-tolerant species establish a cohesive canopy while thriving in enhanced soil conditions designed for filtration and infiltration. The introduction of columnar trees adds vertical variation, serving as accents that punctuate the rhythm of plantings. In the fall, a range of golden, rusty orange, and vibrant red foliage will transform the Racine Greenway and Linear Parks, enhancing the streetscape while reinforcing the ecological function of the water quality planting zones.

Deciduous Tree Species Recommendations. For additional acceptable species reference Appendix D: Foresty Memo from the Ultra Urban Green Infrastructure Guidelines.
(Alternate species in groups of at least 3)

- Miyabe Maple
- Russian Hawthorn
- Bur Oak
- Plains Cottonwood
- Chanticleer Pear

Uvalda Street

Street trees along Uvalda Street vary in form finding unity in their impressive canopies. The columnar oak is introduced to add additional variety and can be used as an accent to create a unique punctuation in the rhythm street trees. A range of golden, rusty orange, and vibrant red color will wash Uvalda Street in the fall.

Deciduous Tree Species Recommendations
(Alternate species in groups of at least 3)

- Shademaster Honeylocust
- Lacebark Elm
- Valley Forge Elm
- Japanese Pagoda Tree

Peoria Street

Peoria Street tree recommendations have been selected to provide ample shade for bike and pedestrian users. These trees have a similar oval to rounded form to create a unified canopy as well as an exciting fall color showing. Ornamental trees cap the street trees at intersections calling attention to entry points by providing a contrasting form to the street trees and showy spring flowers.

Deciduous Tree Species Recommendations
(Alternate species in groups of at least 3)

- Greenspire Linden
- Lacebark Elm
- Autum Blaze Maple
- Swamp White Oak

Ornamental Tree Species
(groups of at least 2)

- Japanese Pagoda Tree
- Chanticleer Pear
- Prairie Gem Pear
- Cardinal Crabapple

Secondary Streets (Water Quality)

A diverse selection of water-tolerant trees with varying growth habits can be strategically arranged to create a rhythmic pattern along Secondary Streets, integrating seamlessly with water quality planters designed to enhance stormwater management. These trees not only contribute to the aesthetic and ecological function of the streetscape but also support bioretention systems, improving water filtration and resilience within the urban environment.

Deciduous Tree Species Recommendations. For additional acceptable species reference Appendix D: Foresty Memo from the Ultra Urban Green Infrastructure Guidelines.
(Alternate species in groups of at least 3)

- Tatarian Maple
- Russian Hawthorn
- Swamp White Oak
- White Oak
- Japanese Pagoda Tree
- Lacebark Elm
- Thornless Honeylocust

Secondary Streets

A variety of trees with multiple growth habits can be grouped and patterned to create a rhythm through the Secondary Streets. These trees vary in fall colors and can be arranged in various ways to have spectacular impact in the fall.

Deciduous Tree Species Recommendations
(Alternate species in groups of at least 3)

- Greenspire Linden
- Maple Plane Tree
- Swamp White Oak
- White Oak
- Lacebark Elm
- Maple Plane Tree
- Japanese Pagoda Tree

Tertiary Ways

Street trees along the Tertiary Ways can be a selection of suggested street tree types. These trees can be grouped in numerous way to that may begin to distinguish public verses private space. Trees can also be arranged to highlight fall color, growth habit and tree characteristics.

Street Tree Types

Autum Blaze Maple
Acer x freemanii Autumn Blaze

- Mature Height: 40-50'
- Mature Spread:30-40'
- Canopy Form: Oval
- Water Requirements: Medium
- Fall Color: Orange-red

Maple Plane Tree
Acer pseudoplatanus

- Mature Height:40-50'
- Mature Spread:40-50'
- Canopy Form: Oval to Rounded
- Water Requirements: Medium
- Fall Color: Greenish Yellow
- Other: Solt Tollerant

*** Turkish Filbert**
Corylus colurnar

- Mature Height:30-45'
- Mature Spread:25-30'
- Canopy Form: Pyramidal
- Water Requirements: Low
- Fall Color: Yellow

*** Shademaster Honeylocust**
Gleditsia triacanthos inermis 'Shademaster'

- Mature Height: 40-50'
- Mature Spread: 30-40'
- Canopy Form: Rounded
- Water Requirements: Low
- Fall Color: Yellow

Japanese Pagoda Tree
Sophora (Styphnolobium) japonica

- Mature Height:40-50'
- Mature Spread:25-35'
- Canopy Form: Upright Rounded
- Water Requirements:Medium
- Fall Color: Yellow to Reddish Purple
- Other: White flowers

Greenspire Linden
Tilia cordata 'Greenspire'

- Mature Height:30-40'
- Mature Spread:25-35'
- Canopy Form: Conical
- Water Requirements:Medium
- Fall Color: Yellow

Prospector Elm
Ulmus wilsoniana 'Prospector'

- Mature Height:35-40'
- Mature Spread:25-30'
- Canopy Form: Vase Shape
- Water Requirements:Medium
- Fall Color: Yellow

Valley Forge Elm
Ulmus americana 'Valley Forge'

- Mature Height:60-70'
- Mature Spread:45-60'
- Canopy Form: Upright Vase Shape
- Water Requirements:Medium
- Fall Color: Yellow
  Other: Resistant to Dutch Elm disease

Lacebark Elm
Ulmus parvifolia

- Mature Height: 40-50'
- Mature Spread: 30-40'
- Canopy Form: Rounded to Oval
- Water Requirements: Medium
- Fall Color: Reddish Purple
- Other: Resistant to Dutch Elm disease

Δ White Oak
Quercus alba

- Mature Height:40-60'
- Mature Spread:40-60'
- Canopy Form: Rounded
- Water Requirements: Medium
- Fall Color: Wine Red

Δ Swamp White Oak
Quercus bicolor

- Mature Height:40-60'
- Mature Spread:40-60''
- Canopy Form: Conical
- Water Requirements: Low
- Fall Color: Gold Orange

*** Chinkapin Oak**
Quercus muehlenbergii

- Mature Height:35-50'
- Mature Spread:35-50'
- Canopy Form: Irregular to round
- Water Requirements: Low
- Fall Color: Yellow Brown

Δ Xeriscape * Drought Tolerant

Street Tree Types

Heritage Oak
Quercus Heritage

- Mature Height:50-60’
- Mature Spread:30-40’
- Canopy Form: Pryimadal
- Water Requirements: Medium
- Fall Color: Gold Yellow

Δ English Oak
Quercus robur

- Mature Height: 40-60’
- Mature Spread: 30-40’
- Canopy Form: Conical
- Water Requirements: Medium
- Fall Color: Gold Yellow

Δ Columnar English Oak
Quercus robur ‘Fastigiata’

- Mature Height: 40-60’
- Mature Spread: 15-20’
- Canopy Form: Columnar
- Water Requirements: Medium
- Fall Color: Gold Yellow

Ornamental Tree Types

Δ Downy Hawthorn
Crataegus mollis

- Mature Height: 15-20’
- Mature Spread: 15-20’
- Canopy: Rounded
- Water Requirements: Low
- Fall Color: Red
- Other: White Flowers

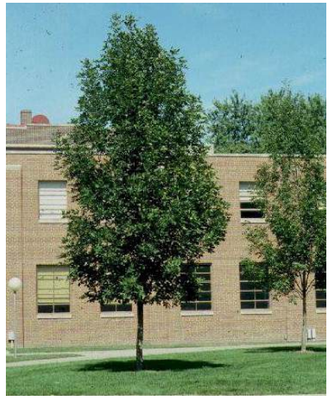
Δ Cardinal Crabapple
Malus ‘Cardinal’

- Mature Height: 15-20’
- Mature Spread: 15-20’
- Canopy: Vase Shaped
- Water Requirements: Medium
- Fall Color: Red
- Other: Red Pink

Δ Chanticleer Pear
Pyrus calleryana Chanticleer

- Mature Height: 20-30’
- Mature Spread: 15-20’
- Canopy: Pyramidal
- Water Requirements: Medium
- Fall Color: Orange-Red
- Other: White blooms in spring

Δ Prairie Gem Pear
Pyrus ussuriensis Prairie Gem



- Mature Height: 20-30’
- Mature Spread:15-25’
- Canopy: Upright Oval to Rounded
- Water Requirements: Low
- Fall Color: Yellow
- Other: White blooms in spring

Δ Peking Lilac
Syringa pekinensis

- Mature Height:15-25’
- Mature Spread:10-15’
- Canopy: Rounded
- Water Requirements: Low
- Fall Color: Yellow Orange
- Other: White blooms in spring

Δ Japanese Tree Lilac
Syringa reticulata

- Mature Height:15-25’
- Mature Spread:15-20’
- Canopy: Rounded
- Water Requirements: Low
- Fall Color: Golden Yellow
- Other: White blooms in spring

Δ Xeriscape * Drought Tolerant

Δ Xeriscape * Drought Tolerant

Park Tree Types

Δ Ohio Buckeye
Aesculus glabra

- Mature Height:30-40'
- Mature Spread:20-30'
- Canopy: Rounded
- Water Requirements: Medium
- Fall Color: Orange, Yellow, Red

Δ Horsechestnut
Aesculus hippocastanum

- Mature Height:50-70'
- Mature Spread:40-60'
- Canopy: Upright Oval
- Water Requirements: Medium
- Fall Color: Yellow

Δ Western Hackberry
Celtis occidentalis

- Mature Height:50-60'
- Mature Spread:40-50'
- Canopy: Rounded
- Water Requirements: Low
- Fall Color: Yellow

Δ Kentucky Coffeetree
Gymnocladus dioicus

- Mature Height:50-60'
- Mature Spread:40-50'
- Canopy: Rounded
- Water Requirements: Low
- Fall Color: Golden Yellow

Δ Goldenrain Tree
Koelreuteria paniculata

- Mature Height:20-30'
- Mature Spread:20-30'
- Canopy: Rounded
- Water Requirements: Low
- Fall Color: Yellow, Red-Orange

Δ Western Catalpa
Catalpa speciosa

- Mature Height:40-60'
- Mature Spread:30-50'
- Canopy: Oval
- Water Requirements: Low
- Fall Color: Yellow Green

Evergreen

Δ Pinon Pine
Pinus edulis

- Mature Height:20-30'
- Mature Spread:10-20'
- Canopy: Pyramidal
- Water Requirements: Very Low

Δ Austrian Pine
Pinus nigra

- Mature Height: 40-60'
- Mature Spread: 30-40'
- Canopy: Pyramidal
- Water Requirements: Low

Δ Ponderosa Pine
Pinus ponderosa

- Mature Height: 60-80'
- Mature Spread: 30-40'
- Canopy: Pyramidal
- Water Requirements: Low

Δ Scotch Pine
Pinus sylvestris

- Mature Height: 30-50'
- Mature Spread: 20-30'
- Canopy: Conical to Rounded
- Water Requirements: Low

Water Quality Landscape Trees*

Miyabe Maple
Acer miyabei

- Mature Height:30-60'
- Mature Spread:20-50'
- Canopy: Rounded
- Water Requirements: Medium
- Fall Color: Golden, Yellow

Δ Russian Hawthorn
Crataegus ambigua

- Mature Height:16-20'
- Mature Spread:12-16'
- Canopy: Rounded to Oval
- Water Requirements: Low
- Fall Color: Yellow to Golden

Lacebark Elm
Ulmus parvifolia

- Mature Height: 40-50'
- Mature Spread: 30-40'
- Canopy Form: Rounded to Oval
- Water Requirements: Medium
- Fall Color: Reddish Purple
- Other: Resistant to Dutch Elm disease

Plains Cottonwood
Populus deltoides monilifer

- Mature Height: 60-80'
- Mature Spread:50-60'
- Canopy Form: Broud
- Water Requirements: Moderate
- Fall Color: Brilliant yellow

Japanese Pagoda Tree
Sophora (Styphnolobium) japonica

- Mature Height:40-50'
- Mature Spread:25-35'
- Canopy Form: Upright Rounded
- Water Requirements:Medium
- Fall Color: Yellow to Reddish Purple
- Other: White flowers

Δ Chanticleer Pear
Pyrus calleryana Chanticleer

- Mature Height: 20-30'
- Mature Spread: 15-20'
- Canopy: Pyramidal
- Water Requirements: Medium
- Fall Color: Orange-Red
- Other: White blooms in spring

*For additional acceptable species reference Appendix D: Foresty Memo from the Ultra Urban Green Infrastructure Guidelines.

Planting Pallet Concept

Plant choice and selection should primarly be native and drought tolerant plantings that reflect the campus's commitment to sustainable practices.

Throughout the streetscape design, planting beds will be used to enhance the urban experience for pedestrians and vehicular traffic. Intersection and building entry planting beds should make use of ornamental plant material such as flowering shrubs, perennials, and annuals with recycled wood mulch.

Planting beds located in the mid-block area should be planted informally with more native plant material such as ornamental grasses, ground covers, and ornamental shrubs.

All planting concepts should reflect a simple and monolithic appoarch that reflects the modern and sustainable goals of the campus.

Tree Mitigation

Mitigation requirements for existing trees located within the FIC will be met through the street tree requirements and open space landscaping provided throughout the Park.

If there are no existing trees on a lot, trees in excess of the City minimum requirement that are provided by a lot developer shall be utilized and counted towards the tree mitigation for the balance of the site, as outlined in the approved General Development Plan.

Once a CAD project boundary has been provided, the FRA/FIC shall provide the existing tree survey to each lot developer. In addition, the FRA/FIC will provide each lot developer's landscape architect a form to fill out with pertinent information that will allow the master developer to track the tree mitigation requirements. This information will be required to be submitted directly to the FRA/FIC, in addition to the package of information that is required to be provided to the Design Review Board per the Submission Guidelines.

Preservation of healthy trees at open spaces or parks is encouraged and should be considered on a site-by-site basis.

Shrubs / Perrenials

Bulbs

Crocus
Tulips
Grape Hyacinth
Dafodils

SOD

Improved variety heat tolerant bluegrass

Seed Mix

Δ Xeriscape * Drought Tolerant

	Name	% of Total
*	Pubescent Wheatgrass 'Luna'	35%
	Western Wheatgrass 'Arriba'	18%
Δ	Streambank Wheatgrass 'Sodar'	15%
	Slender Wheatgrass	15%
	Thickspike Wheatgrass 'Critana'	14%
	Sheep Fescue 'Covar'	3%
	Total	100%

Seeding rate: 60 lbs/acre

Deciduous Shrubs

Δ Xeriscape * Drought Tolerant

	Name	Species
Δ	Alpine Currant	Ribes alpinum
Δ	Blue Mist Spirea	Caryopteris x clandonensis 'Blue Mist'
Δ	Crimson Pygmy Barberry	Berberis thunbergii 'Atropurpurea Nana'
	Red Twig Dogwood	Cornus stolonifera 'Bailey'
Δ	Russian Sage	Perovskia artiplicifolia
Δ	Dwarf Burning Bush	Euonymus alata 'Compacta'
Δ	Miss Kim Lilac	Syringa patula 'Miss Kim'
Δ	Spreading Cotoneaster	Cotoneaster divaricatus
*	Anthony Waterer Spirea	Spiraea japonica 'Anthony Waterer'
Δ	Nana Burning Bush	Euonymus alata 'Nana'
Δ	Cranberry Contoneaster	Cotoneaster Apiculatus
Δ	Lodense Privet	Ligustrum vulgare 'Lodense'
*	Little Princess Spirea	Spiraea japonica 'Little Princess'
Δ	Yellow Shrub Rose	Rosa x 'Gold Wings'
Δ	Red Fragrant Shrub	Rose Rosa x 'John Franklin'
Δ	Snowmound Spirea	Spiraea nipponica 'Snowmound'
Δ	Peking Cotoneaster	Cotoneaster lucidus
Δ	Dwarf Korean Lilac	Syringa meyeri 'Palibin'
Δ	Red Flowering Quince	Chaenomeles japonica 'Rubra'
	Isanti Dogwood	Cornus stolonifera 'Isanti'
Δ	Compact Purple Butterfly Bush	Buddleia davidii nanhoensis 'Petite Plum'
Δ	Three Leaf Sumac	Rhus trilobata
Δ	Diabolo Ninebark	Physocarpus opulifolius 'Diabolo'

Evergreen Shrubs

* Drought Tolerant

	Name	Species
*	Calgary Carpet Juniper	Juniperus sabina 'Calgary Carpet'
*	White Bud Mugo Pine	Pinus mugo 'White Pine'
*	Calgary Carpet Juniper	Juniperus sabina 'Monna'
*	Slowmound Mugo Pine	Pinus mugo 'Slowmound'
*	Compact Oregon Grapeholly	Mahonia aquifolium 'Compacta'
*	Icee Blue Juniper	Juniperus scopulorum 'Monber'
*	Alpine Carpet Juniper	Juniperus communis 'Alpine Carpet'

Ornamental Grasses

Δ Xeriscape

	Name	Species
Δ	Blue Avena Grass	Helictotrichon sempervirens
Δ	Blue Fescue	Festuca 'Elijah Blue'
Δ	Feather Reed Grass	Calamagrostis arundinacea 'Karl Foerster'
Δ	Hardy Fountain Grass	Pennisetum alopecuroides 'Hameln'
Δ	Pampas, Plume Grass	Saccharum ravennae
Δ	Purple Maiden Grass	Miscanthus sinensis 'Purpurescens'

Perennials

Δ Xeriscape

	Name	Species
Δ	Autumn Joy Sedum	Sedum spectabile 'Autumn Joy'
Δ	Bee Balm	Monarda 'Cambridge Scarlet'
Δ	Black Eyed Susan	Rudbeckia fulgida 'Goldsturm'
Δ	Basket of Gold	Aurinia saxatilis 'Gold Ball'
Δ	Moonbeam Coreopsis	Coreopsis verticillata 'Moonbeam'
Δ	Stella D'Oro Daylily	Hemerocallis 'Stella D'Oro'
Δ	Prairie Coneflower	Ratibida columnifera 'Red'
Δ	Rocky Mountain Penstemon	Penstemon strictus
Δ	Scarlet Penstemon	Penstemon barbatus
Δ	Salvia, May Night	Salvia sylvestris x 'Mainacht'
Δ	Shasta Daisy	Chrysanthemum leucanthemum
Δ	Thyme, Wooly	Thymus praecox pseudolanuginosus
Δ	Periwinkle	Vinca minor 'Bowles'

Vines

* Drought Tolerant

	Name	Species
*	Boston Ivy	Parthenocissus tricuspidata
*	Virginia Creeper	Parthenocissus quinquefolia engelmannii
	Purple Clematis	Clematis x jackmanii
*	Trumpet Vine	Campsis radicans

Note: This plant palette is not intended to be all inclusive. It is a sampling of the plant material to be used within the campus and demonstrates the character of plant material to be used. Final plant selection shall be compliant with the City of Aurora Code and is subject to review by the FIC Design Review Board.

Salt Tolerant Pallet

DECIDUOUS TREES

High tolerance - up to 8 mmhos(mS)

Scientific Name and cultivars	Common Name	Size	Bloom color/time	Fall color
Acer plantanoides	Norway Maple	Large shade/street tree	N/A	Yellow
Aesculus hippocastanum 'Ft.	Common Horsechestnut	Large shade tree	Pinkish white flowers	N/A
Amelanchier canadensis	Shadblow Servicebery	Small ornamental tree	White flowers in srping	Red-orange
Crataegus crus-galli	Cockspur Hawthorn	Small ornamental tree	White flowers in srping	Red-orange
Gleditsia triacanthos 'Imperial'	Honeylocust	Large shade/street tree	N/A	Yellow
Ptelea trifoliata	Wafer Ash	Small ornamental tree	yellowish/green in	Yellow
Quercus alba	White Oak	Large shade/street tree	N/A	Red
Quercus robur	English Oak	Large shade/street tree	N/A	Brownish
Quercus rubra	Red Oak	Large shade/street tree	N/A	Red
Syringa amurensis japonica	Japanese Tree Lilac	Small ornamental tree	White flowers in srping	Yellow

Moderately high tolerance - up to 6 mmhos

Scientific Name and cultivars	Common Name	Size	Bloom color/time	Fall color
Acer negundo	Box-elder	Large shade/street tree	N/A	Red
Acer x freemanii Autumn	Maple	Large shade/street tree	N/A	Yellow/Red/
Acer ginnala	Amur maple	Small ornamental tree	N/A	Red
Betula nigra 'Cully'	Heritage River Birch	Large Ornamental tree	N/A	Yellow
Larix decidua	European Larch	Large tree	NA	
Populus deltoides 'Siouxland'	Cottonless Eastern	70' t x 40' w		
Populus tremuloides	Quaking Aspen	Ornamental tree		
Prunus cerasifera 'Vesuvius'	Purple Leaf Plum	Small ornamental tree		
Prunus padus Summer	European Bird Cherry	Ornamental tree		
Prunus serrulata 'Kwanzan'	Kwanzan Flowering Cherry	Ornamental tree		
Prunus virginiana 'Shubert'	Choke Cherry	Ornamental tree		
Quercus bicolor	Swamp White Oak	Large shade/street tree		
Quercus macrocarpa	Burr Oak	Large shade/street tree		
Salix alba `Tristis'	Golden Weeping Willow	Large Ornamental tree		
Salix alba `Vitellina'				
Sophora japonica	Japanese Pagoda Tree	Large Ornamental tree		

Moderate tolerance - up to 4 mmhos

Catalpa speciosa	Northern Catalpa	Large Ornamental tree
Celtis occidentalis	Hackberry	Large shade tree
Fraxinus pennsylvanica	Green Ash	
Ginkgo biloba	Maindenhair Tree	Tall shade/street tree
Koelreuteria paniculata	Goldenrain Tree	Ornamental tree
Maclura pomifera	Osage-Orange	Ornamental tree
Pyrus species	Ornamental Pear	Ornamental tree
Ulmus americana	American Elm	American Elm

Slight tolerance - up to 2 mmhos

Quercus palustris	Pin Oak	Tall shade/street tree
Malus sp.	Apple and Crabapple	Ornamental tree
Juglans nigra	Black Walnut	Large shade tree

Sensitive or intolerant

Acer rubrum	Red Maple	Large shade/street tree
Acer saccharinum	Silver Maple	Large shade/street tree
Acer saccharum	Sugar Maple	Large shade/street tree
Aesculus glabra	Ohio Buckeye	Ornamental tree
Cercis canadensis	Eastern Redbud	Ornamental tree
Crataegus virdis	Winter King	Ornamental tree
Plantanus acerifolia	London Plane	Large shade/street tree
Sorbus aucuparia	European Mountain-Ash	Large ornamental tree
Quercus muehlenbergii	Chinkapin Oak	Large shade/street tree
Tilia americana	American Linden	Large shade/street tree
Tilia cordata	Littleleaf Linden	Large shade/street tree

CONIFEROUS TREES

High tolerance - up to 8 mmhos

Juniperus chinensis	Pfitzer juniper	Small
Picea glauca `densata'	Black Hills Spruce	Medium
Pinus nigra	Austrian Pine	Large

Moderately high tolerance - up to 6 mmhos

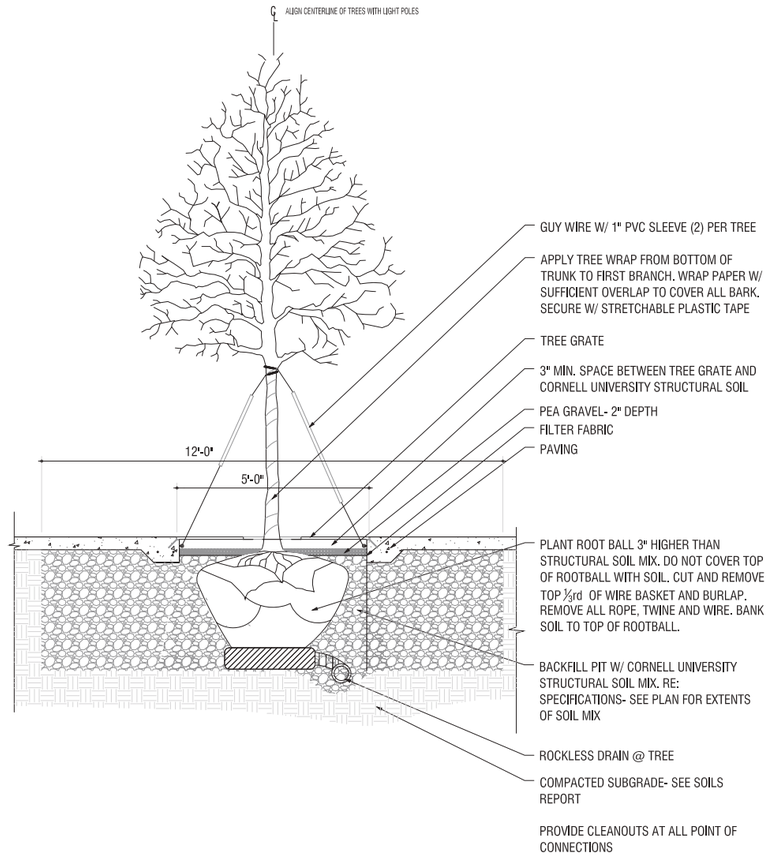
Pinus ponderosa	Ponderosa Pine	Large
Thuja occidentalis	American Arborvitae	Small

Slight tolerance - up to 2 mmhos

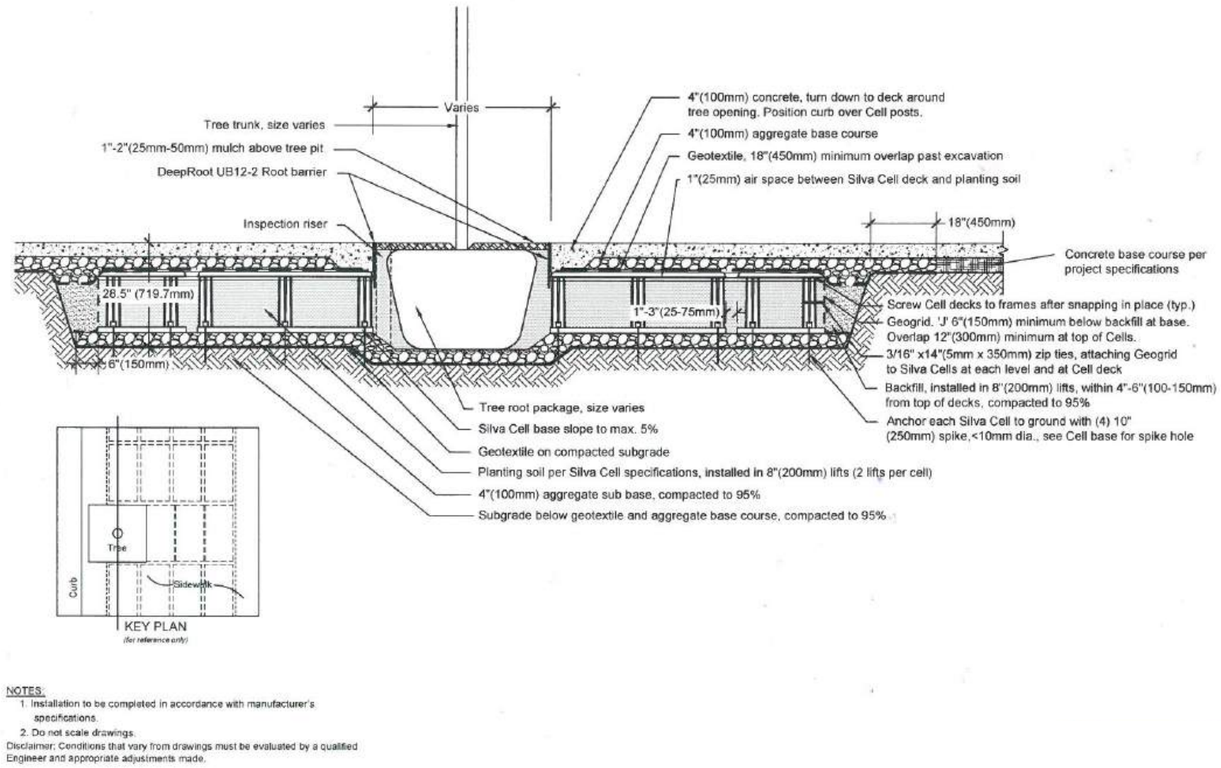
Picea albies	Norway Spruce	Large
Piecea pungens	Blue Spruce	Large
Pinus strobus	Eastern White Pine	Large
Pinus sylvestris	Scot's Pine	Medium
Pseudotsuga menziesii	Douglas Fir	Large

Sensitive or Intolerant

Conceptual Street Tree Planting Details



Cornell University Structural Soil Street Tree Detail

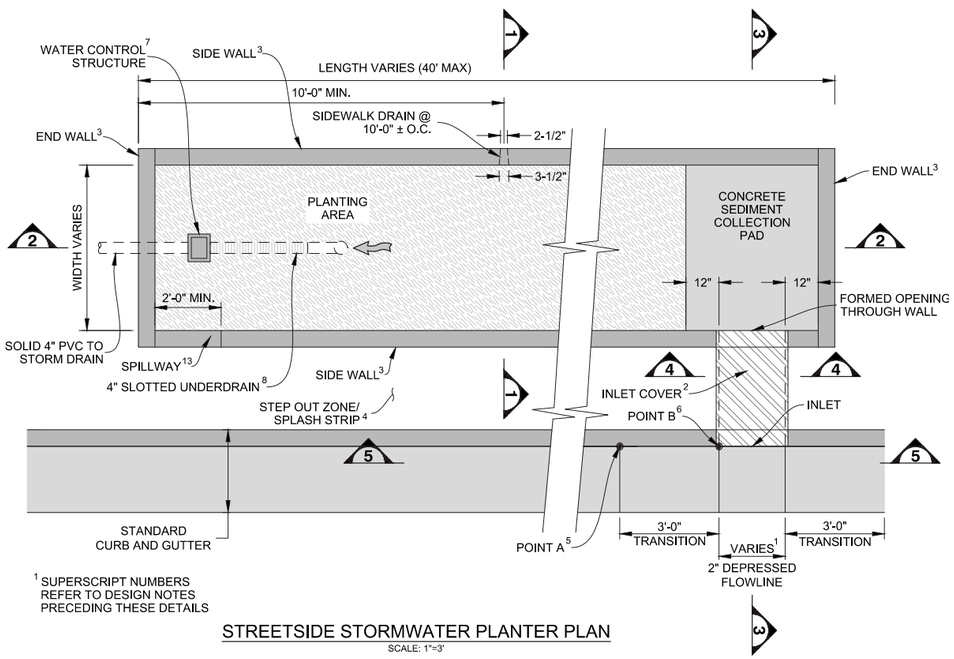


NOTES:
1. Installation to be completed in accordance with manufacturer's specifications.
2. Do not scale drawings.

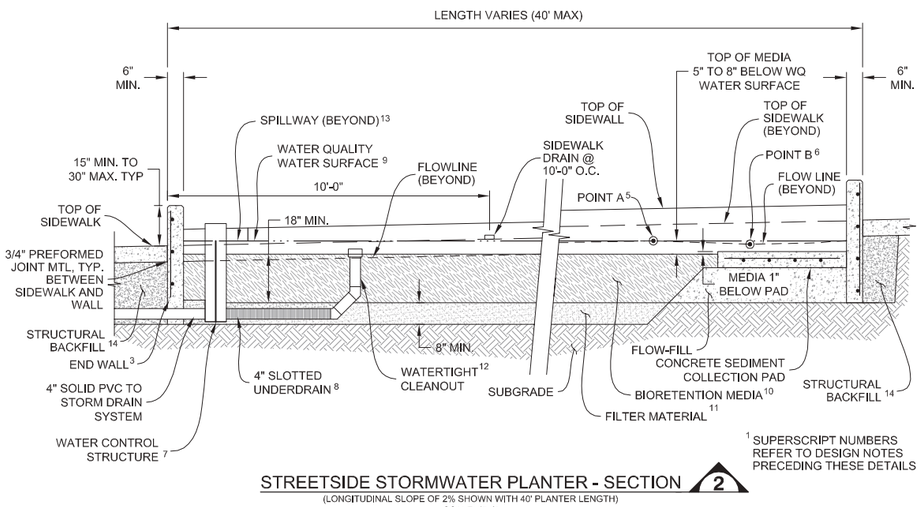
Disclaimer: Conditions that vary from drawings must be evaluated by a qualified Engineer and appropriate adjustments made.

Silva Cell Street Tree Detail

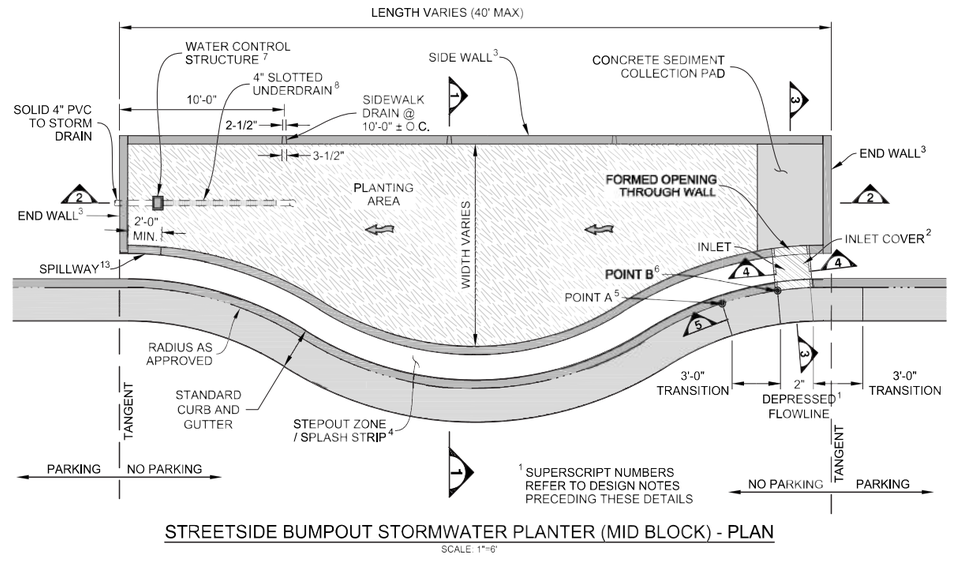
Conceptual Water Quality Streetscape Details



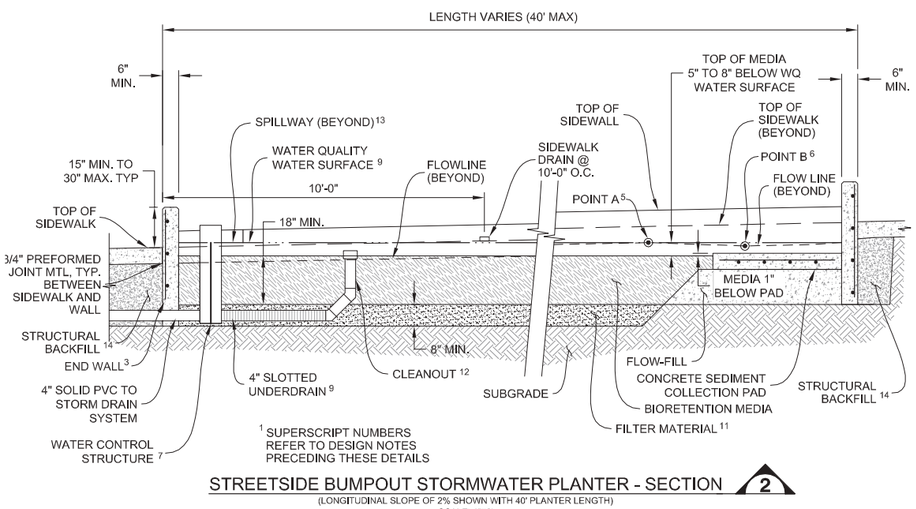
Ultra Urban Green Infrastructure Guidelines - Streetside Stormwater Planter Detail Plan



Ultra Urban Green Infrastructure Guidelines - Streetside Stormwater Planter Detail Section



Ultra Urban Green Infrastructure Guidelines - Bumpout Stormwater Planter Detail Plan



Ultra Urban Green Infrastructure Guidelines - Bumpout Stormwater Planter Detail Section

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The intent of these guidelines is to create a quality, urban-inspired environment within the FIC, and signage plays a critical role in that user experience. The guidelines create a vision for the Campuswide signage and wayfinding system, as well as guidelines for individual project signage. A signage and wayfinding master plan should be created to describe materiality and expand upon these guidelines and signage locations.

The Campuswide signage and wayfinding strategy is predicated upon the visitor arrival sequence. Visitors will arrive to the campus by multiple modes including automobile, bicycle, public transit, and by foot. There will also be a significant amount of intracampus pedestrian and bicycle trips, therefore, a coordinated signage and wayfinding system must be developed to accommodate all users, with an emphasis on pedestrians since all users will be a pedestrian at some point on campus.

A hierarchy of signage scale should be designed to transition from automobile scale and transit scale to pedestrian scale. This is accomplished by first directing people to the campus, then to a particular building or parking facility, and ultimately to a specific tenant space within the building. Today, most journeys begin by researching a destination on a smart-phone or computer. Therefore, digital and physical nomenclature, mapping and addressing systems should be coordinated to ensure a consistent user experience which begins on the Internet and ends at a specific destination.

All signs within the Fitzsimons Innovation Community should express the mixed-use and civic nature of the campus and thoughtfully incorporate contemporary materiality and technologies. Materials should be chosen to meet three primary criteria: durability in accordance with local weather patterns, compatibility with site architecture and landscape, and environmental sustainability.

Illumination of signage should be kept to a minimum, with specific guidelines within each use type, but primarily relying on ambient and indirect illumination of signage. Freestanding monuments are reserved for identifying the entire Campus and will be located at key entry points. They should be uniform in orientation and form.

All signs will have good legibility through contrasting type, with sizes that meet ADA guidelines.

Coordinate with Anschutz Medical Campus.

Signage and Wayfinding Hierarchy:

1. Virtual, Web Media and Off-Site Signage: see section 2.5.1.

2. Campus Signage: see section 2.5.2.

   For the purposes of this document, campus signage refers to Campuswide signage and wayfinding:

   Campus Identity Signage
   Regulatory Signage

   - Pedestrian/Cyclist: Directs pedestrians to buildings and places
   - Parking Signage: Directs automobiles to parking areas
   - Street Signage
   - Other

3. Project Signage: see section 2.5.3.

   For the purpose of this document, project signage refers to individual development projects:

   - Building Name
   - Building Address
   - Office Tenants
   - Commercial/Retail Tenants

2.5.1. Virtual, Web Based Media and Off-Site Signage

A branding strategy should be completed prior to initial development projects in order to inform a cohesive signage and wayfinding system for the entire campus beyond these guidelines.

Intent

- Create a unified nomenclature and addressing system to be used by all Campus businesses.
- Coordinate virtual, web based media and physical user interface.
- Create an off-site identity for Fitzsimons Innovation Community.

2.5.2. Campus Signage

Signs included in this category include the FIC, public open spaces, and public realm including pedestrian and bicycle circulation corridors. Signage is strategically limited to locations along major circulation corridors and primary campus entires, balancing the needs of vehicular and pedestrian circulation within the project.

Campus signs include all regulatory and street name signs located within the project boundaries, including those located within private parking lots. By including regulatory signs under the umbrella of campus signage, The Fitzsimons Innovation Community will maintain a visual cohesion throughout the campus.

Intent

- Create a cohesive campus environment.
- Define campus boundaries and reinforce vehicular and pedestrian circulation patterns.
- Reflect simple, timeless, and modern design principals. Accent elements will express the bold, exciting new technologies pioneered within the project area.

Design Guidelines

- Campus signs should use a unified palette of color, materials, and type style. In order to maintain quality and clarity, project sign messaging should be tightly restricted.
- Internal illumination may be used on select campus signs.
- Lighted signs should add to the interest to the night time campus that may have a substantial number of evening and night time workers.
- FIC signage should be located at Peoria Commuter Rail / Light Rail Station to direct visitors arriving by Commuter Rail to FIC.

Campus Identity Signage

The purpose of campus identity signage is to provide iconic signage at key corners of the campus to alert visitors that they have found the Fitzsimons Innovation Campus.

Identity signage at key campus corners.

Legend

C Campus Identity Signage

N

Campus Regulatory Signage

A consistent palette of regulatory signs, including street signs and regulatory pole mounted signage, should be used throughout the campus and be included in a Campuswide signage master plan.

Bicycle and Pedestrian Signage

A coordinated and uniform pedestrian and cyclist signage and wayfinding strategy should be developed for the entire campus.

Pedestrian Signage Design Guidelines

- Pedestrian signage should be located at key intersections and guide people to particular buildings, parking areas and open spaces.
- Physical campus maps should be designed in a manner that can be updated as the campus grows.
- Include a campus map on pedestrian signage.
- Pedestrian signage should be designed to complement the public realm design materials.

Bicycle Signage Design Guidelines

- Bicycle signage should be located in a manner that is visible and usable for cyclists while on a bike.
- Consider integrating bicycle route signage with street signs.
- Consider pavement markings to indicate bicycle routes and connections.
- Include bicycle trail maps along the multi-use path to show connections to regional bike routes and trails.

Campus Parking Signage

Parking signage includes signs for all public and private surface and structured parking.

Intent

- To utilize automobile scale signage to assist visitors in locating a specific building and/or parking structure.
- To create a uniform parking signage system for the campus.

Design Guidelines

- Uniform parking signs throughout the Fitzsimons Innovation Community will help to create a seamless campus with a strong urban neighborhood feeling.
- Within individual sites, parking signs must comply with tight guidelines for uniform use of materials and type style.
- Within all of the Fitzsimons Innovation Community, a coordinated color palette will further bind the project elements under a single stylistic umbrella.
- All type should have strong contrast for maximum legibility.

A campus wide signage template should be designed in coordination with the project monumentality to maintain a compatible sensibility. At build-out, a campus wide parking management strategy should be coordinated with a digital application to allow users to identify parking availability.

Integrated pedestrian and automotive signage


Pedestrian-oriented directional signage

Integrated bicycle signage

Bicycle route signage

2.5.3. Project Signage

For the purposes of this document, project refers to single and multi-tenant commercial or innovation office, multi-tenant commercial retail, hotels and residential developments. Uniformity of elements alignment with the street, and color palette will reinforce connection between campus signage and project signage.

Project signage includes design elements that may be located within specific developments and plays an important role within the overall campus wayfinding system. It should follow the overall campus wayfinding strategy to create a hierarchy of signage that utilizes automobile-scale signage to first identify the campus and individual buildings or parking areas, then transitions to a pedestrian-scale signage to identify primary building entries and building tenants.

Materials, Quality and Design for all signage

Intent

- To encourage signs that fit the character of the site and that do not detract from or overpower the architecture.
- To limit the proliferation of signs on buildings so as not to detract from the appearance of well-designed architecture.
- To ensure signs and their materials remain visually, structurally, and electronically in “like new” appearance.
- To utilize buildings as signage.
- To utilize sign colors, materials, sizes, shapes and lighting to complement the other elements of the façade design.

Design Guidelines

- Creatively use 2- and 3-dimensional form, profile and iconographic representation (i.e. lighting, typography, color and materials) in expressing the character of the use, identity of the development, character of the overall campus and architecture of the building.
- Design signs that are expressive of the individual proprietor and overall campus identity. Distinctive materials that exhibit craftsmanship and which contribute to individual business’ identity should be used.
- Choose materials well-suited for the Colorado environment.

Additional Secondary Project Signage (not included as individual sign types): These signs should express continuity with other project signage and the project regulatory signage. Ambient illumination is recommended.

- Tenant Directories
- Wall Mounted Identity Plaques
- Back of House and Delivery signage
- Interior Signage

Building Name and Address

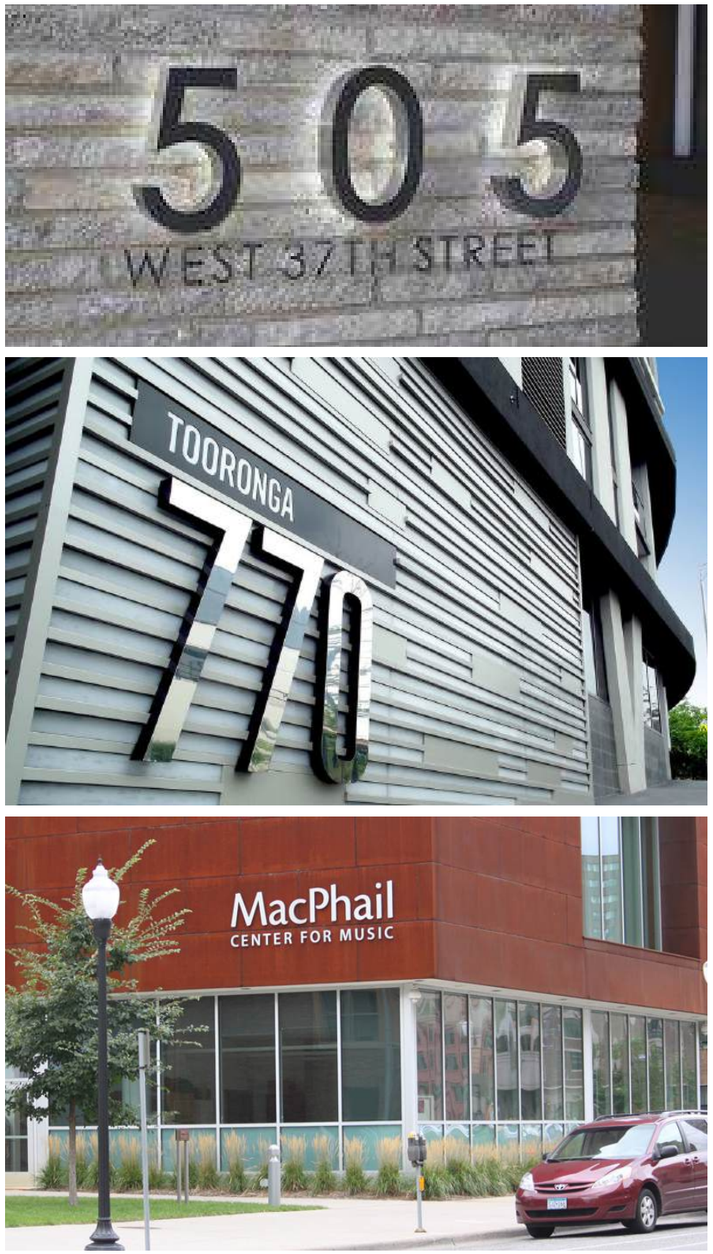
The FIC should create a uniform naming and addressing system that should be followed by all building owners.

Intent

- To utilize a uniform signage material and lighting for all building names and addresses.
- To utilize uniform building tenant signage at all building entries and/or building lobbies to allow all campus users to be familiar with one system.

Design Guidelines

- Building addresses must be code compliant.
- Address and building names should contrast surrounding area for maximum visibility.
- Address signs may include street names.
- Each building should be identified by a single name and address consistent with campus naming, strategy and address.
- Within the campus, a uniform approach to materials and type should be employed.
- All address and building name signs should use the same type style and color to be determined a future and wayfinding master plan.



Building signage of name and address

Office / Lab-Science / Commercial Building Tenant Signage

Other commercial tenants include individual tenants with entries along the public realm space and first floor tenants with entries on shared site lobby space. This does not include tenants whose entries are within building interiors.

All office tenant signage should be located at building entries where they are located.

Intent

- To create a cohesive campus wayfinding system.
- To limit visual clutter in the public realm.

Design Guidelines

- Buildings with multiple tenants may include a pedestrian scale joint identification wall mounted or ground sign located adjacent to the building entry.
- Soft, internal lighting is allowed to add to the nighttime environment.
- Materials and type should be compatible with adjacent architecture.
- Limits on messaging, quantity, location and illumination help insure that tenants reflect the quality of their project and site as a whole.
- Building mounted projecting blade signs are encouraged to activate sidewalks and other pedestrian circulation corridors. Internal illumination is not allowed, while external illumination is recommended.
- Window graphics that activate the street level experience for pedestrian traffic are allowed. These signs should be no more than two colors and may not exceed 10% of the total window area.
- Plexi-face channel letterers are discouraged.
- Permitted Sign Types:
  - Building Name (Wall Sign): One square foot per linear foot of building frontage with a maximum of 75 sq. ft. Individual tenant signage is allowed a maximum of 25 sq. ft.
  - Individual Buildings five stories or greater (High Wall Sign): Two square feet per linear foot of building frontage with a maximum of 200 sq. ft. in area, to be located between the top floor and top of the parapet wall. One high wall sign permitted per building.
  - Building Name (Canopy Sign): Only one sign per entry with a maximum area of 10 sq. ft., and maximum letter height of 18 inches.
  - Individual tenant/business signs (Pedestrian Blade Sign): These signs are allowed for businesses that have direct public entry from a public street or open space. Maximum area of 6 sq. ft. located between 8'-12' above grade.
  - Individual tenant/business signs (Joint identification wall and ground signs): Maximum area of 80 sq. ft. (40 sq. ft. per side) with a maximum height of 8'.

Special Considerations:

Other commercial uses (i.e.-anchor tenants, university buildings, etc.) should utilize all means necessary to follow the retail or commercial tenant signage criteria. However, special considerations for a typical use will be considered on a case by case basis and be approved or rejected by the DRB. Exceptions for special cases may be allowed where tenant creates an identity and address that is symbiotic with the FRA mission of creating an innovation district. In such cases, the tenant signage may take the place of building naming signage.

- In special cases where office tenant signage is allowed on a building facade, signage elements cannot exceed 20% length of the total building elevation with one (1) sign per frontage and no contiguous corners. Lighting is to be halo illumination only.
- One sign per frontage, no contiguous corners, and halo illumination only.
- Tenant signage should take the place of building name signage.

Commercial / Retail Tenant Signage

The Retail /Commercial Tenant category includes those retail, restaurants, hair salons, spas and entertainment tenants, etc. that are not located within a mixed use building.

Window Graphics activate the street level experience for pedestrian traffic. Signs should be no more than two colors and may not exceed 10% of the total window area.

Building Mounted Projecting Blade Signs activate sidewalks and other pedestrian circulation corridors. Built-up dimensional blade signs are strongly encouraged. Internal illumination is not allowed, while external illumination is recommended. Maximum area of 6 sq. ft. located between 8'-12' above grade.

Fascia or Canopy Signs may be used as compatible with the architecture. Letters must be individually mounted dimensional letters with no back plate or integrated into architectural canopy. Attachment methods to be concealed. Letters must be all one color with good contrast to the building facade or surrounding area. Illumination can be external, reverse halo, or cove lighting. Signage is not to exceed 2/3rds of the width and height of the sign band.

Other specialty tenant identity signage: For tenants requiring additional signage, the following options are strongly encouraged: awning, paving, and wall plaques. Awning signage is permitted only on the vertical surface of the valance and should not exceed 2/3rds of the width and height of the valance area. Wall plaques should be located next to tenant entries and not exceed 2 sq. ft.

Special Consideration

Other commercial uses (i.e.-movie theaters, gas stations, childcare facilities, etc.) should utilize all means necessary to follow the retail or commercial tenant signage criteria. However, special considerations for a typical use will be considered on a case by case basis and be approved or rejected by the DRB.

Design Guidelines:

- Retail signs express the unique personalities of individual tenants.
- Materials and type should have wide parameters.
- Limits on messaging, quantity, location and illumination help insure that tenants reflect the quality of their project and site as a whole. Within these guidelines, individual projects may choose to add further restrictions.
- All tenant signs should include only the tenant name and logotype, no tag lines allowed. Within the following sign types, each tenant shall have a maximum of one (1) sign per sign type.
- Tenants with frontage on multiple facade should use other specialty tenant identity signs, such as wall plaques on secondary frontages.
- Tenant shall have 1.0 sq. ft. of signage per linear foot of frontage. Square footage will be figured for all signs combined.
- Plexi-face channel letterers are discouraged.

Prohibited Sign Types:

- Exposed or surface-mounted box cabinet signs, including those with acrylic face and painted and/or vinyl graphics.
- Signs that are not professional in appearance and in character with the profile of the project.

Building Mounted Blade Signage

Fascia Signage

Fascia Signage

Canopy Signage

Window Signage

Prohibited sign types

- Signs that use animated, flashing or strobing lights.
- Formed plastic.
- Balloon or inflatable signs.
- Temporary fabric signs.
- Signs which emit sound or odor or visible matter.
- Signs with exposed raceways, conduit, junction boxes, or transformers.
- Fluorescent or reflective sign or color.
- Simulated materials, i.e. wood grained, plastic laminate, wall coverings, paper, cardboard or styrofoam.
- Surface mounted, box cabinet signage.

Prohibited sign types specified within site and tenant signage

- Multiple tenant logos on a single monument or building facade

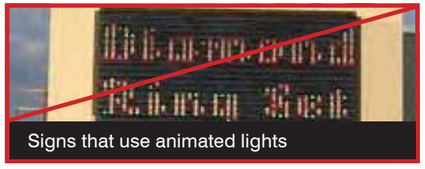
Illumination terms used within this document

- Ambient illumination or indirect illumination provides an area with overall illumination and is the general background light that contrasts between contrasting signage and building facade.
- Internal Illumination refers to light transmitted from within a sign.
- Halo illuminated, also referred to as reverse pan channel.
- External illumination refers to light that is outside of a sign, but specifically dedicated to and aimed at the sign.
- Canopy sign refers to signage architecturally incorporated into a canopy.
- Individually Mounted Dimensional Letters

Surface mounted, box cabinet signage

Plexi-face channel letters

Signs with exposed electrical & lighting


Signs that use animated lights

Formed Plastic

Signs with a back plate

Signs with a back plate

Multiple tenant logos on a monument


External illuminated dimensional

Signage on canopy with ambient illumination

Ambient above and indirect below on channels

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2.6.1. Public Art

Public art enriches the physical and intellectual environment and should be sited in strategic locations throughout the campus. Large and smaller scale sculptures create memorable landmarks that integrate well within an urban streetscape. Parks, open spaces, and private plazas are well served by strong sculptural elements. Metal, stone, concrete and other durable materials are ideally suited to withstand local weather and potential vandalism. Public art within the Fitzsimons Innovation Community will reflect the diverse character of its setting, transitioning in tone and materiality as it moves from the natural landscape of Sand Creek Park to the more urban core near the Anschutz Medical Campus. This progression enhances the sense of place and supports the broader identity of the campus.

Natural Public Art
Near Sand Creek Park, artwork will adopt an organic character, using natural materials and forms inspired by the local ecology. These installations will often be integrated into landscapes, trails, and park features.

Formal Public Art
Toward the AMC and campus core, public art will take on a more civic and architectural tone, reinforcing the institutional setting with structured forms, durable materials, and placements in plazas or along key corridors.

Intent

- To incorporate public art into key public parks and plazas to enrich user experience and create a memorable experience.

Design Guidelines

- Public art locations will be approved by Fitzsimons DRB.
- Public art should be located at key focal points to terminate important views.
- Artwork should be contextually responsive, reflecting the character of each campus district and its proximity to surrounding assets.

Permitted type of art project

- Unique or limited edition artworks created by a professional artist including:
- Functional elements such as gates, benches, fountains, special facade treatments, or shade structures;
- Landscape integrated enhancements such as passageways, bridges, street lighting elements, or garden features;
- Sculpture such as freestanding, wall-supported, suspended, kinetic, or electronic;
- Neon, LED, glass, photographs, prints, and any combination of media including sound, film, video, or other interdisciplinary artwork.
- Art that references the history of the site should be considered.

Not permitted type of art project

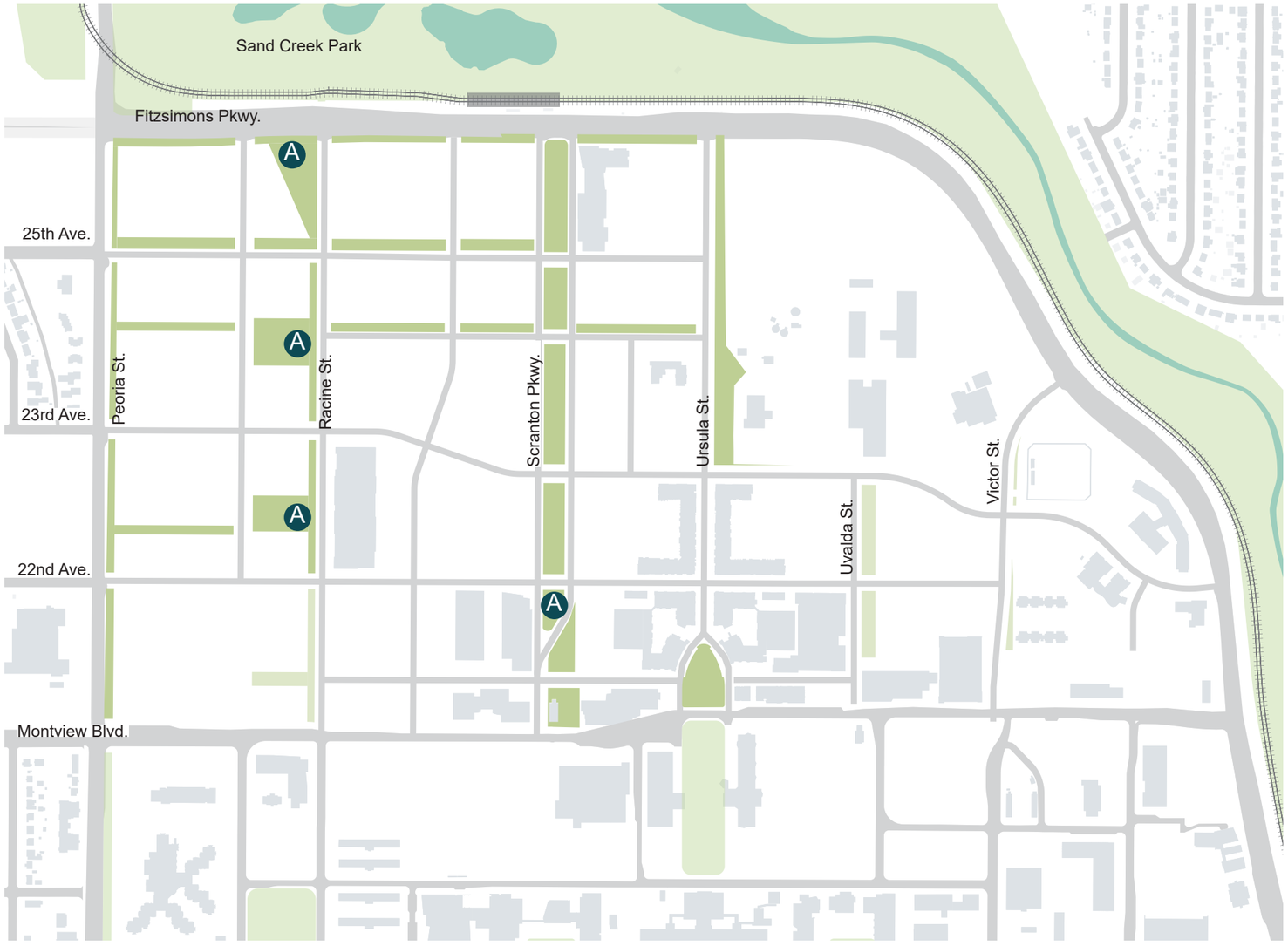
- Reproductions or unlimited editions of original work;
- Art objects that are mass-produced;
- Artworks that are decorative, ornamental or functional elements of the architecture or landscape design, except when commissioned by a professional artist;
    - Architectural rehabilitation or historical preservation;
    - Directional elements such as super-graphics, signage, or graphics that would already be a part of the project;
    - Fountains or playground equipment that is mass-produced;
    - Business logos;

Civic Artwork

Pavilion as art

Nature as Art

Public Art Locations



Legend

A Potential Public Art Location

N

3

COMMERCIAL SITE PLAN DESIGN GUIDELINES

3.1.1. Parks

Publicly accessible, privately maintained open space such as plazas, courtyards or outdoor rooms are an important part of the overall park network. Each development block is encouraged to include some form of outdoor space that is connected to the public realm either directly, or by a publicly accessible walkaway.

A publicly accessible, privately owned and maintained park is defined as amenitized space that is accessible to the public between 7am and 10pm. These are at-grade spaces that are unobstructed to the sky and are not located in the right-of-way. The term 'plaza' may include courtyards, urban gardens and outdoor rooms, but shall not include off-street loading areas, driveways, drop-off areas, off-street parking areas, or pedestrian ways accessory thereto.

The majority of the surface may be hardscape, but any portion of a plaza occupied by landscape, water features, art, or recreation facilities may be considered a part of the space.

Intent

- To provide parks that give relief and interest to the streetscape.
- To provide outdoor space that serve for relaxation and community interaction.
- To create variety and interest in the urban pattern.
- To allow for additional space adjacent to buildings to accommodate special amenities such as café seating, sculptures and gardens.
- To encourage socialization, congregation, interaction, and idea sharing.
- To create a variety of distinct places, providing memorable experiences that assist with wayfinding and mental mapping of the campus.
- To provide parks such as plazas, courtyards and small parks as an extension of the work environment into an outdoor environment.
- To provide quiet contemplative parks, to relax and away from distractions to think.

Design Guidelines

- Trellis, gazebos, picnic covers, sun shades and other non-enclosed roof-like forms that add to the usability and enjoyment of outdoors are allowed.
- Seat walls that enclose park and plazas should be considered an integrated part of the plaza design.
- Plazas and pocket parks should connect to the public realm, either directly or by publicly accessible walkways.
- Materials and furnishings should be durable.
- Landscape materials should be selected for each plazas unique micro-climate.
- Building access, either public or secure, should be located on each plaza to encourage regular use.
- Encourage natural, garden-like environments.

3.1.2. Pedestrian Circulation

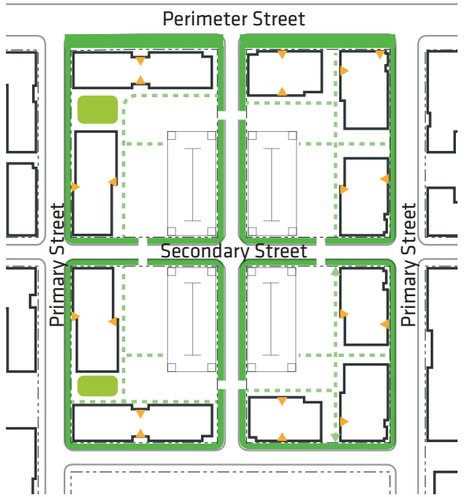
Intent

- To encourage pedestrian and bicyclist access to the Site.
- To provide continuous, convenient, direct and comfortable pedestrian connections between primary uses, parking facilities, and publicly accessible parks and plazas.
- To minimize conflicts between automobiles, bicyclists, and pedestrians.
- To create a network of connected and comfortable parks.
- To promote security on a street or public park through frequent points of access, and sources of activity.

Design Guidelines

- Provide sidewalks and walkways of adequate width to allow groups of people to comfortably pass each other.
- Public lobbies should be considered as part of the pedestrian network.
- Provide pedestrian oriented lighting and shade trees along walkaways.

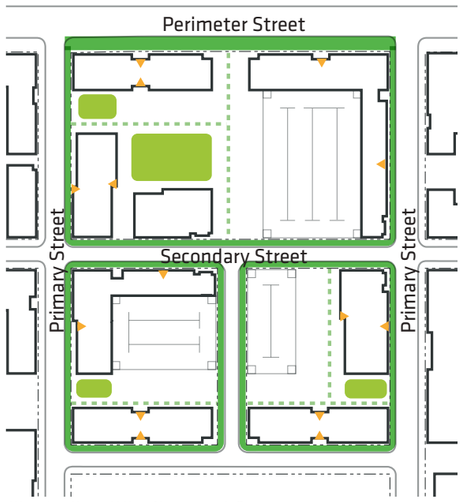
Park & Pedestrian Circulation Diagram



Illustrative Site Concept 1

Legend

- Linear Park
- Through Block Pedestrian Circulation
- Pedestrian Circulation
- Park / Courtyard
- Building entry



Illustrative Site Concept 2

3.1.3. Building Orientation & Entries

Locate major pedestrian entrances along the Primary street. Buildings that are sited between a street and a surface parking area, for example, should have a pedestrian entrance on both the parking area side for employees to gain access from their cars, and along the public street to provide access for visitors, and pedestrians arriving from transit, on-street parking, adjacent neighborhoods and other buildings. It is anticipated that employees may use the building's street entrance during office hours to conduct local errands and attend meetings. This will activate the streetscape as they walk to their intended destination.

Although building entrances on streets will be limited in size to maximize first floor leasable street frontage, they will be clearly demarcated and articulated on the street oriented facade for the pedestrian. Canopies at building entrances are highly recommended.

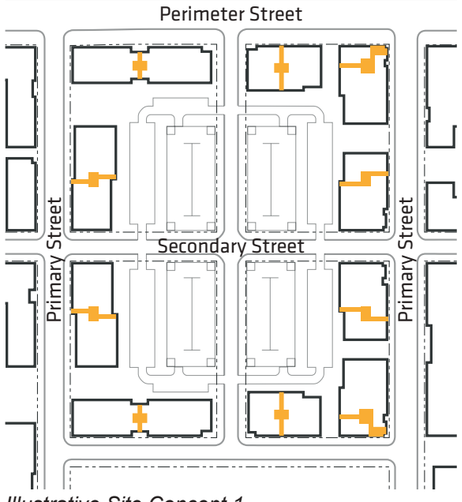
Intent

- To spatially define the street or public parks to create a sense of place
- To give importance and priority to the public realm
- To visually emphasize the primary entry or entries to a building or ground floor use.
- To locate as many active entries as possible along the street.

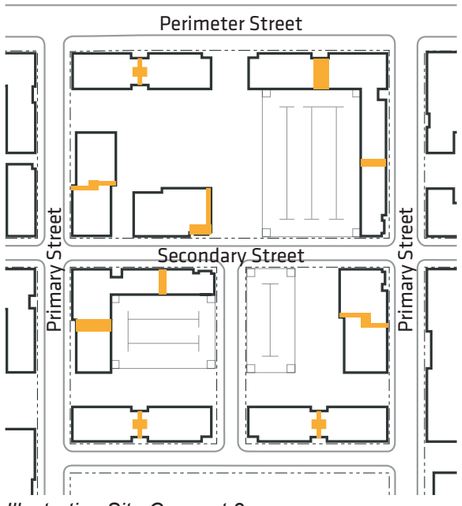
Design Guidelines

- The long-side of buildings should be generally parallel with the primary street.
- Buildings should be generally orthogonal with the street or park edge.
- Variation from the orthogonal is acceptable to create visual interest so long as the majority of building remains orthogonal.
- Building entry plazas are encouraged, but should not disrupt the public realm design.
- Pedestrian oriented signage that complies with signage guidelines that identifies building tenants is allowed near a building entry.
- In order to encourage a healthy lifestyle, interior stairs should be visible and easily accessible from the building entry. Similarly, elevators may be located out of view from the public lobby in low rise buildings.
- Building entrances facing parking lots should be coordinated with building service areas to avoid conflicts between pedestrians and service vehicle movements.

Building Orientation & Entry Diagram



Illustrative Site Concept 1



Illustrative Site Concept 2

Legend

Pedestrian Connections

3.1.4. Vehicular Circulation and Service Access

Vehicular circulation and the proper location of building service areas is critical to the function of each building and site. Preferred locations for building service areas are along dedicated Tertiary Ways, which includes service streets and access drives surrounding the perimeter of parking areas. Service areas should not be directly accessed from Perimeter Streets or Primary Streets unless no other reasonable access is available. Service areas should be located out of sight from the primary building entrance.

Building service areas may be one of the following; loading docks internal to buildings, shared exterior loading courts located external to, and between two adjacent buildings, and screened, external service courts. The number of loading bays for any given building will be based upon building size and use.

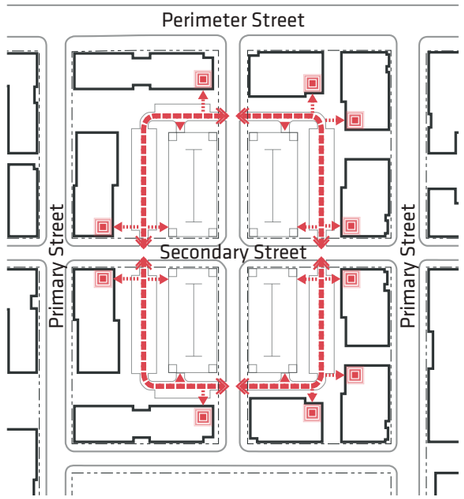
Intent

- To provide clear and logical vehicular access and circulation within the site.
- To minimize the visual impact of service areas.
- To minimize conflicts between automobiles and pedestrians.
- To provide adequate service truck access.

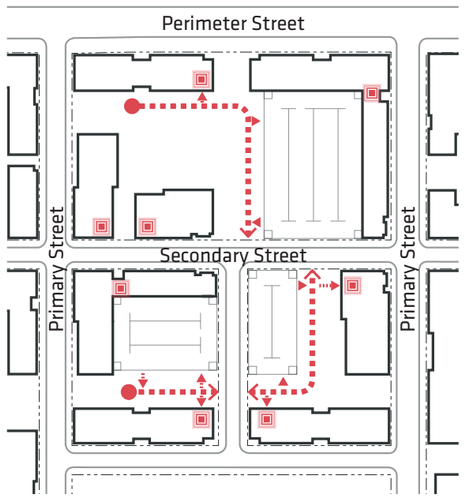
Design Guidelines

- Curb radii along primary truck service routes shall be designed to accommodate service and delivery vehicles, with consideration to maintain the smallest possible turning radii at all street intersections.
- All internal service areas will be equipped with closeable, rolling overhead doors and bollards to protect building facade.
- All exterior service courts and loading areas shall be screened from view by architectural elements, screen walls, landscaping, or some combination.
- Larger buildings may need to provide loading docks at service courts that accommodate a 55' articulating tractor-trailer truck, trash compacting area, and recycling center.
- Internal service bays should be properly dimensioned, and shared external service courts will be located so that trucks will not project into the street or onto adjacent sidewalks.
- Service areas should be designed to minimize the disruption to on-street parking, street tree patterning, and street lighting.
- Service areas within phased developments should be aligned and designed to maximize parking/loading across the site. Opportunities for shared parking parking and loading between adjacent sites should be considered.
- Special care should be taken to treat all service doors, service access streets, and service areas with streetscape and building design details in order to render them of equal pedestrian value to typical streets. For example, sidewalk paving materials will continue across service access curb cuts so that pedestrian routes remain uninterrupted along the edge of the streets, regardless of service door locations. Landscape and lighting will also maintain continuity through the service areas.

Building Service and Parking Access Diagram



Illustrative Site Concept 1



Illustrative Site Concept 2

Legend:

Service access point

Coordinated service route

While the Public Realm Guidelines describe the macro-scale of the urban street-which defines the major streets, primary parks and gateways , the micro-scale of the street environment will operate at the scale of individual buildings.

The network of streets and parks, established in the Public Realm Guidelines, create consistent identity and character for the Innovation Campus as a whole. This allows for architecture and building design to vary and evolve as the campus grows over time.

Buildings should be sited and designed to reinforce the public realm by fronting Primary Streets and Primary Parks with entries and ground level active uses. Human scaled facade articulation, architectural detailing, handsome materials, and variations in the wall depth create a pedestrian scale and inviting street edge. Transparent glass at the ground level encourages a feeling of openness and provides 'eyes on the street'. Special emphasis should be given to distinctive articulation of individual building entrances and street corner elements.

All buildings will have at least one primary entrance located on the street serving as its address, integrated with the streetscape design and directly connected to a public sidewalk except where primary entries front public plazas or primary parks. Entrances and lobbies with through-block connections will be incorporated into the design of a building if a parking area located behind the building services it. Buildings define the street edge through their orientation, articulation and the use of a street wall that reinforce the spatial definition and rhythm of the street. Mechanical penthouses should be strategically positioned to either enhance the street edge by adding height and definition, emphasizing the research and lab-science prominence of the community, or be set back and screened with a parapet to minimize visibility from the street. This approach ensures that mechanical elements contribute to the overall architectural expression while maintaining a visually cohesive and well-integrated urban environment.

The first level of buildings will be designed to give the appearance of greater height than any other single floor with the sill of the ground floor windows located as close as is reasonably possible to the exterior ground plane (0" to 24" above the sidewalk).

In order to promote healthy lifestyle choices, main stair cases should be clearly visible from primary entries and inviting to use.

3.2.1. Building Character

Building character should reflect the distinct urban design district in which it is located–Campus Core, Fairway, or Water Gardens–ensuring a cohesive and contextually responsive built environment. Architectural expression should embrace materials and design strategies that emphasize environmental performance, economic efficiency, and technical functionality. A wide variety of architectural styles is encouraged, and buildings should exhibit form that is reflective of their function, reinforcing the identity of each district while contributing to the broader mixed-use urban campus character.

The material palette should emphasize durability, quality, and visual cohesion throughout each District. Creative use of traditional materials and unique design expression is encouraged. New material technologies that meet the performative characteristics outlined in this section are also encouraged.

If proposed, stucco and tilt-up concrete panels must be well-designed and articulated on all building faces. EIFS is not allowed.

Building material selection should follow a hierarchy that correlates with primary and secondary building facades. Primary building facades are immediately adjacent to public streets and open space (see Chapter 01.4, Urban Form Diagram). Secondary facades are visible from the public realm, while not located immediately adjacent.

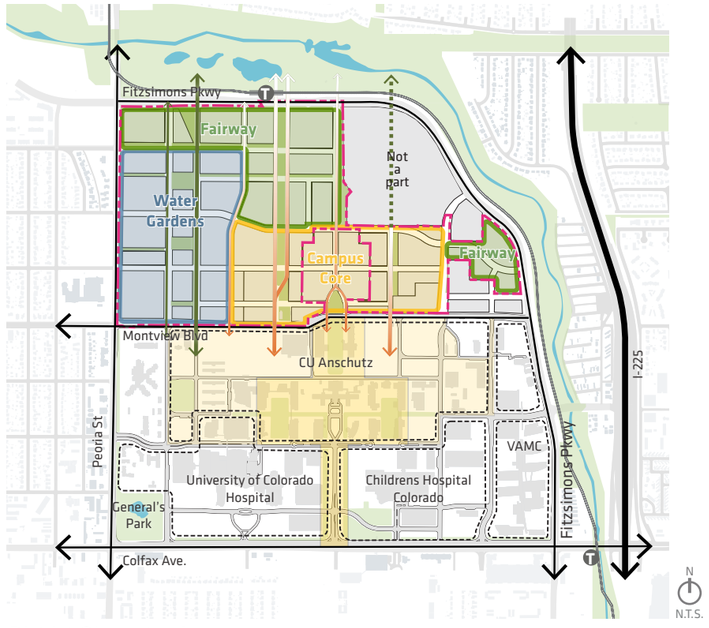
- **Campus Core:** Materials should convey a civic, high-density urban character, incorporating enduring, high-quality finishes that reinforce the district's prominence as the primary connector between the AMC and the FIC.
- **Fairway District:** Architecture should integrate a harmonious blend of natural and refined materials, responding to the site's topography and visual connections to Sand Creek Park and the Rocky Mountains, creating a balanced relationship between the built environment and parks.
- **Water Gardens District:** Buildings should feature textured materials and high visual transparency, reinforcing the district's landscape-driven identity and fostering a seamless transition between the built and natural environment.

Intent

- To express the building's function, internal organization, and/or structure. Even 'messy' functions (labs, kitchens, mechanical rooms, etc.) could be transparent. Inactive storerooms should not be transparent.
- To create a visually comfortable and environmentally responsive space.
- To create buildings that provide human scale, interest, and variation.
- To promote architectural creativity.
- To provide building height that gives spatial definition to the street.

Design Guidelines

- Modern, contemporary architecture with clean lines and materials is encouraged.
- New and innovative materials are encouraged as long as they are durable, lasting and properly detailed.
- Buildings should be designed to provide human scale, interest and variety. Examples of techniques may include:
  - Variation in the building form such as recessed or projecting bays;
  - Expression of architectural or structural module and detail;
  - Diversity of window size, shape or patterns that relate to interior functions;
  - Emphasis of building entries through projecting or recessed forms, detail, color, or materials;
  - Variations of materiality, material modules, expressed joints and details, surface relief, color, and texture to scale;
  - Bay column spacing that subdivides the facade into smaller, more human scaled elements.
- Buildings should express their functions, particularly special or unique functions.
- Buildings shoud express any technical or mechanical elements related to their function and/or to environmental sustainability.



District Character Areas

3.2.2. District Building Character

Fairway

Water Gardens

Campus Core

3.2.3. Building Form and Massing

Building form and massing should be used to frame the public realm and create a pedestrian scale, urban environment.

Intent

- To create occasional 'gems', through special building forms and design quality, which terminate views, create a unique skyline, and aid in way-finding.
- To moderate scale changes between non-residential and residential uses.
- To emphasize important components of a building, such as an entry, or a special internal space.
- To promote sun and sky exposure to public streets and plazas.
- To consider the relationship between building and site topography.
- To promote solar access at street level and parks.

Design Guidelines

- Building height should be a minimum of four stories. Proposals diverging from this base standard must be addressed during the review process, and active uses at the ground level should be incorporated as a conditional use.
- Varied building form and facade articulation should be used to break up long wall faces.
- Building forms should respond to important gateway locations and view termini.
- Buildings should integrate key datums from the surrounding built and natural environment to establish a cohesive urban fabric, reinforcing visual continuity and contextual harmony within the Fitzsimons Innovation Community. These datums should wrap around buildings.
- Lower building heights or upper level step backs are encouraged on the south or east side of the street or public space in order to provide more solar access at the ground level.

3.2.4. Building Facade and Materiality

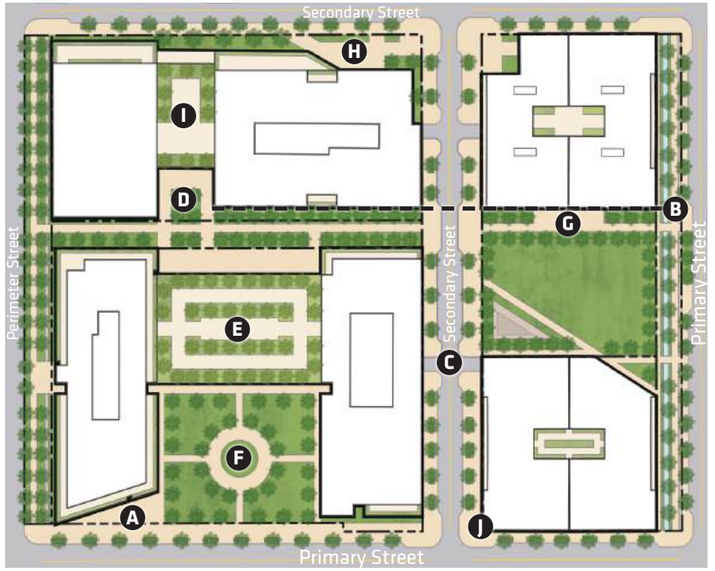
To create a lasting, high-quality environment throughout the campus, all building facades should be given design consideration and should be well-detailed. Priority in material choice should be given to facades adjacent to and/or visible from primary and secondary streets, parks, and mid-block connections. Each building oriented to a street or park should provide architectural scale through modulations and/or articulation in the façade and building massing, including: expression of the building's structure, changes in wall plane or height, patterns of window, door, or other openings.

Intent

- To create visually interesting facades, particularly those that face streets or parks.
- To avoid large areas of undifferentiated or blank facades.
- To provide human scale and detail.
- To use materials that convey a sense of quality and attention to detail.

Design Guidelines

- A significant portion of the facade facing a street or public park (not including windows and doors) should be composed of highly durable materials such as brick, stone, architectural precast or cast-in-place concrete, cast stone, specially treated concrete masonry units, glass, architectural metal panels, durable synthetic materials such as architectural glass fiber reinforced concrete.
- Above listed materials are encouraged to be used in new and inventive ways, which embody the campus's commitment to innovation and progress, particularly in the design of landmark buildings. For background buildings, these material standards shall apply only to primary facades facing the public realm or along designated primary and secondary streets, ensuring visual continuity and quality where buildings interface with the public.
- New materials and technologies not listed above may be included at the discretion of the reviewing authority. Performative characteristics should be presented and should be aligned with the base standards of quality, durability, environmental efficiency, and reinforcing district character.
- Materials that convey a sense of quality, weather well, resist vandalism, gracefully age and require little maintenance should be utilized.
- Materials that incorporate human scale in their modules, in their ability to receive detail, or in their inherent texture are encouraged.
- Avoid the use of synthetic materials that imitate 'natural' materials as much as possible.
- Use new synthetic materials in ways that reflect their intrinsic characteristics.



Hypothetical Buildout to Illustrate Urban Design Concepts

A. Use building forms to define campus gateways (3.2.3).
B. Align buildings forms with adjacent buildings (3.2.3).
C. Locate service access off of secondary and tertiary roadways (3.1.4).
D. Use building forms to define access to surrounding park spaces (3.1.1).
E. Connect buildings through shared amenities and terraces (3.3.1).
F. Create visual connections to park spaces and surrounding amenities through publically accessible private open space (2.3.1).
G. Activate park space network through building entries and wayfinding forms (3.1.2).
H. Activate intersections with building entries and wayfinding forms (3.1.3).
I. Develop a vocabulary of courtyard terraces on south facades (3.3.1).
J. Active ground floors with transparency on main and secondary facades (3.2.5).

3.2.5. Active Uses and Building Transparency

Active ground floor uses shall be located on primary streets, parks, and at mid-block connections as an extension of the public realm.

Active uses include all permitted primary uses and prioritize locating public-facing functions adjacent to the public realm to attract and generate pedestrian activity.

The use of glass should compliment active uses by providing transparency and a sense of openness that reinforces the connection to public realm. The use of expansive areas of glass at street level will help to animate streets, sidewalks and parks for all users. All glazing at street level should be highly transparent. The use of translucent areas of glass may be considered in locations where interior function dictates.

Intent

- To promote an active, pedestrian-friendly ground plane.
- To provide transparent glazing at the ground floor that provides visibility between the public realm and internal uses.
- To provide transparent upper level glazing to promote visual connection between upper levels and public realm.
- To reduce glare from reflective glass.
- To allow for the use of coated or tinted glass to reduce heat gain, particularly on west and south facades.
- To allow for operable windows, where appropriate to allow for passive cooling.

Design Guidelines

- Active ground floor uses include all primary uses except the following: storage, drive thru facilities, parking spaces, and parking aisles. Active uses shall occupy a building's ground floor for a minimum of 15' depth.
- Active ground floor uses shall be reinforced with highly transparent ground floor building facades to galvanize pedestrian activity within the public realm.
- When transparency is in conflict with internal functions, other means should be utilized to activate the street such as public art, architectural ornament or detailing, landscape within the allowable build-to zone; or material, texture, or color patterns.
- To ensure high level of transparency at the ground level, the coefficient of transparency should be at least 0.65.
- For upper floors, the use of high performance reflective glass, while reducing possible glare, and maintaining some transparency, the reflective coating should be on the second or third surface, and the coefficient of reflectivity should not be higher than 0.20.
- Continuous ribbon windows are discouraged.

Building transparency example, black areas represent glazing

3.2.6. Rooftop Mechanical

Intent

Building rooftop mechanical equipment, such as HVAC systems, exhaust fans, air exchanges, etc. that often characterize science buildings, as well as solar panels, should be either screened from view of surrounding public rights-of-way or be integrated into the design of the building. These roof forms should respect the context of height, proportions, views of the building from other buildings and the skyline.

Design Guidelines

- Vent, stacks, fans etc. if exposed should be painted or made from quality materials.

3.3.1. Internal Courtyards, Plazas, and Parks and Rooftop Amenity Decks

Encourage rooftop uses: community rooms, decks, pools, great views of mountains where feasible.

Intent

- To create useable parks that are an extension of the work environment suitable for working outdoors, informal meetings, lunch, stress relief, and sitting in shade in the summer and sun in the winter.

Design Guidelines

- Consider reasonable water conservation practices.
- Consider summer/winter solar access when designing plaza space.
- Consider other plazas and courtyards designs on campus in order to provide a different experience that adds richness to the campus by providing a variety of or unique spaces and places.

3.3.2. Screening, fencing and walls

Intent

- To screen or buffer service areas, refuse containers and utility fixtures from views from streets, parks and adjacent properties.
- To encourage informal oversight of common spaces while allowing for privacy.
- To provide security for ground level private and common spaces not open to the general public.
- To screen surface parking lots from streets and parks.

Design Guidelines

- Well-designed security gates may be utilized to allow limited access to interior courtyards through open passages between public and private spaces.
- Generators and transformers are preferred to be located in services areas, not within the right-of-way, and screened from public view whenever possible. Cohesive design of screen walls and adjacent building facades is encouraged.

* See Chapter 5 for surface parking screening requirements.

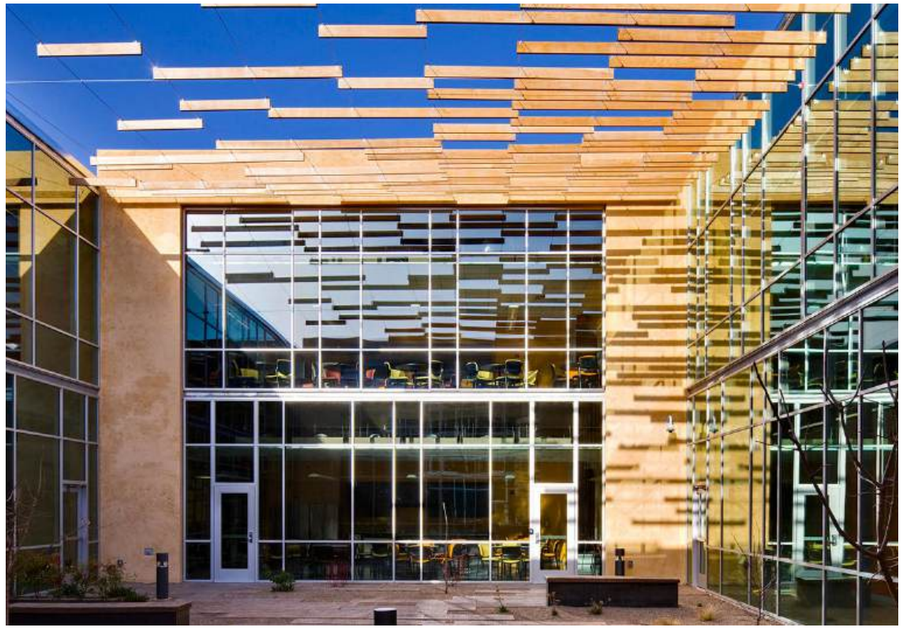
3.3.3. Site furnishings

Intent

- To provide consistency and durability in the design of site elements such as railings, bollards, trees grates, benches and trash receptacles.

Design Guidelines

- Provide seating in private parks accessible to the public.
- Provide trash receptacles at areas where pedestrian activity is expected



Shade system creates visual interest.

Interior courtyard connects to public spaces.

Places to sit in the sun.

Trees within courtyard create a calming work environment.

Bike parking integrated into public realm.

- Provide bicycle storage at safe and convenient locations.
- Provide power outlets for laptops and charging stations for phones, tablets, etc. in order to encourage use of outdoor areas as alternative work spaces.

3.3.4. Paving

Intent

- To provide safe paving conditions for all persons.
- To create interest and variation within paved surfaces.

Design Guidelines

- Use a quality of paving materials and patterns consistent with the quality of the surrounding architecture and parks.
- Use paving to differentiate between functional areas in plazas, drop-off areas, and sidewalks.
- Consider environmentally sustainable paving materials.

3.3.5. Plant Materials

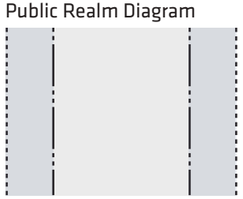
Intent

- To create comfortable and interesting environments.
- To save and reuse existing trees as much as possible. This should be coordinated with a golf course tree protection plan.

Design Guidelines

- Use quality plant materials that are located, sized and provided in quantities sufficient to emphasize important streets, plazas, and parks.
- Select plants based on regional water conservation practices.
- Use plant material within the private portion of the public realm (i.e. build-to zones) that is complimentary with landscape palette withing the R.O.W.
- See Landscape Design Guidelines, section 2.4 approved list of plant species.

Public Realm Diagram



*Build-to-Zone is part of the public realm. Landscape materials should compliment R.O.W. landscape character.

Rich texture of planing and paving materials.

Provide a variety of seating and gathering options.

Colorful, drought-tolerant plant selections.

3.4.1. Building Lighting

Intent

- To accentuate important architectural components of the building, such as entries, towers or roof elements, or repetitive columns or bays.
- To provide lighting for safety and ease of access at building entries.
- To provide indirect or direct lighting for adjoining sidewalks and parks.

Design Guidelines

- Entries should be defined with lighting that balances with the interior lobby illumination and creates a sense of visual hierarchy.
- Consider upper facade lighting to softly illuminate the top of buildings providing a subtle skyline presence.
- Down lighting is encouraged to reduce night sky light pollution. However, architectural lighting of special features is allowed if used thoughtfully and sparingly.

3.4.2. Site and Parking Lot Lighting

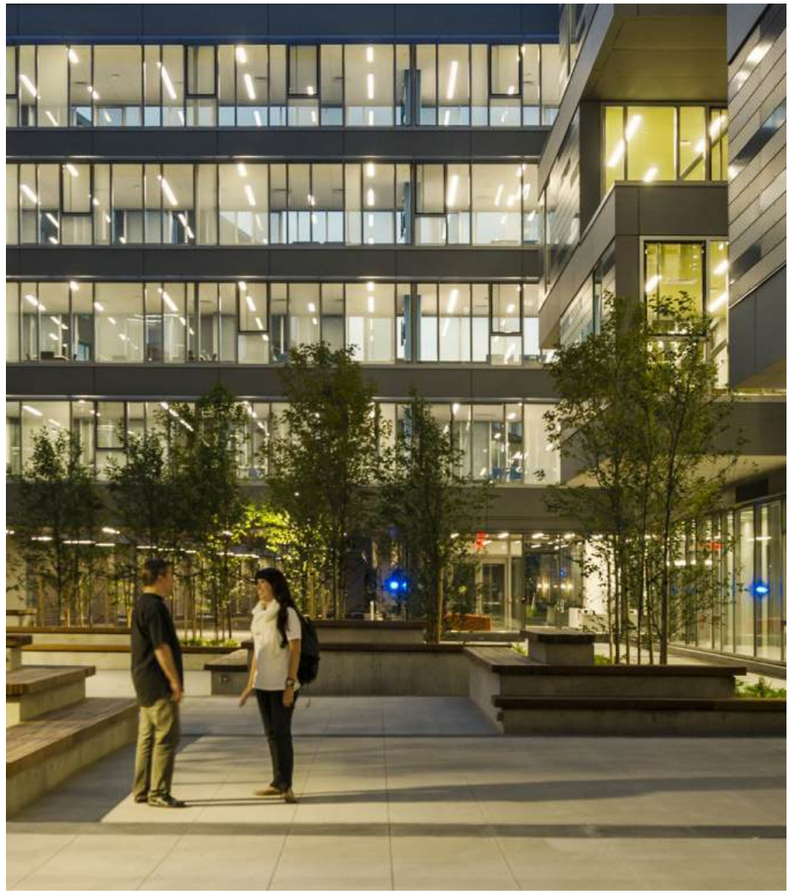
Intent

- To provide a safe and secure environment within parking lot, drop-off areas, and private or publicly-accessible parks.
- To provide a safe and secure environment for all exterior walkways.
- To distinguish the parking lot lighting system from the street lighting system in order to clarify the 'street' from the parking lot and its circulation system.
- To create night-time interest through the lighting of landscape elements.

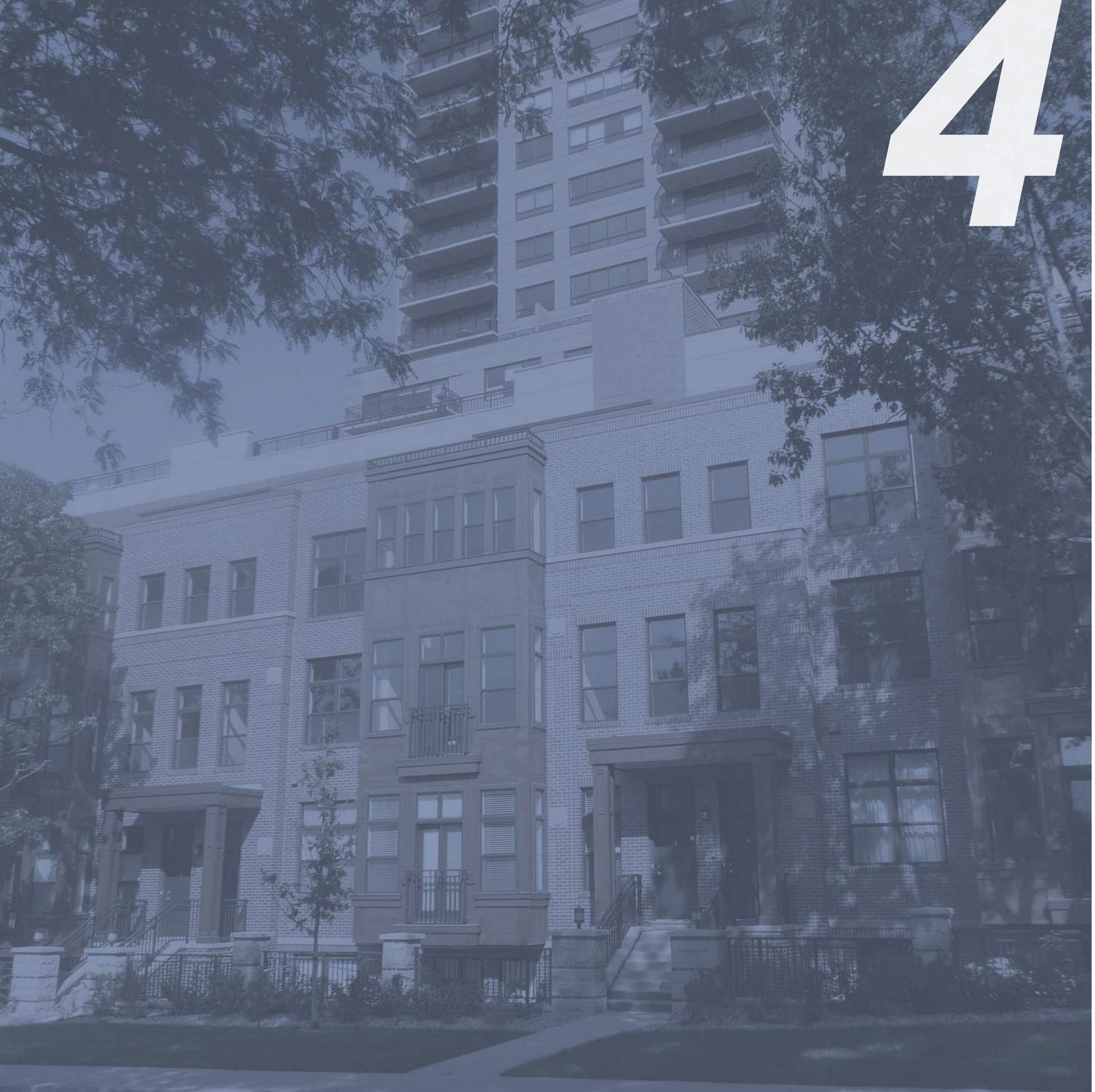
Design Guidelines

- Dark sky fixtures shall be utilized in parking areas to minimize light pollution.
- LED lighting should be utilized.
- Unique or artistic lighting may be used in plazas and/or courtyards to create a distinct and attractive evening environment.
- Maximum 25' tall lighting fixtures within parking areas, consistent with Aurora UDO 4.9.2.
- Minimum 1.0 footcandles on all walking paths, consistent with Aurora UDO 4.9.2. Minimum 2.0 average footcandles in parking areas, consistent with UDO 4.9.3. Maximum average footcandle of 3.0.

Bollard lights create low light levels and promote dark sky principles.



Ambient building lighting creates comfortable and safe environment.



4

RESIDENTIAL SITE PLAN DESIGN GUIDELINES

4.1.1. Building Entry and Pedestrian Circulation

Given the important role each building plays in the master plan, the design planning process for each building should begin with an analysis of the immediate context and the site's designated role within the campus framework. This preliminary design process will include an analysis of pedestrian movements to and from existing and planned parking areas, public open spaces, retail core areas, the RTD Light Rail Station and bus stops. It will also include an analysis of the site's relationship to existing pedestrian routes that connect to the University of Colorado Medical Campus.

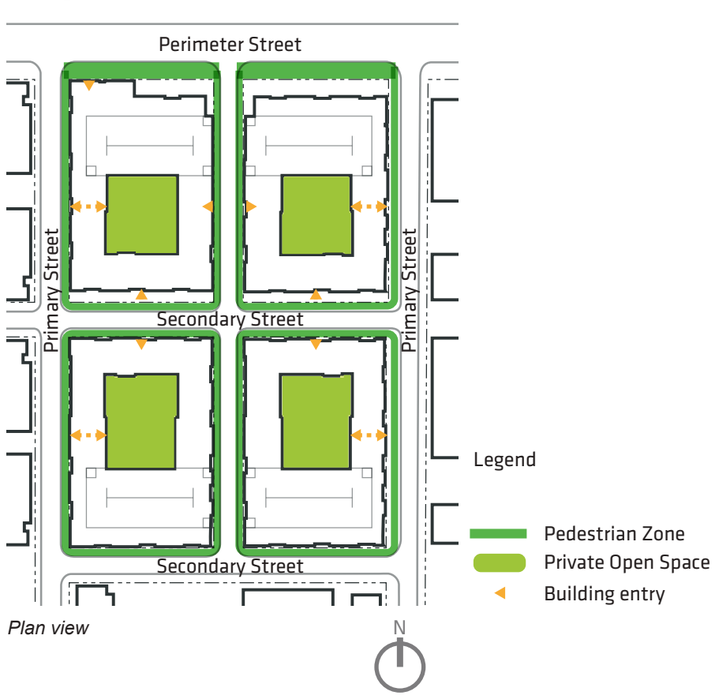
Intent

- To promote a sense of individuality among the various properties within the block.
- To promote security through frequent activity and "eyes on the street."
- To promote activity and safety on the street by providing frequent entries to buildings and uses.
- To visually emphasize the major entry or entries to a building or ground floor use.
- To detail and elaborate entries as another way to create street level interest and architectural variety.
- To maximize generally uninterrupted pedestrian ways (including paths, sidewalks and lanes) in order to create a walkable neighborhood.

Design Guidelines

- All buildings should have primary pedestrian entrances on primary streets that provide the building with its address. Entrances should serve individual units, public lobbies or common spaces.
- Multifamily buildings that are sited between a street and a surface parking area should have a pedestrian entrance on both the parking area side to gain access from their cars, and along the public street to provide an address for visitors. It is anticipated that residents will use the building's street entrance to conduct local errands and will activate the streetscape as they walk to their intended destination.
- Building entrances facing parking lots should be coordinated with building service areas to avoid conflicts between pedestrians and service vehicle movements.
- Residential buildings adjacent to an open space or linear park should incorporate a secondary entrance, primary entrance, ground-floor commercial space, amenity space, or individual unit entrances to actively engage with the open space and enhance the public realm.
- Walk-up unit entrances are permitted along primary and secondary streets but must be either elevated, separated by a grade change, or set back a minimum of 10 feet (preferred) with a landscaped area to minimize visibility into units. This ensures a clear distinction between the public and private realm while maintaining resident privacy.
- Building entrances on streets should be clearly demarcated and articulated on the street-wall. Canopies at building entrances are highly recommended.

Building Entries and Pedestrian Circulation



Plan view

4.1.2. Vehicular Circulation and Service Areas

Vehicular circulation and the proper location of building service areas is critical to the function of each building and site plan. Preferred locations for building service areas are along dedicated Secondary Streets or Tertiary Ways, which includes service streets and access drives surrounding the perimeter of parking areas. Service areas should not be directly accessed from Perimeter Streets, Open Space or Primary Streets unless no other reasonable access is available. Service areas should be located out of sight from the primary building entrance.

Building service areas may be one of the following; loading docks internal to buildings, shared exterior loading courts located external to, and between two adjacent buildings, and screened, external service courts. The number of loading bays for any given building will be based upon building size and use.

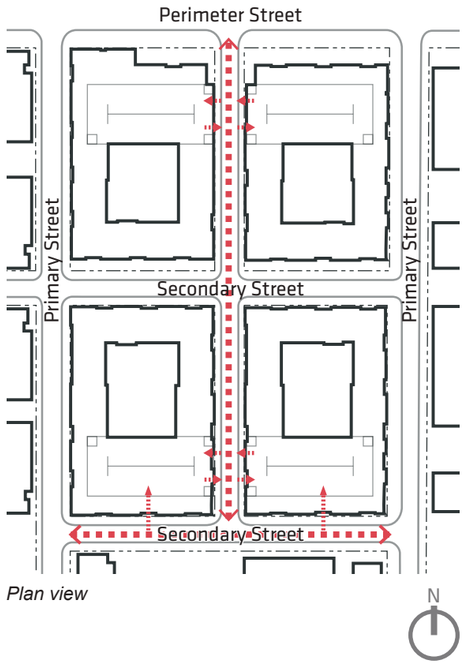
Intent

- To create a clearly organized system of entrances, driveways and parking areas.
- To promote the safe and efficient movement of vehicles, pedestrians and bicyclists.
- To minimize conflicts between automobiles and pedestrians.
- To minimize the visual presence of auto circulation and related functions such as parking and refuse pickup.
- To minimize driveway paved areas and curb cuts to reduce overall visual impact to the street.
- To provide clear and logical vehicular access and circulation.
- To minimize the visual impact of service areas.
- To minimize conflicts between automobiles and pedestrians.
- To provide adequate service truck access.

Design Guidelines

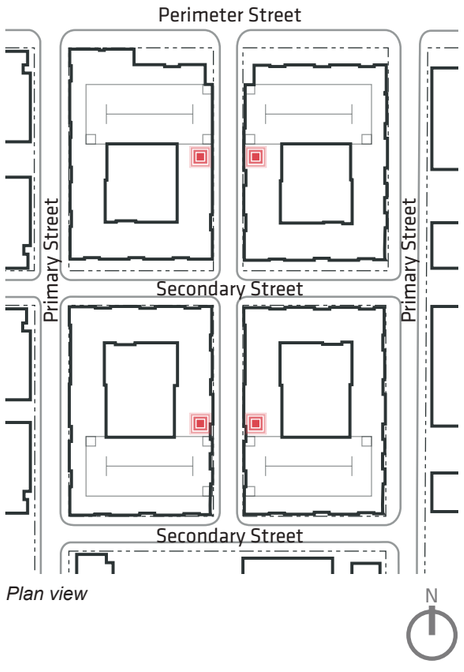
- All internal service areas will be equipped with closeable, rolling overhead doors and bollards to protect building cladding.
- Service areas should be located off tertiary ways, drives, or alleys.
- All exterior service courts and loading areas shall be screened from view by architectural elements, screen walls, landscaping, or some combination.
- Typical loading docks and service courts should accommodate garbage and recycling trucks and fixed axle moving trucks.
- Internal service bays should be properly dimensioned, and shared external service courts will be located so that trucks will not project into the street or onto adjacent sidewalks.
- Service areas should be designed to minimize the disruption to on-street parking, street tree patterning, and street lighting.
- Special care should be taken to treat all service doors, service access streets, and service areas with streetscape and building design details in order to render them of equal pedestrian value to typical streets. For example, sidewalk paving materials will continue across service access curb cuts so that pedestrian routes remain uninterrupted along the edge of the streets, regardless of service door locations. Landscape and lighting will also maintain continuity through the service areas.
- Tuck-under service areas are permitted provided they maintain architectural continuity, are not oriented toward the street, ensure safe and efficient access from internal circulation drives, and provide appropriate screening to minimize visual impact from the surrounding streets.

Parking Access



Plan view

Building Service Access



Plan view

Legend
Parking garage entrance
Service area

4.1.3. Private Amenitized Open Space

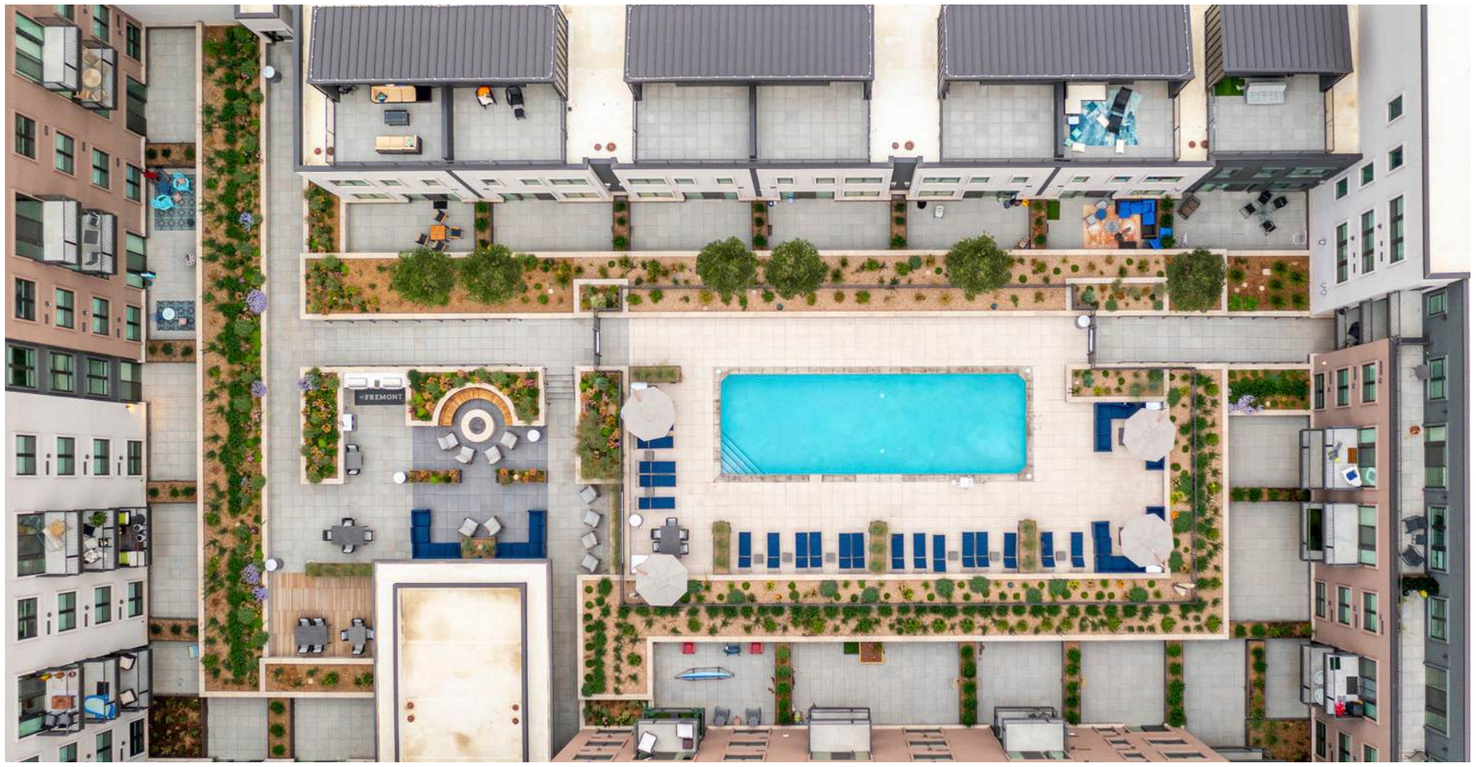
An open area at ground or elevated level accessible to the residents at all times, and not within the right-of-way, which is unobstructed from its lowest level to the sky, although it may contain arbors, trellis, gazebos, picnic covers, sun shades and other non-enclosed roof-like forms that add to the usability and enjoyment of outdoors. If private open space is located at ground level and visually connected to the public realm, landscape and hardscape design should be coordinated between the two, creating a seamless and integrated transition between public and private spaces.

Intent

- To create usable open space that is connected, either directly or through secure entry, to the overall open space network.
- To encourage reasonable water conservation practices.
- To provide private exterior space for residents.
- To provide private exterior open spaces through the use of balconies, rooftop plazas, and interior courtyards.

Design Guidelines

- Consider measurable water conservation practices.
- Consider summer/winter solar access when designing exterior spaces.
- Utilize quality, durable, paving and furnishings.
- Consider low water or xeriscape landscape materials.
- Provide open spaces, suitable for passive recreational activities such as informal play, reading, sitting in the sun or shade.
- Provide passive or recreational uses that may include pools, courtyards, playgrounds or other uses intended for the to enjoyment of the residents.
- Minimum amenitized open space standard is 10% of the parcel site area (SF). A reduction from this base standard is within the DRB's purview and may be considered based on factors such as connection to surrounding parks, parcel use type, and project application. Buffer zones between the building and public realm may be considered to meet this requirement if design is demonstrated to be above base performance standards.



Well designed private open spaces provide respite from urban environment and promote social gathering.

While the Public Realm Guidelines describe the macro-scale of the urban street edge which defines the major streets, primary open spaces and gateways, the micro-scale of the street-edge will operate at the scale of individual buildings.

The network of streets, linear parks and open spaces shapes the identity of each FIC District—Campus Core, Fairway, or Water Gardens—gradually transitioning from a formal character in the Campus Core to a more natural setting near Sand Creek Park. Similarly, architecture should respond to the character within its district to reinforce the urban and ecological context of each area.

Residential buildings should be sited and designed to reinforce the public realm by fronting Primary Streets and Primary Open Spaces with entries and ground level active uses. Human scaled facade articulation, architectural detailing, handsome materials, and variations in the wall depth create a pedestrian scale and inviting street edge. Special emphasis should be given to distinctive articulation of individual building entrances and street corner elements.

Residential buildings must have at least one primary entrance located on either the Primary Street serving as its address or the longest street frontage. This entrance should be integrated with the streetscape design and directly connected to a public sidewalk, except in cases where primary entries front public plazas or primary open spaces. Common entrances and lobbies with through-building connections should be incorporated into the design of multi-family buildings if it connects to an internal courtyard or to a parking area that services the building. Buildings should define the street wall through distinct articulation and a minimum four-story facade height, reinforcing the pedestrian scale and establishing a strong rhythm along the street. Mechanical penthouses should be strategically positioned to either enhance the street edge by adding height and definition or be set back and screened with a parapet to reduce visibility from the street. This ensures mechanical elements are integrated into the architectural design, maintaining a cohesive and visually harmonious urban environment.

Walk-up units should have individual entries located on primary or secondary streets or along the FIC park network, and must be attached to a parking structure, adjacent to structured parking, or incorporate internal tuck-under parking that is screened from the public realm. Detached townhome and rowhouse typologies are not permitted to maintain the desired density and urban character of the campus.

The first floor of residential buildings with ground-level units may be elevated up to 4 feet (maximum) above sidewalk level to enhance privacy and create a clear distinction between public and private space while maintaining a strong connection to the streetscape.

4.2.1. Building Character

Building character should reflect the distinct urban design district in which it is located—Campus Core, Fairway, or Water Gardens—ensuring a cohesive and contextually responsive built environment. Architectural expression should embrace materials and design strategies that emphasize environmental performance, economic efficiency, and technical functionality. A wide variety of architectural styles is encouraged, and buildings should exhibit form that is reflective of their function, reinforcing the identity of each district while contributing to the broader mixed-use urban campus character.

The material palette should emphasize durability, quality, and visual cohesion throughout each District. Creative use of traditional materials and unique design expression is encouraged. New material technologies that meet the performative characteristics outlined in this section are also encouraged.

If proposed, stucco and tilt-up concrete panels must be well-designed and articulated on all building faces. EIFS is not allowed.

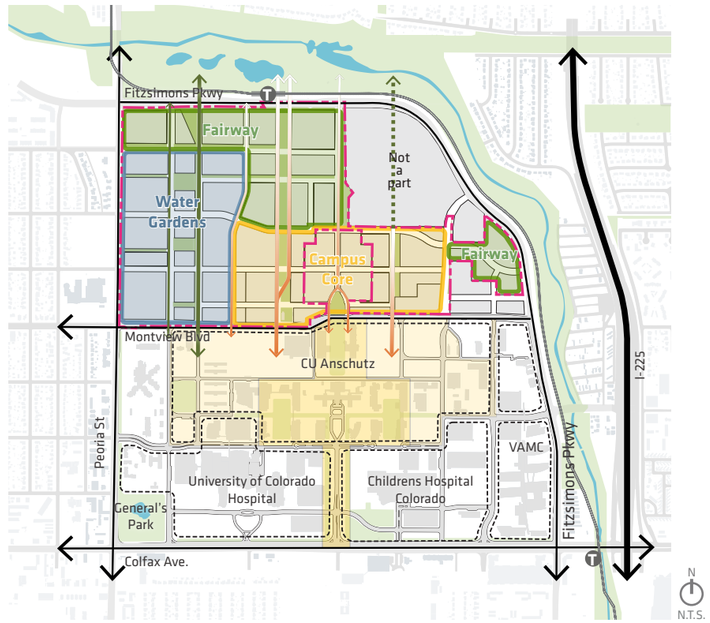
- **Campus Core:** Materials should reflect a civic, high-density urban character, incorporating durable, high-quality finishes that reinforce the district's prominence. Buildings should actively engage the ground floor through amenity spaces, commercial uses, and individual unit entrances, fostering strong street-level interaction between developments and the public realm.
- **Fairway District:** Architecture should integrate a harmonious blend of natural and refined materials, responding to the site's topography and prioritizing visual connections to Sand Creek Park and the Rocky Mountains. Residential structures should take advantage of grade changes, enabling the use of podium or wrapped construction typologies that support street-level access and engagement with sidewalks and open space networks.
- **Water Gardens District:** Buildings should feature textured materials and orient high-visibility areas along open space corridors and linear parks, reinforcing the district's landscape-driven identity and fostering a seamless transition between the built and natural environment. Residential structures should engage public open spaces through amenity or commercial spaces, as well as building or unit entrances adjacent to open areas, ensuring active street-level interaction and direct public realm access.

Intent

- To express the building's function, internal organization, and/or structure.
- To create buildings that provide human scale, interest, and variation.
- To promote architectural creativity.

Design Guidelines

- Modern, contemporary architecture with clean lines and materials is encouraged.
- The use of materials that are economically viable, environmentally responsible, and exemplify best construction practices is encouraged, as long as they are durable, long-lasting, and meticulously detailed to ensure both quality and longevity within the built environment.
- Buildings should be designed to provide a human scale, actively engage the public realm, and offer visual interest and variety. Integrated retail spaces should be located on primary streets, open space corridors and/or at mid-block connections. Additional techniques to engage the public realm may include:
  - Variation in the building form such as recessed or projecting bays;
  - Expression of architectural or structural module and detail;
  - Diversity of window size, shape or patterns that relate to interior functions;
  - Emphasis of building entries through projecting or recessed forms, detail, color, or materials;
  - Variations of materiality, material modules, expressed joints and details, surface relief, color, and texture to scale;
  - Bay column spacing that subdivides the facade into smaller, more human scaled elements.



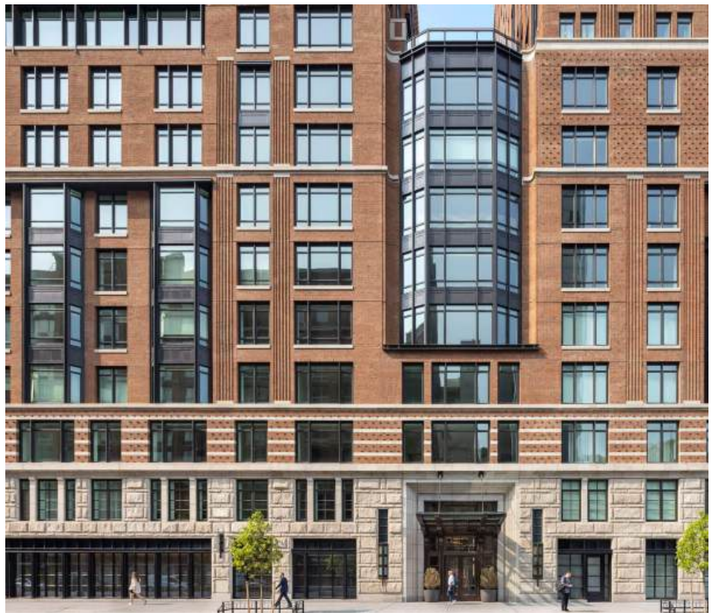
District Character Areas

4.2.2. District Building Character

Fairway

Water Gardens

Campus Core



4.2.3. Building Form, Orientation and Massing

Intent

- To create occasional 'gems' through special building forms and design quality which terminate views, create a unique skyline, and aid in way-finding.
- To moderate scale changes between non-residential and residential uses and also between higher and lower buildings.
- High-density development is encouraged for residential buildings along Fitzsimons Parkway and Scranton Parkway, taking advantage of the site's topography and views to key environmental assets.
- To emphasize important components of a building, such as an entry, or a special internal space.
- To promote sun and sky exposure to public streets and plazas.
- To consider the relationship between building and site topography.
- To provide private exterior space for each dwelling unit.
- To provide common exterior open spaces through the use of courtyards or rooftop plazas.
- To design primary building facades that face streets and significant public spaces with the highest quality, character and scale.
- To design the secondary building facades along the sides and rears of buildings with good detailing and proportion relative to the primary facade.

Design Guidelines

- Residential buildings should have a minimum height of four storys.
- Varied building form and facade articulation should be used to break up long wall faces.
- Buildings should integrate key datums from the surrounding built and natural environment to establish a cohesive urban fabric, reinforcing visual continuity and contextual harmony within the Fitzsimons Innovation Community. These datums should wrap around buildings.
- Building forms should be designed to enhance gateway locations and frame key view corridors to open spaces and natural landscape features.
- Upper-level step backs are encouraged for high-density residential buildings on the south or east side of streets or public open spaces to ensure adequate solar access at the ground level.
- Porches or stoops are encouraged to mark individual unit entrances and may be placed within the build-to zone, provided they enhance the public realm with appropriate landscape screening.
- Exterior balconies should not extend into the public R.O.W.

4.2.4. Building Facade and Materiality

To create a lasting, high-quality environment throughout the campus, all building facades should be given design consideration and should be well-detailed. Priority in material choice should be given to facades adjacent to and/or visible from primary and secondary streets, open spaces, and mid-block connections. Each building oriented to a street or public open space should provide architectural variety and scale through minor variations in the façade and building massing, including: expression of the buildings structure, changes in wall plane or height, patterns of window, door, or other openings.

Intent

- To create visually interesting facades, particularly those that face streets or open spaces.
- To avoid large areas of undifferentiated or blank facades.
- To provide human scale and detail.
- To use materials that convey a sense of quality and attention to detail.

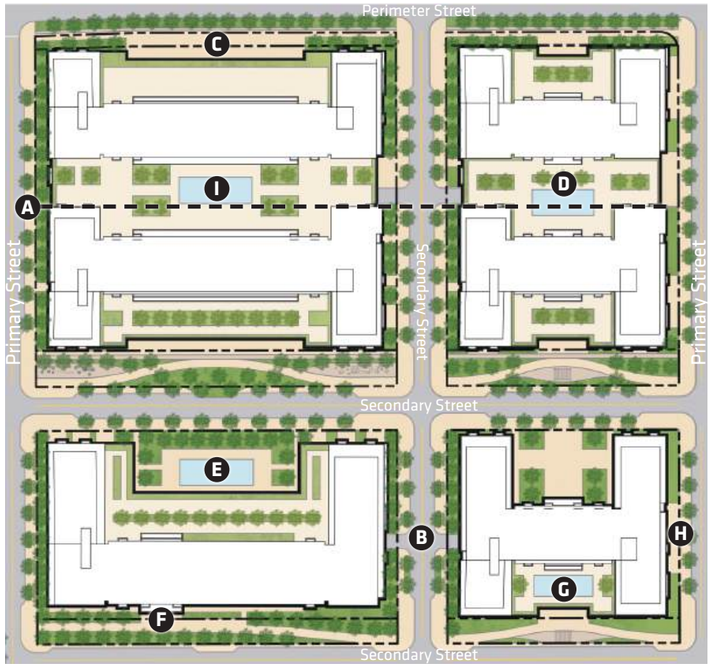
Design Guidelines

- A significant portion of the facade facing a street or public open space (not including windows and doors) should be composed of highly durable materials such as brick, stone, architectural cast concrete, cast stone, specially treated concrete masonry units, glass, architectural metal panels, durable synthetic materials such as architectural glass fiber reinforced concrete or plastic.
- Above listed materials are encouraged to be used in new and inventive ways, which embody the campus's commitment to innovation and progress.
- New materials and technologies not listed above may be included at the discretion of the reviewing authority. Performative characteristics should be presented and should be aligned with the base standards of quality, durability, environmental efficiency, and reinforcing district character.
- Materials that convey a sense of quality, weather well, resist vandalism, gracefully age and require little maintenance should be utilized.
- Materials that incorporate human scale in their modules, in their ability to receive detail, or in their inherent texture are encouraged.
- The use of synthetic materials that imitate 'natural' materials as much as possible, and to use new synthetic materials in ways that reflect their intrinsic characteristics should be avoided.

4.2.5. Rooftop Mechanical

Intent

Building rooftop mechanical equipment should be screened from view of surrounding public rights-of-way or be integrated into the upper levels of the building massing in order to reinforce the urban characteristics of the street-wall. These roof forms should respect the context of height, proportions, views of the building from other buildings and the skyline. Vents are strongly discouraged on the primary building facades and should be routed to the roof. High efficiency furnaces and water heaters, dryer vents, and stove hood vents should extend to the roof or rear facades. Vents should be avoided on facades facing the public realm, unless necessary for high-density development, in which case they should be integrated into the building form and architectural character.



Hypothetical Buildout to Illustrate Urban Design Concepts

A. Align buildings forms with adjacent buildings (4.2.3).
B. Locate service access off of secondary and tertiary roadways (4.1.2).
C. Use building forms to define access to surrounding park spaces (2.3.1).
D. Connect buildings through shared amenities and terraces (4.1.3).
E. Create visual connections to park spaces and surrounding amenities through publically accessible private open space (2.3.2).
F. Activate park space network through building entries and wayfinding forms (4.1.1).
G. Develop a vocabulary of courtyard terraces on south facades (4.1.1).
H. Active ground floors with transparency on main and secondary facades (4.2.3).
I. Integrate interior courtyards prioritizing access to natural daylight (4.1.3).

4.3.1. Internal courtyards, plazas, open spaces, private balconies and rooftop amenity decks

Intent

- To create shared usable open spaces that are usable for range of ages and abilities.
- To create shared usable open spaces suitable for passive recreational activities such as informal play, reading, sitting in the sun or shade.
- To create private exterior open spaces in the form of balconies or roof top patios.
- To create common open space as an extension of common interior space.

Design Guidelines

- Amenitized rooftops with integrated planting areas are encouraged to create a sense of enclosure and cohesion between the public and private realms.
- Consider reasonable water conservation practices.
- Consider how building form affects summer/winter solar access when designing exterior spaces.

4.3.2. Screening, fencing and walls

Intent

- To screen or buffer service areas, refuse containers and utility fixtures from views from streets, open spaces and adjacent properties.
- To encourage informal oversight of common spaces while allowing for privacy.
- To provide security for ground level private and common spaces not open to the general public.
- To screen surface parking lots from streets and open spaces.

Design Guidelines

- Rooftop mechanical equipment should be screened with a material that coordinates with the building's architecture, particularly when adjacent to amenitized rooftop areas.
- Well-designed security gates may be utilized to allow limited access to interior courtyards through open passages between public and private spaces.

* See Chapter 5 for surface parking screening requirements.

4.3.3. Site furnishings

Design Guidelines

- Provide seating in private or open spaces accessible to the public.
- Provide trash receptacles at areas where pedestrian activity is expected.
- Provide consistency and durability in the design of site elements such as railings, bollards, trees grates, benches and trash receptacles.
- Provide bicycle storage at safe and convenient locations.

4.3.4. Paving

Intent

- To utilize a quality of paving materials and patterns consistent with the quality of the surrounding architecture and open spaces.
- To create interest and variation within paved surfaces.
- To differentiate between functional areas in plazas, drop-off areas, and sidewalks.

Design Guidelines

- Provide safe paving conditions for all persons.
- Provide environmentally sustainable paving.

4.3.5. Plant Materials

Intent

- To use quality plant materials that are located, sized and provided in quantities sufficient to emphasize important streets, plazas, and parks.
- To encourage plant selection based on regional water conservation practices.
- To save and reuse existing trees as much as possible.
- To use plant material within the private portion of the public realm (i.e. build-to zones) that is complimentary with landscape palette withing the R.O.W.
- To provide buffer between public and private spaces.

Design Guidelines

- See Landscape Design Guidelines, section 2.4 for approved list of plant species.

Design residences with families in mind.

4.4.1. Building Lighting

Intent

- To accentuate important architectural components of the building, such as entries, towers or roof elements, or repetitive columns or bays.
- To provide lighting for safety and ease of access at building entries.
- To provide indirect or direct lighting for adjoining sidewalks and open spaces.

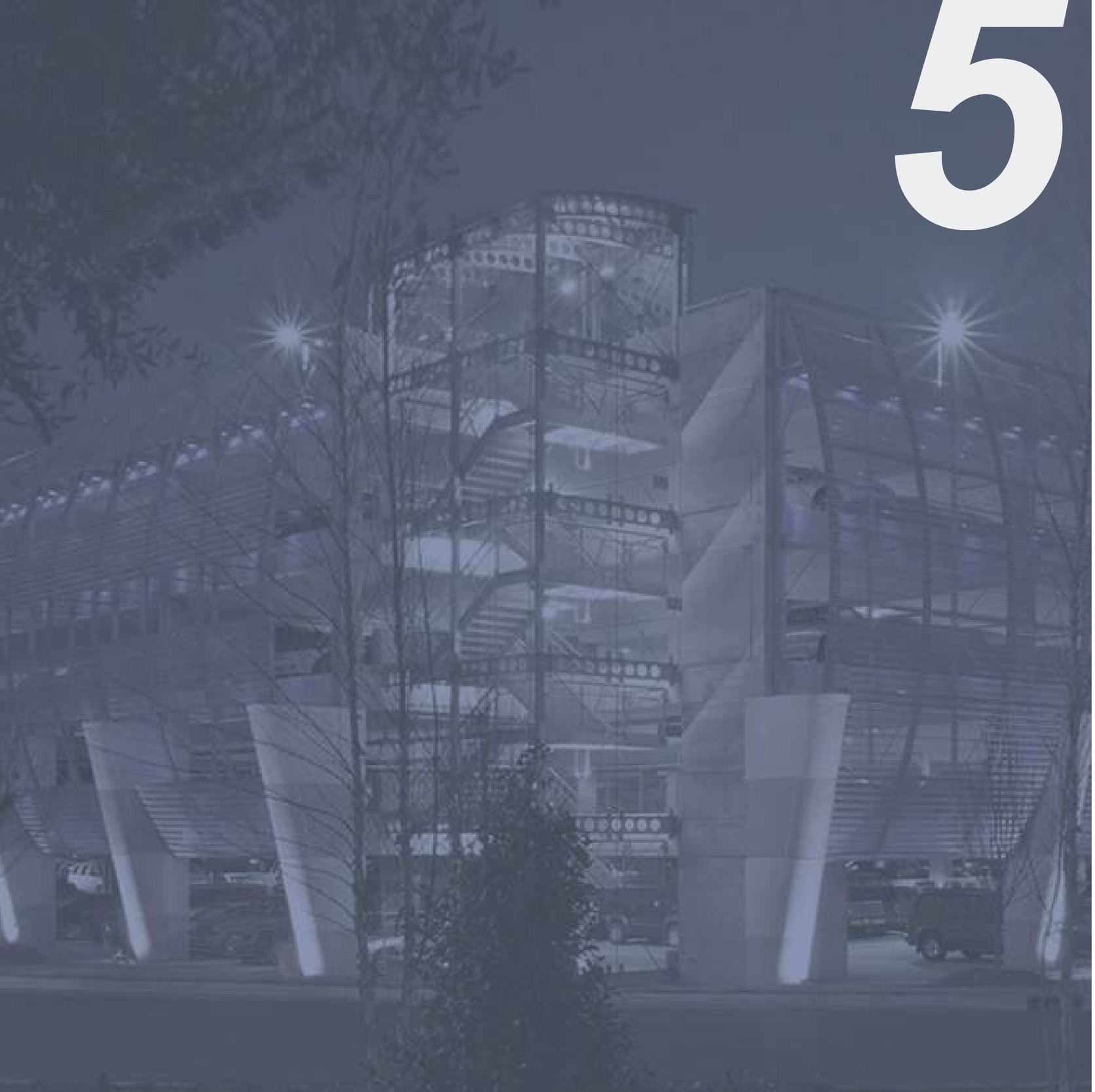
4.4.2. Site and parking lot lighting

Intent

- To provide a safe and secure environment within parking lot, drop-off areas, and private or open spaces accessible to the public.
- To provide a safe and secure environment for all exterior walkways.
- To distinguish the parking lot lighting system from the street lighting system in order to clarify the 'street' from the parking lot and its circulation system.
- To create night-time interest through the lighting of landscape elements.
- To minimize impacts on adjacent residences.

Design Guidelines

- Dark sky fixtures shall be utilized in parking areas to minimize light pollution.
- LED lighting should be utilized.
- Unique or artistic lighting may be used in plazas and / or courtyards to create a distinct and attractive evening environment.
- Maximum 25' tall lighting fixtures within parking areas, consistent with Aurora UDO 4.9.2.
- Minimum 1.0 footcandles on all walking paths, consistent with Aurora UDO 4.9.2. Minimum 2.0 average footcandles in parking areas, consistent with UDO 4.9.3. Maximum average footcandle of 3.0.



5

PARKING

5.1 CAMPUS PARKING STRATEGY

5.2 SITE PARKING

The parking guidelines for the Fitzsimons Innovation Community are designed to achieve several important goals. These goals include reinforcing the urban design of the Campus, integrating public transportation systems, maximizing parking efficiency and incorporating flexibility in response to the evolution of the Campus and transportation.

The design guidelines reinforce the urban character of the Campus by locating surface and structured parking internal to urban blocks where it is appropriately screened from the public realm or by providing appropriate design for parking facilities located adjacent to streets. The guidelines describe optimal locations for parking with the intent to encourage pedestrian activation of the streetscape.

The guidelines incorporate enough flexibility to respond appropriately to the planned evolution of the Campus. Initially, the design strategy plans for a combination of temporary surface parking and on-street parking. As Campus density increases in later phases, the plan anticipates the transition from surface parking to structured parking developments. Although some combination of surface and structured parking may serve the building's needs at any particular time, long-term plans should only incorporate the use of structured parking to maximize parking efficiency throughout the Campus development. Upon completion of a parcel's final building phase, surface parking will not be allowed as a primary use on any Campus parcel. Wherever possible, opportunities for shared parking agreements should be considered. All developments will be required to provide the DRB with a phasing plan to show how the development parcel and/or block will be phased to incorporate structured parking in the future.

Per the GDP, most land uses will have no defined parking minimums required (except for multi-family residential). Instead, each development parcel is to submit a parking plan to show how many parking spaces the project will need, the hours of day that parking will be in use, and how parking needs will be met by new and/or existing parking resources. It is suggested that these plans include a professionally prepared shared parking study, especially for parcels that will include a mix of uses.

The parking plan should also include a strategy for managing parking resources and the transportation demand management programs (TDM) the developer intends to provide. TDM programs might include options such as car share, bike share, eco passes for employees, and/or other incentives to make use of the site-wide shuttle system, RTD rail, and other alternatives.

Structured Parking

Particular attention should be given to the design of all structured parking garages so they offer convenience and accessibility to all campus tenants and visitors. These structures should provide enough architectural detail in their massing and façade development to support the level of design quality intended for the Campus, and to enhance the overall quality of the pedestrian experience. All structured parking façades should be designed to be compatible with the pattern, articulation, scale and massing of surrounding structures within the Campus.

Special attention should be given to the design and articulation of the ground floor fenestration, particularly how it integrates with the design of the adjacent streetscape, to create a quality pedestrian environment.

Intent

- To minimize the visual impact of parking on the pedestrian experience and the street environment.
- To increase pedestrian activity and interest along the street by locating active uses at the street level of parking garages.
- To visually screen parking structures or parking podiums from public realm.

Design Guidelines

- Wherever possible, garage entries should be located on a Secondary Street or Tertiary Way and avoid vehicular entrances across from public open spaces.
- Ground floors fronting Primary or Secondary Streets or public open spaces should be lined with active uses. Other ground floor fenestration should offer views into the garage at grade, and incorporate either grilles, low walls, landscaping or a combination of these elements to screen car bumpers, tires and headlights.
- Wrapped parking structures or liner buildings are encouraged.
- Podium parking structures more than two feet above grade should be screened from view.
- Buildings located between a Primary Street and parking garages without liner buildings should must be screened at the street level.
- Facade openings should be vertically and horizontally aligned to meet building and/or contextual datums.
- Street oriented facades should conceal or effectively reduce the impact of parked cars and light sources from the exterior view for the full height of the structures.
- Artistic facade treatments should be considered where active ground floor uses are not feasible, especially along perimeter streets.
- Charging stations are encouraged.
- Internal vehicle ramps should be located off of a Secondary or Tertiary Way or relegated to the center of garages with three or more parking trays. Sloping ramps should not be visible from Primary or Secondary Streets or public open spaces.
- Vehicular entrances across from public open spaces should be avoided.
- Upper level parking that is adjacent to Primary Streets should be level and designed with a manner that is compatible with architecture of the main building. Upper level parking is allowed adjacent to Primary Streets with active ground floor use.
- Where feasible, site topography should be utilized to creatively hide parking structures partially or completely below grade.
- Garage fenestration that fronts on public open space and Primary and Secondary Streets should be given a higher level of quality and attention to architectural detail than fenestration that fronts on Tertiary Ways or adjacent structures.
- Stand alone parking structures should not be located along Primary Streets.
- Controlled access (e.g. gated or other access control) Off-Street Parking Areas shall be designed to accommodate anticipated queuing of vehicles entirely on private property and not in the public right-of-way.
- Interior lighting should be bright enough to provide a proper level of safety and security, but should be properly controlled to not spill out beyond the exterior walls.
- Emphasis should be placed upon the design and articulation of elevator lobbies and stair towers as components of the pedestrian experience, and should be appropriately separated from vehicular ingress and egress locations.
- Solar canopies are encouraged at initial buildout or to be planned for in phased development through the use of electrical stubouts, etc.

Surface Parking

There are three types of surface parking within the FIC. The first is on-street parallel parking, which is a requirement for every Primary and Secondary Street in the Campus and contributes to the required parking number calculated for each block within the master plan. The second type is surface parking lots associated with buildings. These shall be located behind buildings, screened from public view, and must be considered accessory to a parcel's primary use. The third are interim, stand alone surface parking lots. Interim surface parking lots are permitted to a maximum of 10 years per the GDP. Surface parking is not allowed as a primary use for any parcel beyond this timeframe.

Surface parking lots should meet the intent and design guidelines listed below, while also accommodating the location of building service areas and pedestrian connections. In the case of an interim parking lot, the parking lot shall consider future street locations and potential future building pad locations.

Intent

- To design surface parking areas in a manner that will allow drives and Tertiary Streets to become Secondary Streets in later phases.
- To design surface parking areas in a manner that will allow the parcel or block to densify over time with additional buildings and parking structures.
- To screen surface parking from all public streets.
- To locate parking behind or to the side of buildings.
- To buffer the view of surface parking lots and the cars on them from adjoining streets, open spaces and pedestrian ways.
- To visually separate parking lots from adjoining streets.
- To reduce the scale of surface parking lots.
- To reduce overall heat gain of paved surfaces.
- To soften the appearance of surface parking lots with landscaping.

Design Guidelines

- Surface parking shall comply with local zoning ordinances and the Americans with Disabilities Act.
- Landscape islands should break up parking rows that exceed 15 spaces.
- Consider the use of permeable paving for surface parking lots to minimize stormwater run-off.
- Consider water quality treatment areas within parking lots, especially in Campus districts that requires water quality treatment as a design characteristic.
- Terminal islands should be placed at the end of every parking row.
- Parking rows should be positioned perpendicular to building façades where possible.
- Each surface parking lot should minimize the number of curb cuts in order to maintain the continuous streetscape character of adjoining streets.
- Parking lots larger than 120 spaces should have landscaped median rows to break-up the scale of parking lots.
- A minimum of five percent of the parking area should be landscaped. Landscape planters should be focused around parking edges and interior paths where pedestrian enhanced pedestrian activity is desired.
- Provide shade for parked vehicles.
- Provide charging stations for electric vehicles.
- Reduce overall heat gain of paved surfaces.
- Pedestrian ways should be clearly identified.
- If shuttle stops are included in parking lots, they should include bus shelters, trees and landscape to create a comfortable, human scale experience.

Parking Lot Perimeter Screening

Surface parking lots shall be set back a minimum of ten feet from the public right-of-way or property line to provide space for a continuous landscape buffer zone. Pedestrian circulation is paramount and scale should feel human and civic in nature. Thus, parking lots shall be visually screened from the public right-of-way, open space, and adjacent property by one or more of the following methods:

1. A continuous landscaped buffer zone consisting of an architectural berm with a minimum height of 18", maximum 3:1 slope, planted with shrubs at a maximum of 3 feet on center in a triangular pattern. The berm may be planted with drought tolerant grasses, consist of rock mulch, or some combination thereof. Combination berm and planting condition to be within 3' to 4' overall height.

2. A continuous landscaped buffer zone that includes a minimum six-foot wide screening layer consisting of shrubs planted a maximum of 3 feet on center in a triangular pattern with a mature height of at least 36" high. Ornamental, tall grasses may be substituted for up to 30% of the shrubs within the screening layer subject to approval by the DRB.

3. Low walls may be used to provide screening where a ten-foot landscape buffer zone cannot be achieved. Walls should be a minimum of 30" high, in combination with shrubs, ornamental grasses, and perennials. Plant material shall be placed on the exterior side of the wall. Wall materials and design should be consistent with site architecture.

Design Guidelines

- The entire landscape buffer zone should be landscaped with a combination of low-irrigation plant material including, but not limited to native grasses, shrubs, tall ornamental grasses.
- Large shade and evergreen tree species and/or small trees or large shrub species should be used as accents throughout the landscape buffer zone in conjunction with screening strategy and street frontage plantings. Minimum tree requirement is least one tree per 35 linear feet of parking lot frontage.
- Openings in screening may be permitted to allow access ways and for drainage purposes or pedestrian connections.
- Plant material used for screening should achieve required opacity, per city requirements, within three years of construction of the vehicular use area to be screened.
- Shrub species should be chosen that will reach a minimum height of three feet within three years of planting. Species selection should consider four-season climate.
- Whenever parking lots abut public open space, plant materials should be selected that are compatible with the natural character of the area. Whenever parking lots abut a public street, where feasible, plant materials should be selected that reflect the character of the street.
- Parking lot screening adjacent to the Peoria and Fitzsimons multi-use trail/linear park should be designed to be complimentary to landscape character of the trail/linear park.
- Parking lot buffer landscape and streetscapes shall be installed at the time adjacent streets are built.

Fences and Vehicular Gates

Fences and vehicular gates for parking lots should be decorative and contribute to the visual quality of the project and the overall development. Fences and landscape materials shall be used to screen parking lots, service areas, loading areas, and outdoor storage areas. When not required for security, fences should be minimized. When required for security, fencing should be as inconspicuous as possible, and walls should be low.

Design Guidelines

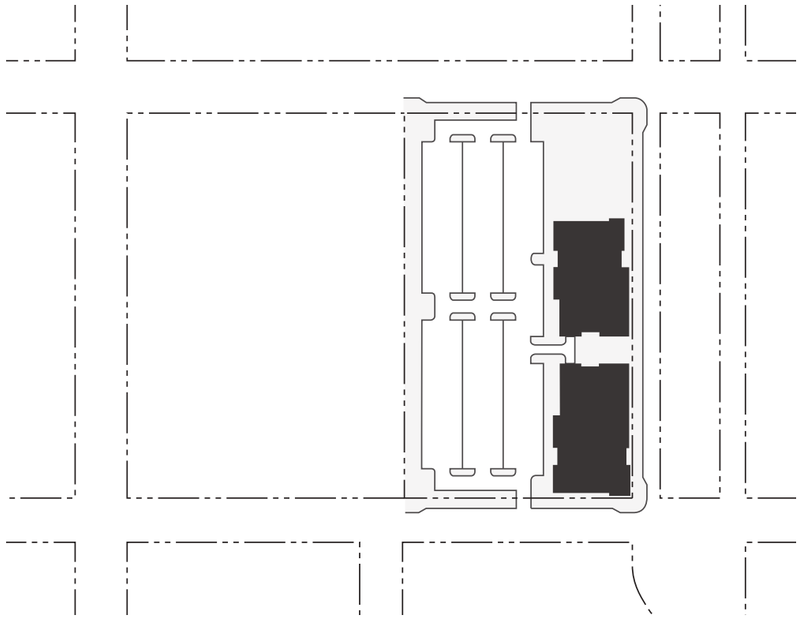
- Well designed, architectural security fencing is permitted along the back edge of the landscape buffer zone.
- Fencing should exhibit an architectural quality and constructed of durable, lasting materials such as wrought iron and durable metals.
- Fences should be visually subordinate and inconspicuous.
- Fence appearance should be softened with plantings.
- Fences shall not exceed 6' in height.
- Wood, solid walls and chain link fencing are not allowed.
- Consider breaking up long expanses of fences with periodic columns, insets or change in materials.
- No fence, wall, hedge or other shrubbery shall interfere with the vision of motorists at any intersection.

The FRA DRB shall review and approve screening strategy, planting and materials.

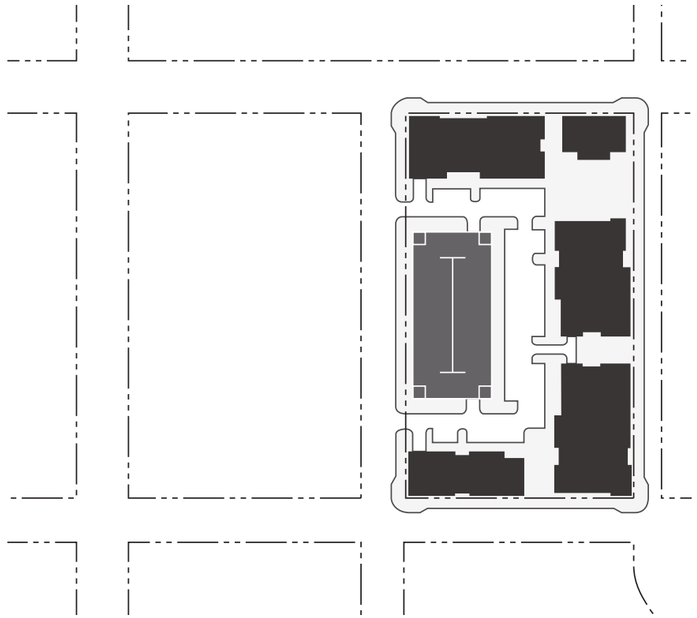
Development Phasing

A conceptual phasing plan for the entire parcel or block, as determined by DRB, should be submitted to convey how parking can be built-out over time to fulfill the vision set forth in these design guidelines. The diagrams below represent an example showing how Phase 1 of a block could become more dense during later phases of development.

Phase 1



Phase 2



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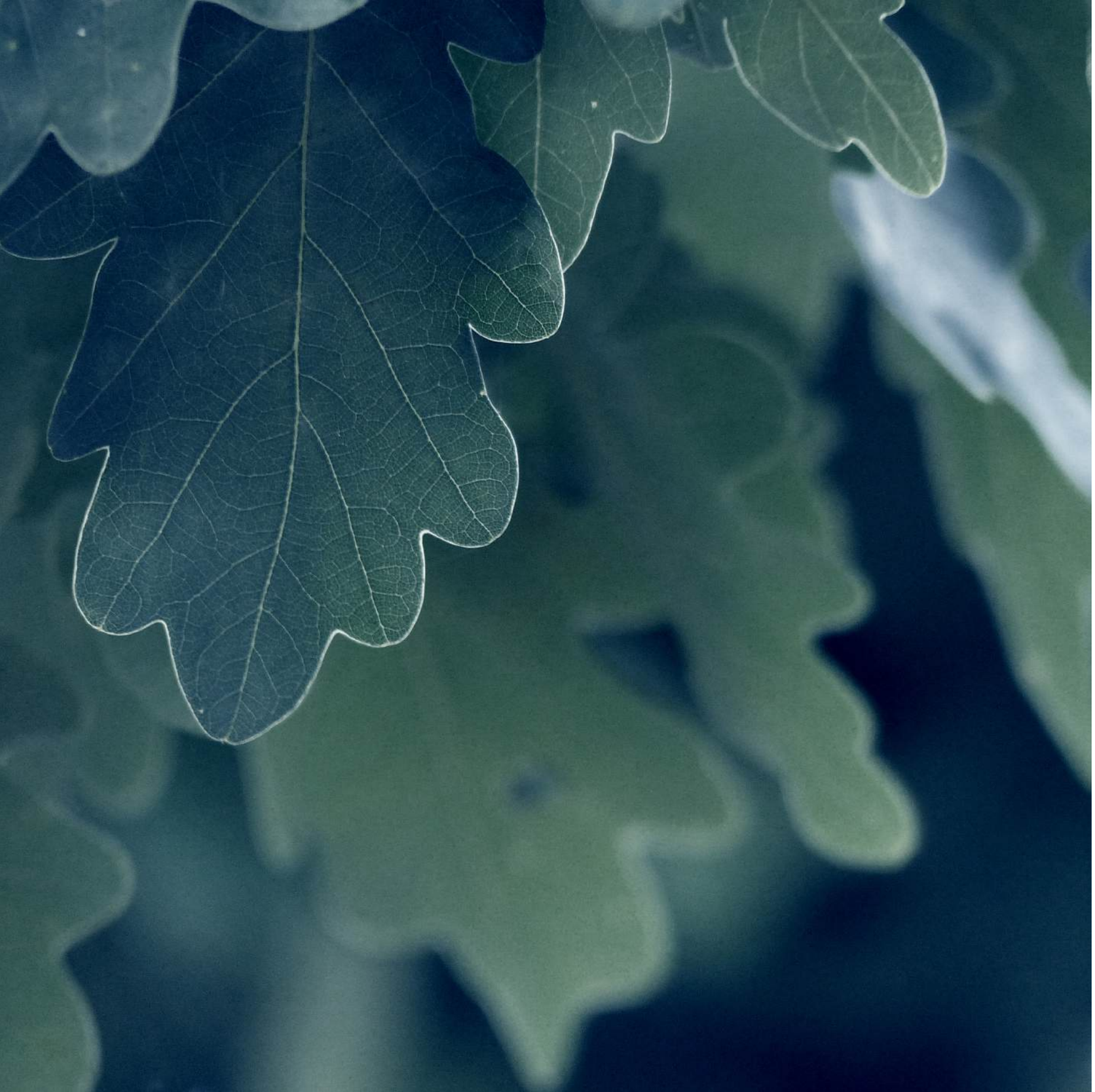

APPENDIX A: SUSTAINABILITY

Sustainable Building Design

The built environment has profound impact on our natural environment, economy, health and productivity. Sustainable design, construction and operation are fundamental objectives of FRA's new Fitzsimons Innovation Community, in Aurora, Colorado. The Urban Design Guidelines call for all real estate development to address broad sustainable design and construction principles and practices.

Building construction and operations can have extensive direct and indirect impacts on the environment, society, and economy, which are commonly referred to as the 3 P's ('People', 'Planet', 'Pocketbook'). The field of sustainable design seeks to balance the needs of these areas by using an integrated approach to create win-win-win design solutions.

The main objectives of sustainable design are to reduce, or completely avoid, depletion of critical resources like energy, water, and raw materials; prevent environmental degradation caused by facilities and infrastructure throughout their life cycle; and create built environments that are livable, comfortable, safe, and productive.

Buildings use resources (energy, water, raw materials, and etc.), generate waste (occupant, construction and demolition), and emit potentially harmful atmospheric emissions. Building owners, designers, and builders face a unique challenge to meet demands for new and renovated facilities that are accessible, secure, healthy, and productive while minimizing any negative impacts on society, the environment, and the economy. Ideally, building designs should result in net-positive benefits to all three areas.

In addition to including sustainable design concepts in new construction, sustainable design can include retrofitting existing buildings rather than building anew. New buildings at FIC should consider the potential re-use of the building in the future, there-by encouraging retrofitting as a sustainable option for future building owners. Retrofitting an existing building can often be more cost-effective than building a new facility. Designing major renovations and retrofits for existing buildings to include sustainable design attributes reduces operation costs and environmental impacts, and can increase building resiliency. The embodied energy of the existing building, a term expressing the cost of resources in both human labor and materials consumed during the building's construction and use, are squandered when the building is allowed to decay or be demolished.

This appendix establishes several goals for long term, sustainable development.

- Design buildings with improved performance which can be operated and maintained within the limits of existing resources.
- Improve the comfort, health and well-being of building occupants and public visitors.
- Save building owners and tenants money through reduced energy and material expenditures, waste disposal costs, and utility bills.
- Define expectations for the facility's performance among the various participants.
- Stimulate markets for sustainable technologies and products.
- Create partnerships in the design and construction process around environmental and economic performance goals.
- Ensure that capital budgeting design and construction practices result in investments that make economic and environmental sense.

While the definition of sustainable building design is constantly changing; and technology and rating systems for sustainable buildings, sustainable site design and smart cities are ever evolving, six fundamental principles for sustainable design persist:

1. Optimize Site Potential
2. Optimize Energy Use
3. Protect and Conserve Water
4. Optimize Building Space and Material Use
5. Enhance Indoor Environmental Quality
6. Optimize Operational and Maintenance Practices

The remainder of this appendix outlines specific guidelines organized by the aforementioned principles which are based upon Whole Building Design Guide created by the National Institute of Building Sciences.

Consider EPA's Recommendations (https://www.epa.gov/greenerproducts/epas-recommendations-specifications-standards-and-ecolabels) of environmental performance standards and ecolabels.

See also WBDG Evaluating and Selecting Green Products.

Financial Assistance

Building owners and developers locating in the Campus may be eligible for participation in Xcel Energy's Energy Design Assistance (EDA) Program. The EDA Program provides free energy modeling to evaluate the energy and economic performance of energy efficiency improvements. Additionally, based on the energy savings chieved in the final design, a financial incentive is provided to the building owner to partially offset the 'first cost' of the energy efficiency improvements. Building owners and developers are encouraged to contact Xcel Energy (http:// www.xcelenergy.com/XLWEB/CDA/0,3080,1-1-3_4530_39021_44490-22840-2_171_256-0,00.html) to determine if their project meets eligibility requirements for participation in the EDA Program.

Enforcement

Development projects shall submit a Sustainable Design Checklist to be used by the developers, design teams and the Design Review Board (DRB) throughout the design process. Projects shall utilize the most recent LEED Rating Checklist and buildings should strive to fulfill LEED Gold rating criteria; however, certification is not mandated.

The Checklist will be primarily used by the Design Review Board, which oversees the implementation of the Campus's Master Plan, and approval of specific project development plans. The Checklist will also be used as part of FIC's internal review and by individual developers and their design teams as they prepare and submit development proposals for vertical projects in the Campus.

Note: Look to the specific LEED Reference Guides for further details and specific requirements (http://www.usgbc.org/DisplayPage.aspx?CMSPageID=174).

Note: Look to the Green Globes Reference Guide for further details (http://www.thegbi.org/home.asp).

1. Optimize Site Potential

The FIC urban design sets a vision for the overall Campus which individual projects should build upon. Creating sustainable buildings starts with proper site selection. The location, orientation, and landscaping of a building affect local ecosystems, transportation methods, and energy use. Siting a physical building is a critical issue in optimizing site design, including locations of access roads, parking, vehicle barriers, and perimeter lighting that will affect the overall function of the Campus. Whether designing a new building or retrofitting an existing building, site design must integrate with Campus wide sustainable design objectives to achieve a successful project. The site of a sustainable building should reduce, control, and/or treat storm water runoff either on site or within sitewide infrastructure where provided. If possible, strive to support native flora and fauna of the region in the landscape design.

Guidelines:

- Consider energy implications and carbon emissions in site selection and building orientation.
- Use native plants and remove existing invasive plants.
- Reduce heat islands through building design methods, minimizing impervious surfaces, and using landscaping.
- Reduce, control, and treat surface runoff
  - Consider incorporating green roofs into the project where feasible.
- Incorporate transportation solutions along with site plans that acknowledge the need for bicycle parking, carpool staging, and proximity to mass transit. Encourage alternatives to traditional vehicular commuting.
- Orient buildings to be able to integrate passive and active solar strategies.
- Take advantage of natural ventilation and prevailing wind patterns.
- Maximize daylight use, while balancing higher heating and cooling demand resulting from increased glazing.
- Work closely with lighting designer to reduce unnecessary lighting and its associated light pollution.
- Maximize the use of existing trees and other vegetation to shade walkways, parking lots, and other open areas.
- Utilize roof materials that have high reflectance and high emissivity to reduce energy loads and extend the life of the roof, particularly in warm climates; consider incorporating green roofs or photovoltaics into the project.
- Consider incorporating green roofs into the project, which bring additional site benefits, including controlling storm water runoff and improving water quality.
- Make provisions for bicycling, walking, carpool parking, and telecommuting; and provide refueling/recharging facilities for alternative fuel/electric vehicles (or plan for their incorporation at a later date).

2. Optimize Energy Use

With continually increasing demand on the world's fossil fuel resources, concerns for energy independence, and the impacts of global climate change are becoming more evident. New building design and construction should explore opportunities to reduce energy load, increase efficiency, and maximize the use of renewable energy sources. New buildings at FIC should strive to building net zero energy buildings as a way to significantly reduce our dependence on fossil fuel-derived energy.

Guidelines:

- Utilize high performance glazing and/or sun shades to minimize solar gain during summer months.
- Orient buildings to take advantage of solar gain during winter months.
- Utilize local materials and suppliers whenever possible to minimize carbon footprint related to shipping materials over long distances.
- Reduce heating, cooling, and lighting loads through climate-responsive design and conservation practices.
  - Use passive solar design; orient, size, and specify windows; and locate landscape elements with solar geometry and building load requirements in mind.
  - Use high-performance building envelopes; select walls, roofs, and other assemblies based on long-term insulation, air barrier performance, and durability requirements.
  - Consider an integrated landscape design that provides deciduous trees for summer shading, appropriate planting for windbreaks, and attractive outdoor spaces so that occupants wish to be outdoors–thereby reducing the occupant driven additional heat load to the building.
- Employ renewable energy sources such as daylighting, passive solar heating, photovoltaics, geothermal, and groundwater cooling;
  - Renewable energy sources include solar water heating, photovoltaic (PV), wind, biomass, and geothermal. Use of renewable energy can reduce dependence on fossil fuels, while reducing or eliminating greenhouse gas emissions associated with energy use. Consider solar thermal for domestic hot water and heating purposes.
  - Evaluate the use of building scale to take advantage of on-site renewable energy technologies such as daylighting, solar water heating, and geothermal heat pumps.
  - Consider the use of larger scale, on-site renewable energy technologies such as photovoltaics, solar thermal, and wind turbines.
  - Consider the use of a central utility plant (CUP) for larger, complimentary sites where it may be applicable to consolidate energy and utility needs.
  - Evaluate purchasing electricity generated from renewable sources or low polluting sources such as natural gas.
- Specify efficient HVAC and lighting systems that consider part-load conditions and utility interface requirements;
  - Use lighting systems that consume less than 1 watt/square foot for ambient lighting.
  - Use Energy Star® approved and/or FEMP-designated energy efficient products or products that meet or exceed Department of Energy standards.
  - Evaluate energy recovery systems that pre-heat or pre-cool incoming ventilation air in commercial and institutional buildings.
  - Investigate the use of integrated generation and delivery systems, such as co-generation, fuel cells, and off-peak thermal storage.
- Optimize building performance by employing energy modeling programs and optimize system control strategies by using occupancy sensors CO2 sensors and other air quality alarms;
  - Employ energy modeling programs early in the design process.
  - Use sensors to control loads based on occupancy, schedule and/or the availability of natural resources such as daylight or natural ventilation.
  - Evaluate the use of modular components such as boilers or chillers to optimize part-load efficiency and maintenance requirements.
  - Evaluate the use of Smart Controls that merge building automation systems with information technology (IT) infrastructures.
  - Employ an interactive energy management tool that allows you to track and assess energy and water consumption like the Energy Star® Portfolio Manager.
  - Employ centralized remote meter reading and management to provide accurate analysis of energy use and monitor power quality.
  - Use a comprehensive, building commissioning plan throughout the life of the project.
  - Use metering to confirm building energy and environmental performance through the life of the project.
  - Provide electronic interactive graphic dashboards in prominent locations to educate occupants of their building's energy and water consumption and highlight sustainable building features.
- Monitor project performance through a policy of commissioning, metering, annual reporting, and periodic re-commissioning; and
- Integrate water saving technologies to reduce the energy burden of providing potable water.

3. Protect and Conserve Water

In Colorado, fresh water is a precious resource. Reducing water consumption and protecting water quality are key objectives of sustainable design. To the maximum extent feasible, facilities should decrease their need for water by increasing efficiency. Once efficiency has been optimized, facilities should maximize the use of water that is collected, used, purified, and reused on-site. Though the collect and treat strategy will do little to reduce total water volume used on-site, it will minimize treatment and transport losses as well as reduce the overall energy required for processing and conveyance.

A sustainable building should use water efficiently, through the use of low-flow fixtures, and reuse or recycle water for on-site use when feasible. Buildings should explore opportunities to use green roofs to reduce impervious surface area and reduce stormwater run-off. While stormwater harvesting is not allowed at the time of this document, the FRA should monitor state legislation and opportunities to apply for pilot storm water harvesting programs that may occur in the future. These guidelines should be updated if state regulations change.

Guidelines:

- If a campus-wide 'purple pipe' system is ever implemented, all buildings should participate in the program.
- Recover non-sewage and graywater for on-site use (such as toilet flushing and landscape irrigation, and more generally, consider the water quality requirements of each water use)
- Use water efficiently through high efficiency fixtures, elimination of leaks, water conserving cooling towers, and other actions;

Use Water Efficiently

- Incorporate water efficiency and conservation in construction specifications.
- Use high efficiency plumbing fixtures and integrate other water-saving devices into buildings.
- Design landscape for water efficiency through the use of native plants that are tolerant of local soil and rainfall conditions.
- Maximize the use of efficient landscape irrigation equipment when irrigation is required (see "Employ Environmentally Prefereble Landscaping Practices").
- Reduce evaporation through controlled scheduled irrigation that avoids watering during the hottest part of the day.
- Protect Water Quality
- Install and maintain water quality ponds or oil/grease/grit separators as storm water runoff filtration systems.
- Eliminate the use of lead materials.
- Use non-toxic bathroom and kitchen cleaning products, including products with the Safer Choice label.

Recover Non-Sewage and Graywater for On-Site Use

- Use non-sewage wastewater for irrigation and other uses permitted by Code or local ordinance.
- Use rain water, groundwater, and water from sump pumps for on-site activities such as flushing toilets.
- Capture and use condensate from HVAC systems.
- Install separate pipe system for graywater.

Employ Environmentally Preferable Landscaping Practices

- Eliminate the use of potable water by designing the landscape with drought-tolerant native, or indigenous, plants.
- Where watering of the landscape is necessary employ zone irrigation, drip irrigation and rain water detectors to minimize water consumption.
- Consider composting and/or recycling yard waste.

4. Optimize Operational + Maintenance Practices

Considering a building's operating and maintenance issues during the preliminary design phase of a facility will contribute to improved working environments, higher productivity, reduced energy and resource costs, and prevented system failures. Encourage building operators and maintenance personnel to participate in the design and development phases to ensure optimal operations and maintenance of the building. Designers can specify materials and systems that simplify and reduce maintenance requirements; require less water, energy, and toxic chemicals and cleaners to maintain; and are cost-effective and reduce life-cycle costs. Additionally, design facilities to include meters in order to track the progress of sustainability initiatives, including reductions in energy and water use and waste generation, in the facility and on site.

Guidelines:

Throughout the building's life cycle, operations and maintenance should seek to:

- Train building occupants, facilities managers, and maintenance staff in sustainable design principles and methods that will minimize system failures;
- Purchase cleaning products and supplies that are resource-efficient, bio-degradable and safer for both janitorial staff and building occupants, and thereby improving indoor air quality;
- Test sensor control points on a regular basis to ensure energy efficiency is not compromised;
- Use automated monitors and controls for energy, water, waste, temperature, moisture, and ventilation;
- Reduce waste through source reduction and recycling to eliminate off-site disposal;
- Minimize travel by supporting telecommuting programs and enabling a mobile work environment;
- Perform scheduled energy audits and re-commissioning of systems; and
- When updating a facility or its systems, choose higher efficiency equipment, durable materials that will withstand storms and other natural events, and improve the tightness of the building envelope if feasible.

5. Optimize Building Space and Material Use

While the world population continues to grow (to over 9 billion by 2050), natural resource use will continue to increase and the demand for additional goods and services will continue to stress available resources. It is critical to achieve an integrated and intelligent use of materials that maximizes their value, prevents upstream pollution, and conserves resources. A sustainable building is designed and operated to use and reuse materials in the most productive and sustainable way across its entire life cycle and is adaptable for reuse during its life cycle. The materials used in a sustainable building minimize life-cycle environmental impacts such as global warming, resource depletion, and human toxicity. Environmentally preferable materials have a reduced effect on human health and the environment and contribute to improved worker safety and health, reduced liabilities, reduced disposal costs, and achievement of environmental goals.

Guidelines:

Design facilities adaptable for different uses during their life cycle incorporating building components that can be disassembled and reused or recycled,

- Design major systems with differing functions and lifespans to promote disentanglement.
- Design and provide access to the connections that allow disassembly.
- Include adaptable, re-configurable interior non-structural components, and during building renovation or adaptation, plan to dismount, disassemble, re-configure and reuse interior elements such as non-loadbearing walls, partitions, lighting, and electric systems, suspended ceilings, raised floors, and interior air distribution systems.
- Use components and materials that are reusable or recyclable.
- Maintain a Disassembly Plan with information around the method of disassembly and properties of materials and components.

Reduce overall material use through optimizing building size and module.

- Reduce the overall building size by optimizing the functional relationships between program spaces and shortening circulation, adhering to space criteria (number of square feet per person or unit), and configuring individual spaces to accommodate several complementary functions.
- Ensure buildings are designed to minimize cut-offs and optimize purchasing to prevent excess materials from arriving at the job site. For example, minimize cut-offs by designing to use standard material sizes and reducing customizing spaces.
- Note: “module,” in architecture, is an arbitrary unit adopted to regulate the dimensions, proportions, or construction of the parts of a building. Modules can also serve as the basis for coordinating the dimensions of the various materials and pieces of equipment to be assembled in the course of constructing a building. (from Britannica)

Evaluate Environmental Preferability Using a Life-Cycle Perspective

- Purchase environmentally preferable products as described in EPA’s Environmentally Preferable Purchasing (EPP) Program, which promotes Federal Government procurement of products and services that have reduced impacts on human health and the environment over their life cycle.
- Use EPA-designated recycled content products to the maximum extent practicable-as is required by federal agencies under the 42 USC §6962, Resource Conservation and Recovery Act of 1994, Section 6002.
- Within an acceptable category of product, use materials and assemblies with the highest percentage available of post-consumer or post-industrial recycled content.
- In addition to products with recycled content, optimize product durability by purchasing products with extended warranty, upgradeability, spare parts, service information, and mold resistance.
- Consider EPA’s Recommendations of environmental performance standards and ecolabels when specifying products.
- The life-cycle of a product includes sourcing of raw materials, manufacturing, packaging, transportation, distribution, retailing, installation, use of the product, and management of the product when it is no longer needed (through reuse, repair, upgrading, recycling, or safe disposal). To capture the benefits of reuse, repair, upgrading and/or recycling, analyze the impact offsets that can be accomplished when the product is used in place of a virgin material in another building or infrastructure.
- Evaluate how materials selection influences the building’s overall life-cycle environmental performance and specify materials that can achieve the greatest environmental improvement.
- Where there are certain life-cycle stages or attributes that dominate the opportunity for environmental improvement, those key impact areas (or “hot spots”) should be given greater emphasis in a material specification.
- Consider trade-offs among multiple environmental impacts (e.g., global warming, resource depletion, indoor air quality, waste streams) when determining environmental preferability. That is, look at the “big picture” rather than simply shifting problems from one impact to another.
- Employing LCA Tools like ATHENA and BEES can simplify the process and give more credible results.

Limit the Generation of C&D Materials; Encourage the Separation of Waste Streams; and Encourage Reuse and Recycling done in an Environmentally Acceptable Manner during the Construction, Renovation and Demolition Processes

- During the design phase, require the development and implementation of a Construction Waste Management Plan to maximize the reuse and recycling of C&D materials generated from the project. Consider the following:
- In order to maximize the effectiveness of diversion efforts, (e.g., by ensuring a common understanding of requirements for sorting C&D materials), identify the local recycling and salvage operations that will be used to manage site-related C&D materials; confirm that the chosen recycling facilities are in compliance with state and local regulations, state licensing or registration and/or third-party independent certification.
- Set targets for waste diversion, such as salvaging or recycling on-site or off-site at least 50%, by weight, of the nonhazardous C&D materials generated, excluding land-clearing debris.
- In order to maximize the recycling or salvaging of materials, products and components, consider the use of disassembly techniques to the building or structure, or its portion, planned for demolition; consider linking the deconstruction project with a current construction or renovation project to facilitate the reuse of salvaged materials.
- Require the submission of a Materials Management Summary report documenting the diversion results at the conclusion of project.
- Use products and assemblies that minimize disposable packaging and storage requirements.
- When procuring construction materials and products, select manufacturers and vendors with take-back programs whenever the cost of their products is reasonable, products are available within a reasonable period of time or distance, and products meet performance specifications.

Specify Materials Harvested on a Sustainable Yield Basis

- Use timber products obtained from sustainably managed forests, certified through third-party organizations.
- Evaluate the substitution of bio-based materials or products, such as agricultural-fiber sheathing, for inert or non-recycled alternatives.
- Specify rapidly renewable materials that regenerate in 10 years or less, such as bamboo, cork, wool, and straw.

Eliminate the Use of Materials that Pollute or are Toxic During Their Manufacture, Use, or Reuse

- Consider EPA's Recommendations of environmental performance standards and ecolabels when specifying products.
- Within an acceptable category of product, use materials and assemblies with the lowest level of volatile organic compounds (VOCs) and any chemicals that reduce indoor environmental quality. See WBDG Evaluating and Selecting Green Products and Enhance Indoor Environmental Quality.
- Eliminate the use of asbestos, lead, and PCBs in all products and assemblies. See WBDGHigh-Performance HVAC.
- Eliminate the use of chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs) as refrigerants in all HVAC systems.
- Evaluate the use of materials and assemblies whose manufacture does not pollute or create toxic conditions for workers. See the following sections of WBDG Secure/Safe–Occupant Safety and Health: Provide Good Indoor Air Quality and Adequate Ventilation and Eliminate Exposure to Hazardous Materials.
- Select paints, coatings, plastics, rubbers, and seals that are free from flame retardants and / or softeners containing SCCPs [short-chained chlorinated paraffins] (not more than 0.1 percent by weight), 10 carbon atoms to 13 carbon atoms, minimum 48 percent chlorine by weight, unless it can be shown that the SCCPs are present above this threshold due to the use of recycled content.
- Select paints, coatings, plastics, rubbers and seals that are free from flame retardants and / or softeners containing PBDEs and HBCD.
- Avoid product coatings that contain fluorotelomers based on C8 or higher fluorocarbon chemistries.
- Select textiles, paints, printing inks, and paper that are free of benzidine and benzidine congener-based dyes.
- Use detergents that do not contain NPE and APE surfactants and are certified by EPA's Safer Choice Program.
- When possible, give preference to products that openly disclose substances used in the manufacture of a product and substances comprising the final product.
- Avoid Ground-level Ozone in buildings. It can contribute to health problems for the building's occupants and damages vegetation and ecosystems.

Give Preference to Locally Produced Materials with Low Embodied Energy Content

- Evaluate the use of locally produced products to stimulate local economies and reduce transportation burdens and greenhouse gas generation.
- Evaluate the use of materials and assemblies that require minimum "embodied" energy for raw materials acquisition, manufacture, transport, installation, and use.
- Within an acceptable category of product, evaluate the use of materials and assemblies with low embodied energy content.

Encourage Operational Waste Recycling Success through Planning in the Design Phase

- Establish an operational waste management plan in cooperation with building owners to encourage recycling.
- During the design and construction phase, designate adequate area(s) for collection of ongoing recyclables. Local salvage/recycling/collection services should be identified during the design phase to maximize the effectiveness of the designated areas.
- Investigate providing locations at the project site for organic waste composting.

Durability of Materials

- It is important that 'green' products perform the same as 'standard' products over their expected life cycle, therefore, it is valuable to develop a durability plan, which informs material and systems decisions assessing potential risk factors and damage functions. Once identified, measures can be made in the building design to address the risk factors. This process follows every phase from pre-design to building occupancy. Durability plans consider effects related to moisture, heat, sunlight, insects, material failure, ozone and acid rain, building function, style and natural disasters. Consider materials that age gracefully. Often traditional materials used in building construction are easily refinished, repaired, or are partially replaceable to ensure a potential lifespan measured in human generations.

6. Enhance Indoor Environmental Quality (IEQ)

The indoor environmental quality (IEQ) of a building has a significant impact on occupant health, comfort, and productivity. Among other attributes, a sustainable building maximizes daylighting, has appropriate ventilation and moisture control, optimizes acoustic performance, and avoids the use of materials with high-VOC emissions. Principles of IEQ also emphasize occupant control over systems such as lighting and temperature.

Facilitate Quality IEQ through Good Design, Construction, Renovation and O&M Practices

- Acceptable IEQ is often easiest to achieve if "source control" is practiced, not only during building construction, but also over the life of the building. For example, the designer may select building products that do not produce noxious or irritating odors, do not contain volatile organic compounds (VOC), and design exterior entrances with permanent entryway systems to catch and hold dirt particles.
- Refer to the ASHRAE Indoor Air Quality (IAQ) Guide: Best Practices for Design, Construction, and Commissioning for guidance on addressing IAQ during building design and construction. The ASHRAE IAQ Guide was developed by an ASHRAE appointed team of building professionals and world class IAQ experts with funding support from the U.S. Environmental Protection Agency.
- Refer to the Indoor Air Quality Scientific Findings Resource Bank (IAQ-SFRB) for scientific information about the effects of IAQ on people's health or work performance. The IAQ-SFRB is being developed by the Indoor Environment Department of the Lawrence Berkeley National Laboratory with funding support from the U.S. Environmental Protection Agency.
- The Operations & Maintenance (O&M) and cleaning staff can also avoid creating IEQ problems by choosing less noxious materials during repair and cleaning activities. While HVAC systems may be designed to isolate operations (kitchens, dry cleaners, etc.) from other occupancies, the O&M staff ensures that pressure differentials are maintained to avoid the undesirable flow of contaminants from one space to another. See also WBDG Sustainable O&M Practices.

Value Aesthetic Decisions

- Appreciate the importance of providing windows in all occupied spaces for view and natural ventilation. See also WBDG Aesthetics and Productive–Promote Health and Well-Being. Ensure that these windows have proper solar glare control, and encourage occupants to not close the blinds for the worst condition and leave them closed because of apathy.
- Design spaces around basic human needs, ancient preferences, and connections to the patterns of nature and the mind. See also WBDG Psychosocial Value of Space.
- Demand that individual buildings or facilities are consciously integrated into their natural and man-made context. See also WBDG Sustainable–Optimize Site Potential.

Provide Thermal Comfort

- Use ASHRAE Standard 55–Thermal Environmental Conditions for Human Occupancy as the basis for thermal comfort. See also WBDG Productive–Provide Comfortable Environments.
- Evaluate the use of access floors with displacement ventilation for flexibility, personal comfort control, and energy savings.
- Understand moisture dynamics as a key criteria in the selection of wall and roof assemblies. See also WBDG Air Barrier Systems in Buildings.
- Evaluate the benefit of specifying high-performance windows to increase mean radiant temperature (MRT).
- Consider external conditions impacting thermal comfort.
- Easily maintained window treatments also provide occupants individual control to both thermal and light exposures from the sun.

Provide Ventilation and Maintain Acceptable Indoor Air Quality

- Design the ventilation system to meet or exceed ASHRAE Standard 62.1: Ventilation for Acceptable Indoor Air Quality. Work closely with the Mechanical Engineering team to strike a balance between optimal fresh air and energy efficiency using either the ventilation rate procedure (VRP) or the indoor air quality procedure (IAQP). Also, consider the USGBC LEED pilot credit #68, where a survey of building occupants is performed to determine their satisfaction with the interior air quality.
- Implement a construction management program that ensures key ventilation components are protected from contamination during construction. Ensure that construction filters placed in ductwork and mechanical equipment are routinely inspected and replaced as needed. Do not install carbon filters until all construction work, including dry wall and painting, has ceased.
- Commission HVAC systems to validate and document design performance intent. Review commissioning report to ensure that adequate ventilation rates have been achieved prior to initial occupancy. One Commissioning technique that can be employed over the life of the building is the use of a well maintained carbon dioxide monitoring system that will continually provide diagnostic feedback on the actual amount ventilation provided in the most densely occupied spaces. HVAC system should be installed with filters with a Minimum Efficiency Reporting Value (MERV) of 11 for residential, commercial, telecommunications and industrial facilities. MERV 13-16 is preferred for smoke removal, general surgery, hospitals, and other healthcare facilities.
- Consider a building design with a natural ventilation or hybrid component to both reduce energy consumption and to make some provisions for ventilation even if external power were not available (a measure of resiliency). Use of natural ventilation component is dependent on relative humidity being within an acceptable range.
- Investigate the use of separate outside air and conditioned air distribution systems. A good description of various types of heating and ventilation systems can be found at: WBDG High-Performance HVAC and Natural Ventilation.
- Ensure fresh air intakes are located away from loading areas, exhaust fans, and other contamination points, preferably on roofs.
- If building is close to a large roadway source, consider the location of the fresh air intakes orpossible breaks that may help reduce impact of the outdoor air on the indoor environment.
- Ensure parking lot/garage usage cannot generate pollutants that affect fresh air intake or pedestrian traffic. Prevent vehicles idling near the facility during normal operations. If there is a below grade parking garage, consider using monitored values of both carbon monoxide and carbon dioxide to control the fans to reduce exposures to not only the carbon monoxide but also the respiratory irritants of oxides of nitrogen and unburned hydrocarbons.
- Investigate the use of a permanent air quality monitoring system. ASHRAE acceptable level of carbon dioxide (CO2) for an indoor office environment at 20 cfm per person equates to no greater than 530 ppm greater than outdoors. While outdoor CO2 levels used to range from 300 to 400 ppm many years ago, increasing atmospheric CO2 levels in the last few decades are now at least 400 ppm. Even remote locations, such as on a mountain top in Hawaii, exhibit CO2levels above 400 ppm. If Demand Controlled Ventilation is employed, either rely on sophisticated algorithms to automatically review and interpret the monitoring data and/or have it periodically reviewed by an IAQ expert. Carbon monoxide (CO) levels in office environments should be below 9 ppm. OSHA regulates levels of CO for industrial locations.
- Coordinate ventilation and air filtration with chemical, biological, and radiological concerns and locate outside air intakes so they do not conflict with physical security requirements. See also WBDG Air Decontamination.
- During operation, either develop a plan for identifying needed filter media replacement or replace filter media on a regular schedule.
- Provide Energy Recovery Ventilation systems for needed ventilation air as a standard feature in new construction which is typically highly insulated and extremely airtight.

Prevent Radon Entry, Airborne Bacteria, Mold, and Other Fungi

- Prevention of mold and fungi is dependent upon effective HVAC and building envelope design and construction. The HVAC system must be able to control interior humidity conditions over a wide range of outdoor conditions. The system must be designed to have the capacity to dehumidify at the 1% Humidity Ratio and mean coincident dry bulb temperature, and control interior humidity at both extreme and low load conditions. The building envelope must be carefully designed to prevent intrusion of water and to dry if intrusion should occur. It must also incorporate barriers that control vapor and air infiltration.
- Carefully consider the envelope of the building to prevent moisture infiltration. See ASHRAE IAQ Guide.
- Investigate and remediate immediately when there is a mold or moisture problem, either from high humidity, a leak, or flood. See EPA Guidance.

- Ensure the number of spores in the indoor air is less than the outdoor air. It is recommended that there should be less than 700 spores in a cubic meter of air.
- In areas where it is prevalent, include measures to test for radon and control and mitigate radon buildup.

Limit Spread of Pathogens

- For health care facilities:
- Implement proper maintenance procedures to prevent nosocomial infections.
- Consider removing restroom doors to reduce the chance of acquiring infections.

Use Safer Materials that have Less Hazardous Ingredients and are Low-emitting

- Limit the use of volatile organic compounds (VOCs) in such products as cleaners, paints, sealants, coatings, and adhesives.
- Avoid products containing formaldehyde, i.e., carpet, wall panels, cabinetry.
- Remove asbestos-containing material or contain it in a manner that precludes the possibility of future exposure.
- Create safe, convenient, and secure storage spaces for housekeeping chemicals.
- Ensure office equipment installed emit minimal odors or pollutants.

Assure Acoustic Privacy and Comfort

- Minimize noise through the use of sound-absorbing materials, high sound transmission loss walls, floors, and ceilings, and equipment sound isolation. See Architectural Graphic Standards, 11th Edition, section on Acoustical Design for more information. See also WBDGProductive–Provide Comfortable Environments and Acoustic Comfort.
- Consider sound masking systems. These systems introduce an unobtrusive background sound that reduces interference from distracting office noise. Note that some level of HVAC "noise" can serve as a background white noise source, eliminating the need for sound masking systems.
- Avoid the use of small diameter ducts with high velocity airflow.

Control Disturbing Odors through Contaminant Isolation and Product Selection

- Directly exhaust copying and housekeeping areas, and provide added return air grills in these areas. This will help limit lower atmosphere ozone generation, commonly associated with duplicating and printing processes. Ozone acts as a power oxidant. It can attack surfaces of certain elastomers, plastics, paints, and pigments; and aid in sulfide and chloride corrosion of metals. Possible health hazards caused by ozone include eye and mucous membrane irritation as well as chronic respiratory disease.
- Minimize disturbing odors through contaminant isolation and careful selection of cleaning products.
- Ensure maintenance procedures are in place to remove all trash and recyclables from the building on a regular basis rather than storing them within the building for prolonged periods of time.
- Prohibit smoking in all areas of the building. Environmental Tobacco Smoke (ETS) is a known carcinogen.

Create a High–Performance Luminous Environment

- Use daylighting for ambient lighting wherever feasible.
- Utilize narrow building depths to maximize natural light to the interior of the building.
- Locate work areas within 35' of a window.
- Utilize automatic light switches to turn of lights when rooms are unoccupied.
- Supplement natural light with integrated, high-performance ballasts, lamps, fixtures, and controls.
- Substitute magnetic fluorescent lamps with high-frequency electronic ballasts to reduce flickering.
- Reduce direct glare from both natural and man-made sources in the field of view–particularly in spaces with highly reflective surfaces, such as visual display terminals (VDTs).
- Use task/ambient systems that provide reduced levels of diffuse, general illumination, and supplement with task lighting. Most people do not need lighting in excess of 300 lux (a unit of illumination).
- Use light color on walls and locate windows properly.
- Provide dimming fixtures where possible combined with appropriate task lighting so that occupants can reduce lighting levels to their preferred lumens. Dimming the lights will both save electricity and the heating load that lighting demands of the building's HVAC system. Often the lighting levels are designed to the most demanding user; all other occupants are forced to adapt to levels that are higher that desired.

Provide Quality Water

- Comply with EPA Safe Drinking Water Act (SDWA) for the levels of various metals and bacteria in potable water systems.
- For newly installed or temporarily suspended domestic water systems, follow "start-up" procedures by flushing all downstream outlets.
- Conduct periodic 'maintenance flushing' to proactively control drinking water issues.
- Control domestic water temperature to avoid temperature ranges where legionellae grow: keep domestic water temperatures above 140°F (60°C) in tanks and 122°F (50°C) at all taps (faucets and showers).
- Design cooling tower and building air intake placement so air discharged from the cooling tower or evaporative condenser is not directly brought into the facility's air intake.
- Consider a closed loop system instead of an open system to reduce the potential of exposure at the cooling tower.

APPENDIX B:
SITE PLAN
SUBMISSION CHECKLISTS

SUBMISSION 1: SKETCH PLAN CHECKLIST

SUBMISSION 2: SCHEMATIC DESIGN CHECKLIST

SUBMISSION 3: DESIGN DEVELOPMENT CHECKLIST

SUBMISSION 4: CONSTRUCTION DOCUMENTS AND SPECIFICATION CHECKLIST

SUBMISSION 1: SKETCH PLAN CHECKLIST

In order to facilitate the review of all building and landscape improvements proposed for the Campus and to ensure that the design intent and quality will be consistent with the objectives of the master plan, all property buyers, renters, lessees, etc., hereby referred to as "the applicant" are required to comply with the established design guidelines and submit design documents as outlined in the following checklist.

Sketch Plan - Submission One
Please submit an electronic set in PDF format to the Fitzsimons Design Review Board (DRB) at least 5 business days prior to the DRB scheduled meeting.

- ☐ Cover Sheet
  - ☐ Project Name
  - ☐ Sheet Index
  - ☐ Applicant's name and contact information
  - ☐ Architect
  - ☐ Landscape Architect
  - ☐ Engineer
  - ☐ Date
  - ☐ Submission number
  - ☐ Vicinity Map

- ☐ Project Narrative

- ☐ Urban Design Plan
  Urban design diagrams should be provided that depict the proposed development fits within the overall site; specifically describing building orientation, anticipated heights, pedestrian entries, vehicular circulation and access, parking areas, bicycle circulation access, etc. If it is a phased project, show both near term and ultimate conditions.

- ☐ Site Plan (scale minimum 1:50)
  All plans should have a consistent orientation where possible. Please indicate scale, north and include the following:
  - ☐ Site context analysis (How this project fits within FIC)
  - ☐ Identify Primary, Secondary and/or Perimeter Streets
  - ☐ Building footprint with area calculations
  - ☐ Property line, easements, setbacks (existing and proposed)
  - ☐ General dimensions
  - ☐ Primary Building Entries
  - ☐ Pedestrian Circulation
  - ☐ Parking layout and calculations
  - ☐ Bike Parking
  - ☐ Truck service route, loading zone(s), and fire truck access
  - ☐ Exterior storage equipment, transformers, etc.

- ☐ Floor Plans (scale minimum 3/32"=1'-0")
  - ☐ Applicants are encouraged to submit a conceptual building floor plan.

- ☐ Elevations (full color) - 4 views (scale 1/16)
  - ☐ Applicants are encouraged to submit conceptual building elevations.

- ☐ Submission Fee

All elements of the applicants submission as outlined above must be submitted along with this checklist to the DRB as a complete package. Partial submittals will not be accepted and will be returned to the applicant without review.

DRB Review and/or Approval

The DRB will review the application for compliance with the Urban Design Guidelines. Written comments, modifications and/or approval will be provided within 5 business days following the DRB meeting.

SUBMISSION 2: SCHEMATIC DESIGN CHECKLIST

Please submit an electronic set in PDF format to the Fitzsimons Design Review Board (DRB) at least 5 business days prior to the DRB scheduled meeting.

- ☐ Response to the DRB letter

- ☐ Cover Sheet
  - ☐ Project Name
  - ☐ Sheet Index
  - ☐ Applicant's name and contact information
  - ☐ Architect
  - ☐ Landscape Architect
  - ☐ Engineer
  - ☐ Date
  - ☐ Submission number
  - ☐ Vicinity Map

- ☐ Project Narrative

- ☐ Urban Design Plan
  Referred per Submission 1

- ☐ Site Plan (scale minimum 1:50)
  All plans should have a consistent orientation where possible. Please indicate scale, north and include the following:
  - ☐ Site context analysis (How this project fits within FIC)
  - ☐ Identify Primary, Secondary and/or Perimeter Streets
  - ☐ Building footprint with area calculations
  - ☐ Property line, easements, setbacks (existing and proposed)
  - ☐ General dimensions
  - ☐ Primary Building Entries
  - ☐ Pedestrian Circulation
  - ☐ Parking layout and calculations
  - ☐ Bike Parking
  - ☐ Truck service route, loading zone(s), and fire truck access
  - ☐ Exterior storage equipment, transformers, etc.
  - ☐ Conceptual Phasing Plan
  - ☐ Site Sections

- ☐ Landscape Plan (scale minimum 1:50)
  - ☐ General landscape design and materials
  - ☐ Proposed site lighting fixture(s) / family
  - ☐ Proposed signage locations
  - ☐ Streetscape (refer to Section 2.2 Streets), indicating location(s) of trees being applied toward mitigation requirements
  - ☐ Grading Plan
  - ☐ Identify proposed paving and planting material within 'Build-To' Zone
  - ☐ Identify side-wide planting and paving material.
  - ☐ Provide a landscape legend that includes species and quantity of plant material.
  - ☐ General Dimensions (walks,amenity zones, tree spacing)
  - ☐ Detention/WQ area (if applicable)
  - ☐ Sun/Shade Studies
    (morning, noon, and evening during spring, summer, fall, and winter)
  - ☐ Irrigation Plan
  - ☐ Tree Mitigation Plan:
    - ☐ Plan showing location of existing trees
    - ☐ Indicate trees being removed
  - ☐ Completed tree mitigation form including number of caliper inches being applied toward mitigation requirements and caliper inches removed

- ☐ Floor Plans (scale minimum 3/32"=1'-0")
  All plans should have a consistent orientation where possible. Please indicate scale, north and include the following:
  - ☐ Ground floor with site context including abutting streets
  - ☐ Upper floors
  - ☐ General dimensions
  - ☐ Primary and Secondary Entries
  - ☐ Interior space planning (in order to understand implications to exterior fenestration)
  - ☐ Building Sections
  - ☐ Loading areas
  - ☐ Pedestrian System (context with building entries and site circulation)

- ☐ Elevations (full color) - 4 views (scale 1/16)
  Please indicate scale and orientation, and include the following:
  - ☐ Site context
  - ☐ General dimensions
  - ☐ Annotated materials
  - ☐ Signage
  - ☐ Landscaping
  - ☐ Lighting
  - ☐ Mechanical Screening (site and rooftop)
  - ☐ Percent Glazing

- ☐ Perspectives/Axonometrics - minimum 4 views (Minimum 1 birds-eye and Minimum 1 Street level view at primary entry) (scale 1/16"=1'-0")
  Please indicate view, and identify the following:
  - ☐ Buildings
  - ☐ Site context
  - ☐ Signage
  - ☐ Landscaping
  - ☐ Lighting
  - ☐ Mechanicals (site and rooftop)
  - ☐ Streetscape

- ☐ Project schedule including:
  - ☐ Submission 3
  - ☐ Submission 4
  - ☐ City Plan Review and Permit Application Date
  - ☐ Construction Start
  - ☐ Occupancy.

- ☐ Sustainability Checklist

- ☐ Any additional information requested by the DRB.

- ☐ Digital Files:
  - ☐ CD or Thumb Drive with a PDF and CAD files of the submission

- ☐ Submission Fee

All elements of the applicants submission as outlined above must be submitted along with this checklist to the Board as a complete package. Partial submittals will not be accepted and will be returned to the applicant without review.

DRB Review and/or Approval

After receipt of Submission 2, the DRB will return to the applicant written comments or one set of prints with comments, modifications, and/ or approval. If the DRB returns Design Development documents to the applicant without an approval, the applicant must revise plans and resubmit a revised package indicating all changes bubbled and listed as an addendum addressing the DRB's comments.

SUBMISSION 3: DESIGN DEVELOPMENT CHECKLIST

Please submit an electronic set in PDF format to the Fitzsimons Design Review Board (DRB) at least 5 business days prior to the DRB scheduled meeting.

- ☐ Response to the DRB letter

- ☐ Cover Sheet
  - ☐ Project Name
  - ☐ Sheet Index
  - ☐ Applicant's name and contact information
  - ☐ Architect
  - ☐ Landscape Architect
  - ☐ Engineer
  - ☐ Date
  - ☐ Submission number
  - ☐ Vicinity Map

- ☐ Project Narrative

- ☐ Urban Design Plan
  Referred per Submission 2

- ☐ Site Plan (scale minimum 1:50)
  All plans should have a consistent orientation where possible. Please indicate scale, north and include the following:
  - ☐ Site context analysis (How this project fits within FIC)
  - ☐ Identify Primary, Secondary and/or Perimeter Streets
  - ☐ Building footprint with area calculations
  - ☐ Property line, easements, setbacks (existing and proposed)
  - ☐ General dimensions
  - ☐ Primary Building Entries
  - ☐ Pedestrian Circulation
  - ☐ Parking layout and calculations
  - ☐ Bike Parking
  - ☐ Truck service route, loading zone(s), and fire truck access
  - ☐ Exterior storage equipment, transformers, etc.
  - ☐ Phasing Plan
  - ☐ Site Sections

- ☐ Landscape Plan (scale minimum 1:50)
  - ☐ General landscape design and materials
  - ☐ Proposed street lighting and type
  - ☐ Proposed signage locations
  - ☐ Streetscape (refer to Section 2.2 Streets), indicating location(s) of trees being applied toward mitigation requirements
  - ☐ Grading Plan
  - ☐ Identify proposed paving and planting material within 'Build-To' Zone
  - ☐ Identify side-wide planting and paving material.
  - ☐ Provide a landscape legend that includes species and quantity of plant material.
  - ☐ General Dimensions (walks,amenity zones, tree spacing)
  - ☐ Detention/WQ area (if applicable)
  - ☐ Sun/Shade Studies
    (morning, noon, and evening during spring, summer, fall, and winter)
  - ☐ Irrigation Plan
  - ☐ Tree Mitigation Plan:
  - ☐ Plan showing location of existing trees
  - ☐ Indicate trees being removed
  - ☐ Completed tree mitigation form including number of caliper inches being applied toward mitigation requirements and caliper inches removed

- ☐ Floor Plans (scale minimum 3/32"=1'-0")
  All plans should have a consistent orientation where possible. Please indicate scale, north and include the following:
  - ☐ Ground floor with site context including abutting streets
  - ☐ Upper floors
  - ☐ General dimensions
  - ☐ Primary and Secondary Entries
  - ☐ Interior space planning (in order to understand implications to exterior fenestration)
  - ☐ Building Sections
  - ☐ Loading areas
  - ☐ Pedestrian System (context with building entries and site circulation)

- ☐ Elevations (full color) - 4 views (scale 1/16)
  Please indicate scale and orientation, and include the following:
  - ☐ Site context
  - ☐ General dimensions
  - ☐ Annotated materials
  - ☐ Signage
  - ☐ Landscaping
  - ☐ Lighting
  - ☐ Mechanical Screening (site and rooftop)
  - ☐ Percent Glazing

- ☐ Perspectives/Axonometrics - minimum 4 views (Minimum 1 birds-eye and Minimum 1 Street level view at primary entry) (scale 1/16"=1'-0")
  Please indicate view, and identify the following:
  - ☐ Buildings
  - ☐ Site context
  - ☐ Signage
  - ☐ Landscaping
  - ☐ Lighting
  - ☐ Mechanicals (site and rooftop)
  - ☐ Streetscape

- ☐ Sample board consisting of materials and color chips firmly applied to a 24" x 24" foam core panel. Provide material cut-sheets of non-traditional building materials. Provide a Landscape and Hardscape Palette (photos are acceptable for landscape items). All samples must be clearly labeled including:
  - ☐ Project Name
  - ☐ Applicant's name and contact information
  - ☐ Architect
  - ☐ Landscape Architect
  - ☐ Date
  - ☐ Submission number

- ☐ Exterior Light Drawings including photometric plan

- ☐ Signage Specifications
  - ☐ Detailed drawings of all proposed wall signage and blade signage (1/4"=1'-0") indicating final location(s), size, materials, color, logo, text and other fabrication requirements.
  - ☐ Detailed drawings of all proposed awnings and umbrellas (1/4"=1'-0") indicating location(s), size, material, color, logo and text (where applicable).
  - ☐ Detailed drawings of any other approved environmental graphic elements (1/4"=1'0") indicating location(s), size, materials, color, logo, text as well as other fabrication requirements.

- ☐ Project schedule including:
  - ☐ City Plan Review and Permit Application Date
  - ☐ Construction Start
  - ☐ Occupancy

- ☐ Sustainability Checklist

- ☐ Any additional information requested by the DRB.

- ☐ Digital Files:
  - ☐ CD or Thumb Drive with a PDF and CAD files of the submission

- ☐ Submission Fee

All elements of the applicants submission as outlined above must be submitted along with this checklist to the Board as a complete package. Partial submittals will not be accepted and will be returned to the applicant without review.

DRB Review and/or Approval

After receipt of Submission 3, the DRB will return to the applicant written comments or one set of prints with comments, modifications, and/ or approval. If the DRB returns Design Development documents to the applicant without an approval, the applicant must revise plans and resubmit a revised package indicating all changes bubbled and listed as an addendum addressing the DRB's comments

SUBMISSION 4: CONSTRUCTION DOCUMENTS AND SPECIFICATIONS CHECKLIST

All drawings in the Final Design phase should be at a scale as specified below. Exceptions may be made at the discretion of the Board for applicants whose space is sufficiently large to make drawings at this scale unwieldy.

Please submit an electronic set in PDF format to the Fitzsimons Design Review Board (DRB) at least 5 business days prior to the DRB scheduled meeting.

- ☐ Response to the DRB letter

- ☐ Cover Sheet
  - ☐ Sheet Index
  - ☐ Applicant's name and contact information
  - ☐ Architect
  - ☐ Landscape Architect
  - ☐ Engineer
  - ☐ Date
  - ☐ Submission number
  - ☐ Vicinity Map

- ☐ Project Narrative

- ☐ Urban Design Plan
  Referred per Submission 3

- ☐ Site Plan (scale minimum 1:50)
  All plans should have a consistent orientation where possible. Please indicate scale, north and include the following:
  - ☐ Site context analysis (How this project fits within FIC)
  - ☐ Identify Primary, Secondary and/or Perimeter Streets
  - ☐ Building footprint with area calculations
  - ☐ Property line, easements, setbacks (existing and proposed)
  - ☐ General dimensions
  - ☐ Primary Building Entries
  - ☐ Pedestrian Circulation
  - ☐ Parking layout and calculations
  - ☐ Bike Parking
  - ☐ Truck service route, loading zone(s), and fire truck access
  - ☐ Exterior storage equipment, transformers, etc.
  - ☐ Phasing Plan
  - ☐ Site Sections

- ☐ Landscape Plan (scale minimum 1:50)
  - ☐ General landscape design and materials
  - ☐ Proposed street lighting and type
  - ☐ Proposed signage locations
  - ☐ Streetscape (refer to Section 2.2 Streets), indicating location(s) of trees being applied toward mitigation requirements
  - ☐ Grading Plan
  - ☐ Identify proposed paving and planting material within 'Build-To' Zone
  - ☐ Identify side-wide planting and paving material.
  - ☐ Provide a landscape legend that includes species and quantity of plant material.
  - ☐ General Dimensions (Walks, Amenity Zones, Tree Spacing)
  - ☐ Detention/WQ area (if applicable)
  - ☐ Sun/Shade Studies (morning, noon, and evening during spring, summer, fall, and winter)
  - ☐ Irrigation Plan
  - ☐ Tree Mitigation Plan:
    - ☐ Plan showing location of existing trees
    - ☐ Indicate trees being removed
    - ☐ Completed tree mitigation form including number of caliper inches being applied toward mitigation requirements and caliper inches removed

- ☐ Floor Plans (scale minimum 3/32"=1'-0")
  All plans should have a consistent orientation where possible. Please indicate scale, north and include the following:
  - ☐ Ground floor with site context including abutting streets
  - ☐ Upper floors
  - ☐ General dimensions
  - ☐ Primary and Secondary Entries
  - ☐ Interior space planning (in order to understand implications to exterior fenestration)
  - ☐ Building Sections
  - ☐ Loading areas
  - ☐ Pedestrian System (context with building entries and site circulation)

- ☐ Elevations (full color) - 4 views (scale 1/16)
  Please indicate scale and orientation, and include the following:
  - ☐ Site context
  - ☐ General dimensions
  - ☐ Annotated materials
  - ☐ Signage
  - ☐ Landscaping
  - ☐ Lighting
  - ☐ Mechanical Screening (site and rooftop)
  - ☐ Percent Glazing

- ☐ Perspectives/Axonometrics - minimum 4 views (Minimum 1 birds-eye and Minimum 1 Street level view at primary entry) (scale 1/16"=1'-0")
  Please indicate view, and identify the following:
  - ☐ Site context
  - ☐ Signage
  - ☐ Landscaping
  - ☐ Lighting
  - ☐ Mechanicals (site and rooftop)
  - ☐ Streetscape
  - ☐ Buildings

- ☐ Sample board consisting of materials and color chips firmly applied to a 24" x24" foam core panel. Provide material cut-sheets of non-traditional building materials. Provide a Landscape and Hardscape Palette (photos are acceptable for landscape items). All samples must be clearly labeled including:
  - ☐ Project Name
  - ☐ Applicant's name and contact information
  - ☐ Architect
  - ☐ Landscape Architect
  - ☐ Date
  - ☐ Submission number

- ☐ Exterior Light Drawings including photometric plan

- ☐ Signage Specifications
  - ☐ Detailed drawings of all proposed wall signage and blade signage (1/4"=1'-0") indicating final location(s), size, materials, color, logo, text and other fabrication requirements.
  - ☐ Detailed drawings of all proposed awnings and umbrellas (1/4"=1'-0") indicating location(s), size, material, color, logo and text (where applicable).
  - ☐ Detailed drawings of any other approved environmental graphic elements (1/4"=1'0") indicating location(s), size, materials, color, logo, text as well as other fabrication requirements.

- ☐ Project schedule including:
  - ☐ City Plan Review and Permit Application Date
  - ☐ Construction Start
  - ☐ Occupancy

- ☐ Sustainability Checklist
- ☐ Any additional information requested by the DRB.
- ☐ Digital Files:
  - ☐ CD or Thumb Drive with a PDF and CAD files of the submission

- ☐ Submission Fee

All elements of the applicants submission as outlined above must be submitted along with this checklist to the Board as a complete package. Partial submittals will not be accepted and will be returned to the applicant without review.

DRB Review and/or Approval

If the DRB requires changes, the applicant must revise plans and resubmit a complete package with all changes bubbled and listed as an addendum to the DRB for final approval within 10 business days.

The Design Development Submission (#3) as approved by the DRB shall constitute the final basis of design to be used for construction. In lieu of Submission 4, the applicant may submit final construction documents as long as all the information listed is provided.

Changes After Final Plan Approval

After the DRB's approval of the final plans, no changes will be made without the prior approval of the DRB. However, in the course of construction, applicants may make such changes in, on or about the building as may be required as a result of normal construction changes, provided they are approved in advance and in writing by the DRB.

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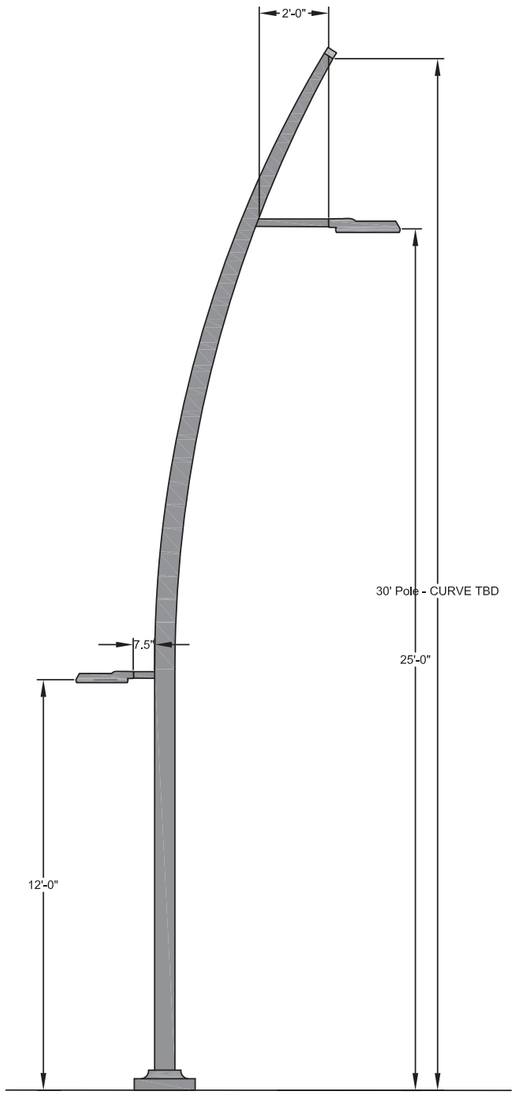
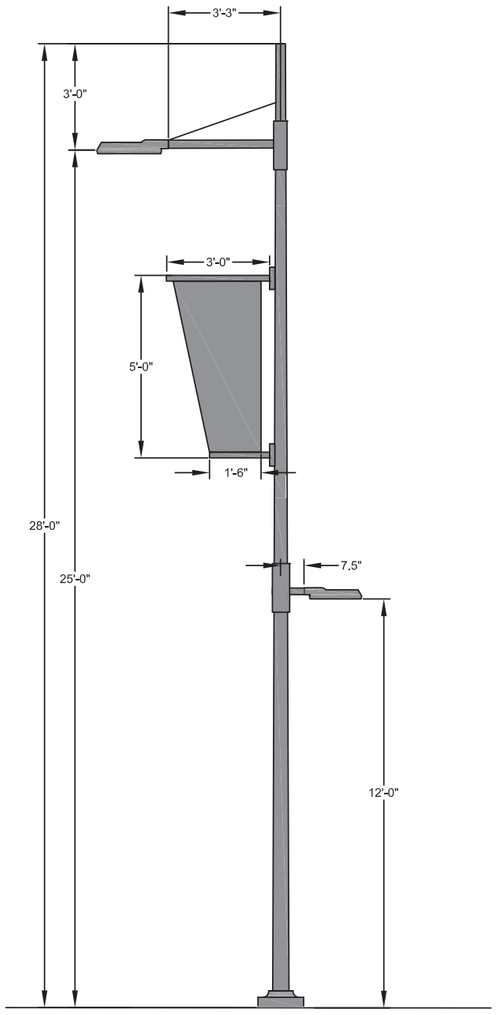
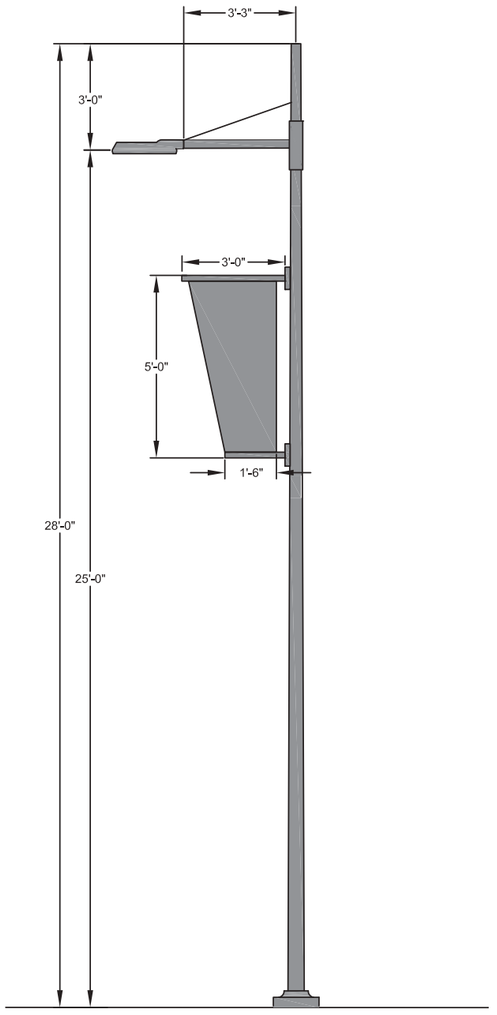
APPENDIX C:
TYPICAL LIGHTING PLAN AND FIXTURE



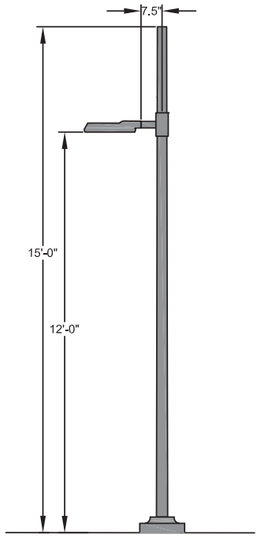
Scranton Specialty Pole (P1)



Street & Pedestrian Pole Combo (P2)



Street Pole (P3)



Pedestrian Pole

* Note: see appendix D about detailed cut sheets

LIGHTING DESIGN AND ENGINEERING

Fitzsimons Innovation Campus Street Poles

Drawn:	RR	Date:	2017-12-04
Checked:	DS	Scale:	N.T.S.

Fitzsimons Innovation Campus
Lighting Improvements

LEGEND

P1: SCRANTON SPECIALTY 30' CURVED POLE BY MOUNTAIN STATES LIGHTING W/ STREET AND PEDESTRIAN LUMINAIRES
STREET LUMINAIRE: WE-EF RFL540 SE LED 661-2336-MOD(7PIN ANSI RECEPTACLE)
PEDESTRIAN LUMINAIRE: WE-EF RFL530 SE LED 661-1347-MOD(7PIN ANSI RECEPTACLE)

P2: STANDARD 28' ROUND TAPERED ALUMINUM POLE BY MOUNTAIN STATES LIGHTING W/ STREET AND PEDESTRIAN LUMINAIRES.
STREET LUMINAIRE: WE-EF RFL540 SE LED 661-2336-MOD(7PIN ANSI RECEPTACLE)
PEDESTRIAN LUMINAIRE: WE-EF RFL530 SE LED 661-1346 - MOD(7PIN ANSI RECEPTACLE)

P3: STANDARD 28' ROUND TAPERED ALUMINUM POLE BY MOUNTAIN STATES LIGHTING W/ STREET LUMINAIRE ONLY.
STREET LUMINAIRE: WE-EF RFL540 SE LED 661-2336-MOD(7PIN ANSI RECEPTACLE)

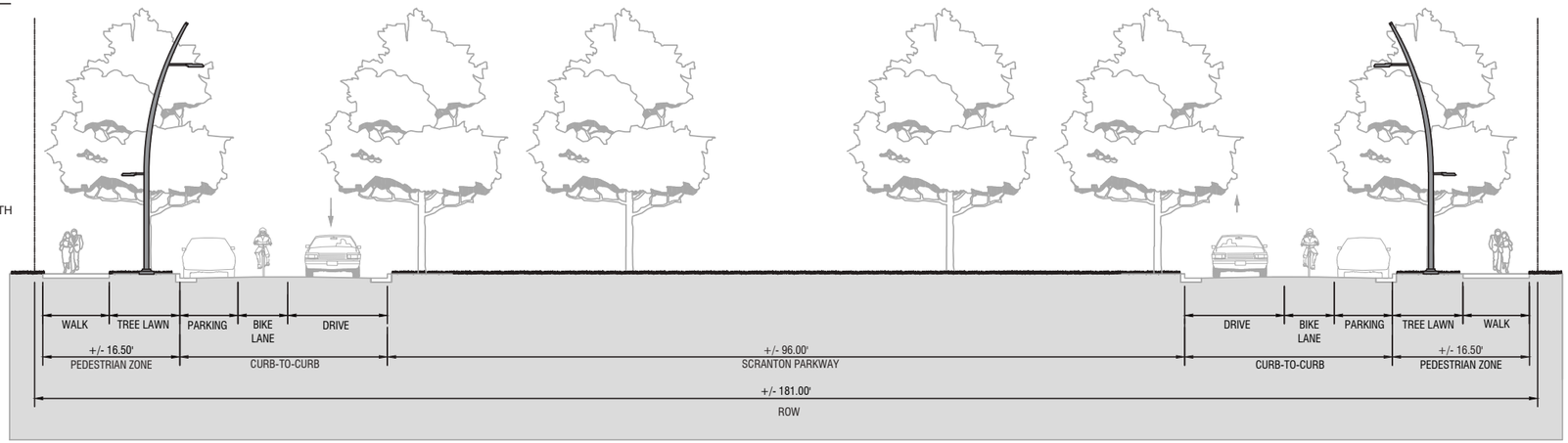
S2 S1 NEW HEAVY-DUTY, BOTTOMLESS, FLUSH-TO GRADE POLYMER CONCRETE SPLICE BOX WITH TIER 22 RATED BOLTED COVER.
S1 = 11" x 18", S2 = 18" x 24"

FO NEW FIBER OPTIC HEAVY-DUTY, BOTTOMLESS, FLUSH-TO GRADE POLYMER CONCRETE SPLICE BOX WITH TIER 22 RATED BOLTED COVER.
FO = 18" x 24"

PVC CONDUIT FOR LUMINAIRE POWER.

PVC CONDUIT FOR FIBER OPTIC.

(2) 3" PVC SLEEVES FOR POWER.



CALCULATION SUMMARY

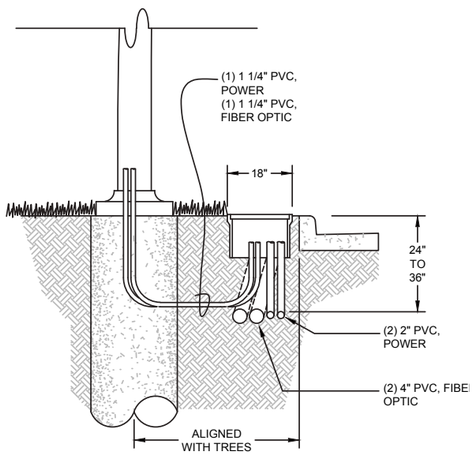
CRITERIA:
ROADWAY AVG LUMINANCE: 0.6 cd/m^2
ROADWAY AVG:MIN: 3.5
SIDEWALK AVG ILLUMINANCE: 0.4 fc

CALCULATION RESULTS:
ROADWAY AVG LUMINANCE: 0.6 cd/m^2
ROADWAY AVG:MIN: 1.8
SIDEWALK AVG ILLUMINANCE: 1.18 fc

ILLUMINANCE CALC POINTS
0.0 - 0.2 FC
0.2 - 0.5 FC
0.5 - 1.0 FC
1.0 - 2.0 FC
2.0+ FC

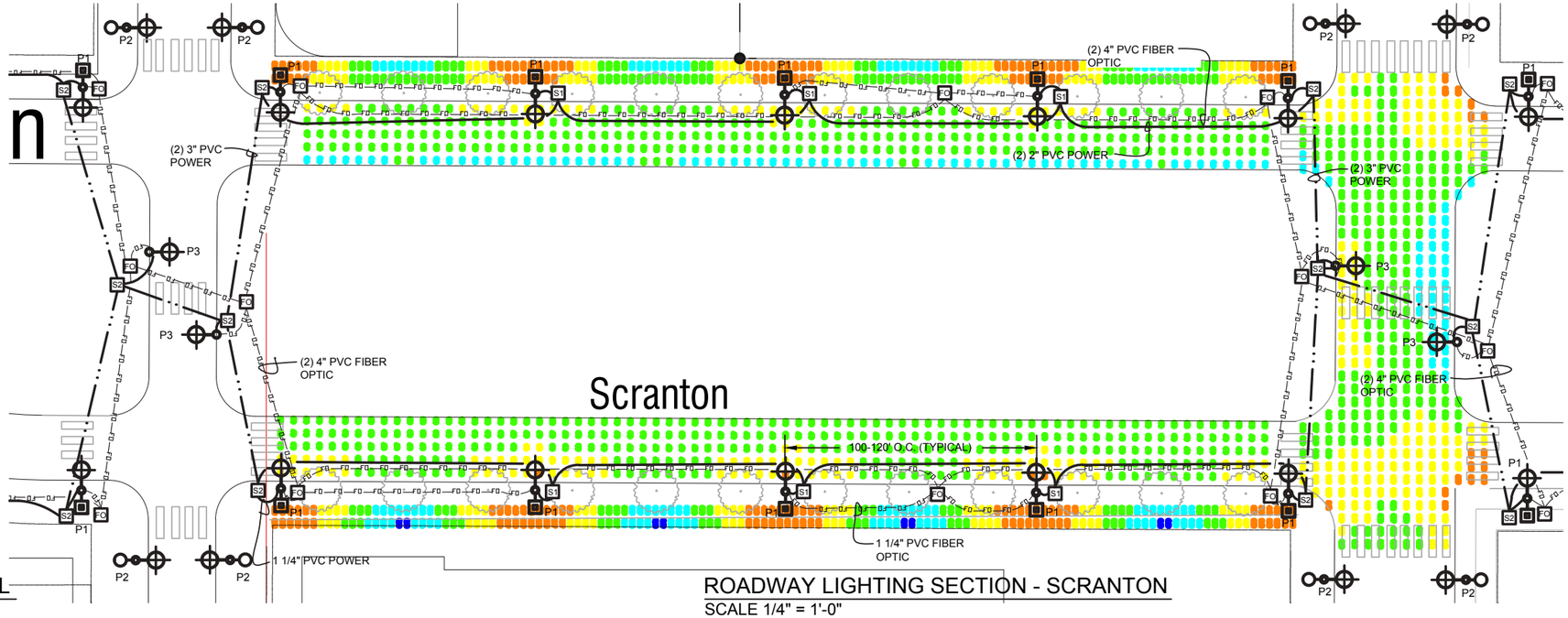
ROADWAY LIGHTING PLAN - SCRANTON

SCALE 3/4" = 1'-0"



SPLICE BOX AND CONDUIT LAYOUT DETAIL

SCALE: NOT TO SCALE



ROADWAY LIGHTING SECTION - SCRANTON

SCALE 1/4" = 1'-0"

CLANTON & ASSOCIATES
LIGHTING DESIGN AND ENGINEERING

Scranton Blvd.

Drawn: RR Date: 2018-03-26
Checked: DS Scale: N.T.S.

Fitzsimons Innovation Campus
Lighting Improvements

LEGEND

P2: STANDARD 28' ROUND TAPERED ALUMINUM POLE BY MOUNTIAN STATES LIGHTING W/ STREET AND PEDESTRIAN LUMINAIRES.
STREET LUMINAIRE: WE-EF RFL540 SE LED 661-2336-MOD(7PIN ANSI RECEPTACLE)
PEDESTRIAN LUMINAIRE: WE-EF RFL530 SE LED 661-1346 - MOD(7PIN ANSI RECEPTACLE)

P4: STANDARD 15' ROUND TAPERED ALUMINUM POLE BY MOUNTAIN STATES LIGHTING WITH PEDESTRIAN LUMINAIRE ONLY.
PEDESTRIAN LUMINAIRE: WE-EF RFL530 SE LED 661-1346-MOD(7PIN ANSI RECEPTACLE)

S2 S1 NEW HEAVY-DUTY, BOTTOMLESS, FLUSH-TO GRADE POLYMER CONCRETE SPLICE BOX WITH TIER 22 RATED BOLTED COVER.
S1 = 11" X 18", S2 = 18" X 24"

FO NEW FIBER OPTIC HEAVY-DUTY, BOTTOMLESS, FLUSH-TO GRADE POLYMER CONCRETE SPLICE BOX WITH TIER 22 RATED BOLTED COVER.
FO = 18" X 24"

PVC CONDUIT FOR LUMINAIRE POWER.

PVC CONDUIT FOR FIBER OPTIC.

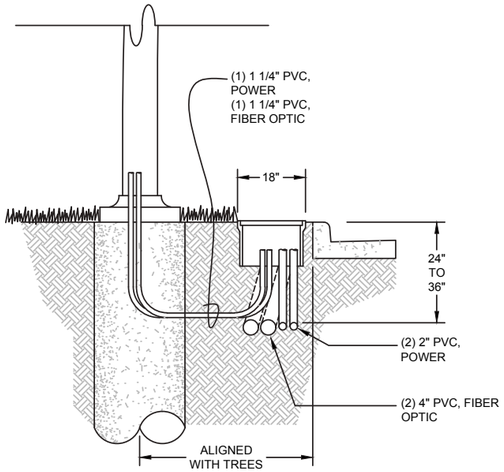
3" PVC SLEEVE FOR POWER.

CALCULATION SUMMARY

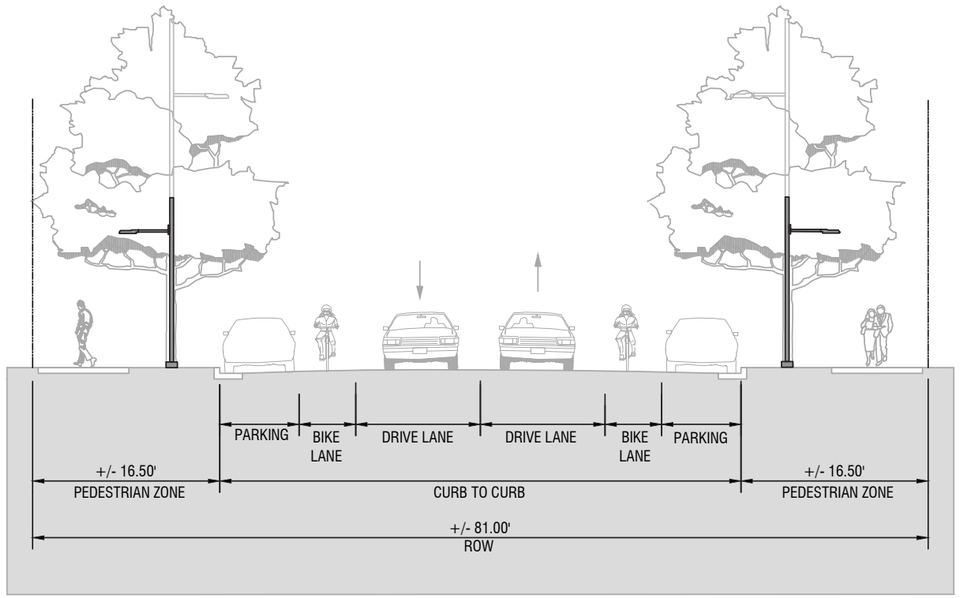
CRITERIA:
ROADWAY AVG LUMINANCE: 0.4 cd/m^2
ROADWAY AVG:MIN: 4.0
SIDEWALK AVG ILLUMINANCE: 0.3 fc

CALCULATION RESULTS:
ROADWAY AVG LUMINANCE: 0.42 cd/m^2
ROADWAY AVG:MIN: 3.45
SIDEWALK AVG ILLUMINANCE: 1.9 fc

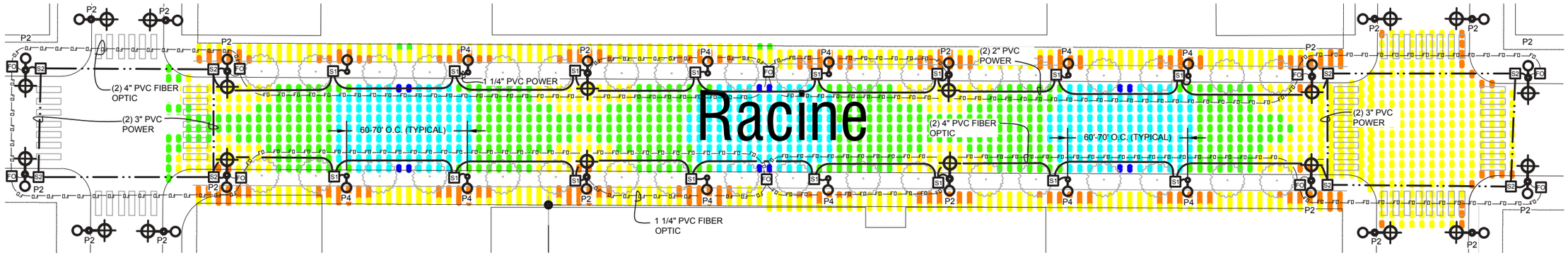
ILLUMINANCE CALC POINTS
0.0 - 0.2 FC
0.2 - 0.5 FC
0.5 - 1.0 FC
1.0 - 2.0 FC
2.0+ FC



SPLICE BOX AND CONDUIT LAYOUT DETAIL
SCALE: NOT TO SCALE



ROADWAY LIGHTING Section - Typical Primary Street
SCALE 1"=1'-0"



ROADWAY LIGHTING PLAN - Typical Primary Street
SCALE 1-4" = 1'-0"

CLANTON & ASSOCIATES
LIGHTING DESIGN AND ENGINEERING

Typical Primary Street

Drawn: RR
Checked: DS
Date: 2018-03-26
Scale: N.T.S.

Fitzsimons Innovation Campus
Lighting Improvements

LEGEND

P2: STANDARD 28' ROUND TAPERED ALUMINUM POLE BY MOUNTIAN STATES LIGHTING W/ STREET AND PEDESTRIAN LUMINAIRES.
STREET LUMINAIRE: WE-EF RFL540 SE LED 661-2336-MOD(7PIN ANSI RECEPTACLE)
PEDESTRIAN LUMINAIRE: WE-EF RFL530 SE LED 661-1346 - MOD(7PIN ANSI RECEPTACLE)

P4: STANDARD 15' ROUND TAPERED ALUMINUM POLE BY MOUNTAIN STATES LIGHTING WITH PEDESTRIAN LUMINAIRE ONLY.
PEDESTRIAN LUMINAIRE: WE-EF RFL530 SE LED 661-1346-MOD(7PIN ANSI RECEPTACLE)

S2 S1 NEW HEAVY-DUTY, BOTTOMLESS, FLUSH-TO GRADE POLYMER CONCRETE SPLICE BOX WITH TIER 22 RATED BOLTED COVER.
S1 = 11" x 18", S2 = 18" x 24"

FO NEW FIBER OPTIC HEAVY-DUTY, BOTTOMLESS, FLUSH-TO GRADE POLYMER CONCRETE SPLICE BOX WITH TIER 22 RATED BOLTED COVER.
FO = 18" x 24"

PVC CONDUIT FOR LUMINAIRE POWER.

PVC CONDUIT FOR FIBER OPTIC.

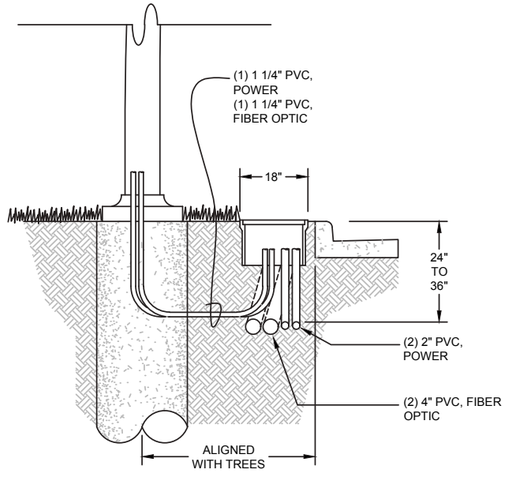
3" PVC SLEEVE FOR POWER.

CALCULATION SUMMARY

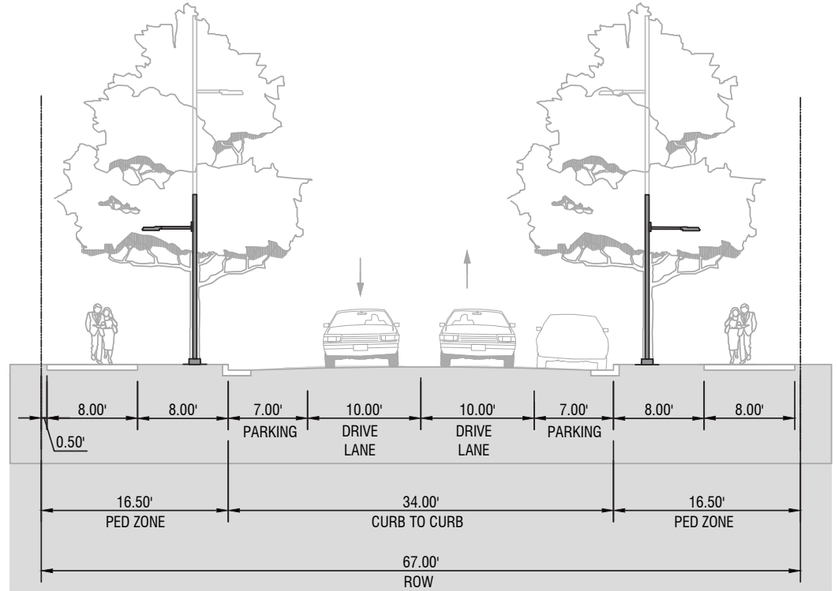
CRITERIA:
ROADWAY AVG LUMINANCE: 0.4 cd/m^2
ROADWAY AVG:MIN: 4.0
SIDEWALK AVG ILLUMINANCE: 0.3 fc

CALCULATION RESULTS
ROADWAY AVG LUMINANCE: 0.54 cd/m^2
ROADWAY AVG:MIN: 1.84
SIDEWALK AVG ILLUMINANCE: 1.66 fc

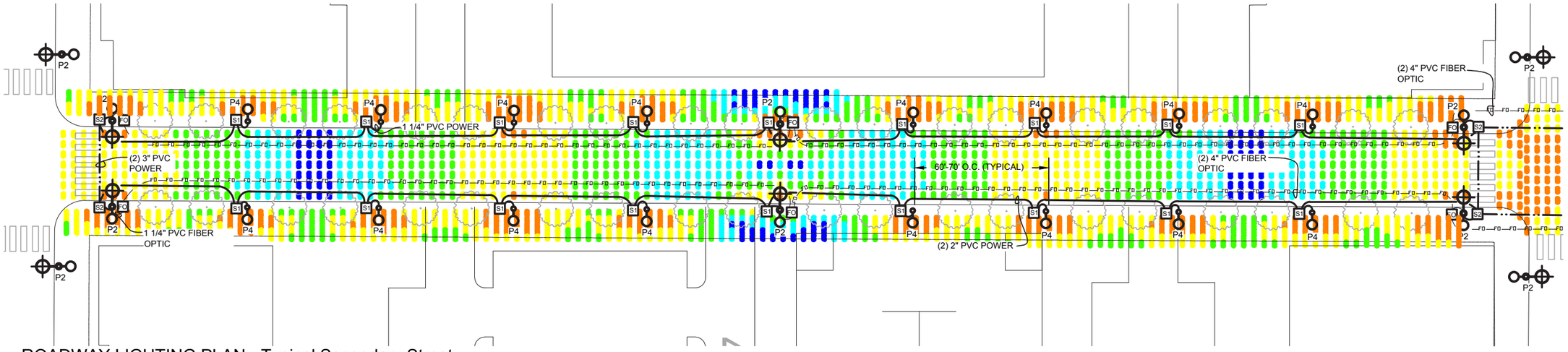
ILLUMINANCE CALC POINTS
0.0 - 0.2 FC
0.2 - 0.5 FC
0.5 - 1.0 FC
1.0 - 2.0 FC
2.0+ FC



SPLICE BOX AND CONDUIT LAYOUT DETAIL
SCALE: NOT TO SCALE



ROADWAY LIGHTING PLAN - Typical Secondary Street
SCALE 1"=1'-0"



ROADWAY LIGHTING PLAN - Typical Secondary Street
SCALE 1/4"=1'-0"

CLANTON & ASSOCIATES
LIGHTING DESIGN AND ENGINEERING

Typical Secondary Street

Drawn: RR
Checked: DS
Date: 2018-03-26
Scale: N.T.S.

Fitzsimons Innovation Campus
Lighting Improvements

LEGEND

P5: STANDARD 25' ROUND TAPERED ALUMINUM POLE BY MOUNTAIN STATES LIGHTING W/ PARKING LOT LUMINAIRE, MOUNTED ON 3'-0" RAISED CONCRETE FOUNDATION.
PARKING LOT LUMINAIRE: WE-EF RFL540 SE LED 661-2525-MOD(7PIN ANSI RECEPTACLE)

S2 S1 NEW HEAVY-DUTY, BOTTOMLESS, FLUSH-TO GRADE POLYMER CONCRETE SPLICE BOX WITH TIER 22 RATED BOLTED COVER.
S1 = 11" x 18", S2 = 18" x 24"

FO NEW FIBER OPTIC HEAVY-DUTY, BOTTOMLESS, FLUSH-TO GRADE POLYMER CONCRETE SPLICE BOX WITH TIER 22 RATED BOLTED COVER.
FO = 18" x 24"

PVC CONDUIT FOR LUMINAIRE POWER.

PVC CONDUIT FOR FIBER OPTIC.

3" PVC SLEEVE FOR POWER.

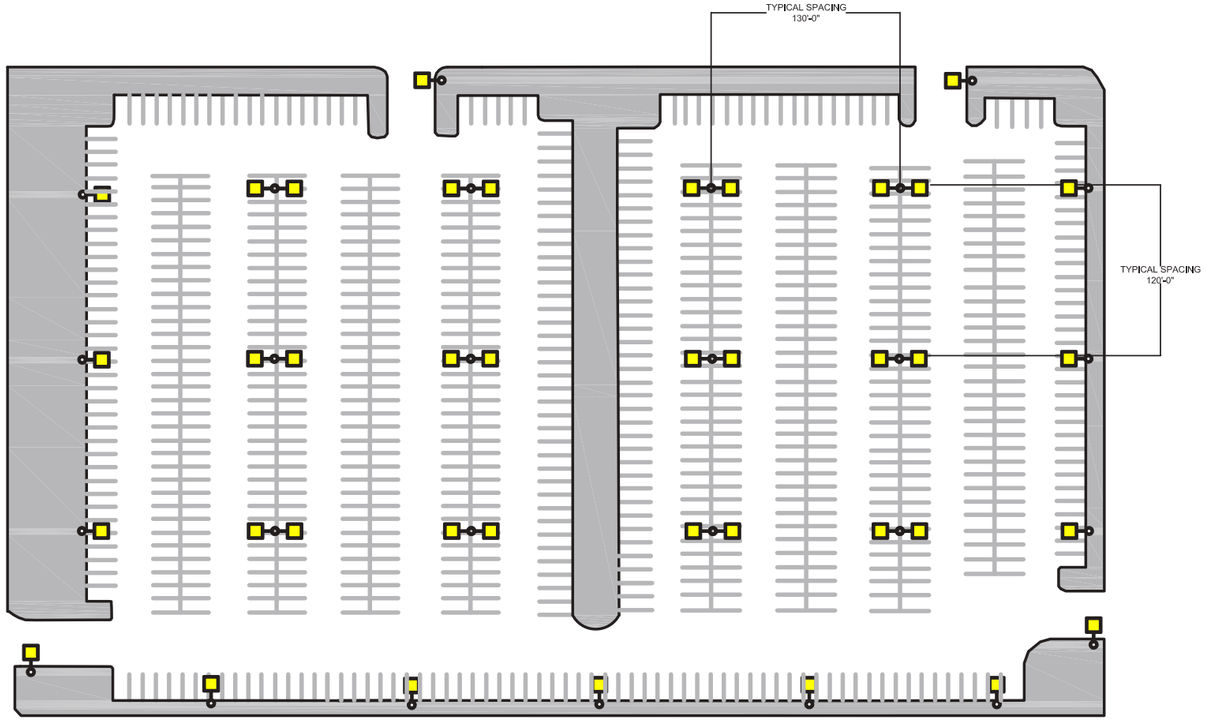
LIGHTING CALCULATION SUMMARY

CRITERIA:

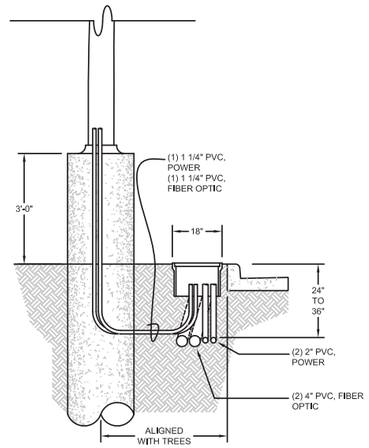
MINIMUM ILLUMINANCE:	0.2FC
MAX:MIN RATIO:	20:1
MINIMUM VERTICAL ILLUMINANCE:	0.1FC

CALCULATION RESULTS:

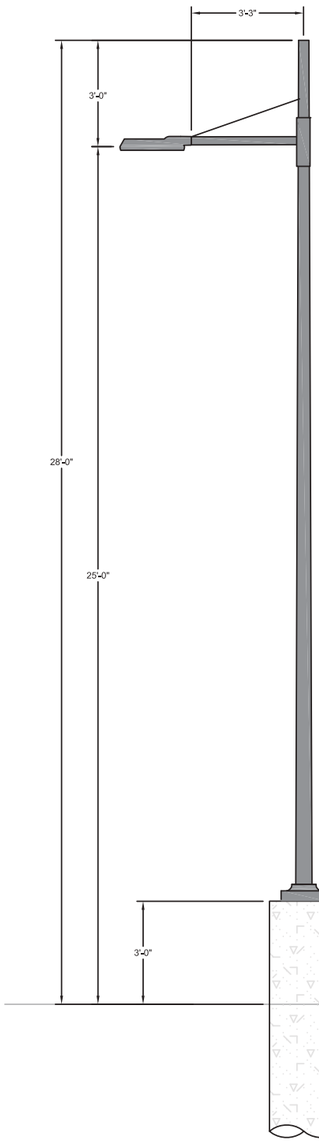
MINIMUM ILLUMINANCE:	0.2FC
MAX:MIN RATIO:	16.50
MINIMUM VERTICAL ILLUMINANCE:	0.15FC



PARKING LOT LIGHTING PLAN - LARGE LOT
SCALE 1/8 "=1'-0"



SPLICE BOX AND CONDUIT LAYOUT DETAIL
SCALE: NOT TO SCALE



* Note: see detailed cut sheet on p.109 from the Mountain States Lighting

PARKING LOT LIGHTING SECTION
SCALE 3 "=1'-0"

CLANTON & ASSOCIATES
LIGHTING DESIGN AND ENGINEERING

LARGE GENERAL PARKING LOT LIGHTING

Drawn: RR Date: 2018-03-14
Checked: DS Scale: N.T.S.

Fitzsimons Innovation Campus
Parking Lot Lighting

LEGEND

P5: STANDARD 25' ROUND TAPERED ALUMINUM POLE BY MOUNTAIN STATES LIGHTING W/ PARKING LOT LUMINAIRE, MOUNTED ON 3'-0" RAISED CONCRETE FOUNDATION.
PARKING LOT LUMINAIRE: WE-EF RFL540 SE LED 661-2525-MOD(7PIN ANSI RECEPTACLE)

S2 S1 NEW HEAVY-DUTY, BOTTOMLESS, FLUSH-TO GRADE POLYMER CONCRETE SPLICE BOX WITH TIER 22 RATED BOLTED COVER.
S1 = 11" x 18", S2 = 18" x 24"

FO NEW FIBER OPTIC HEAVY-DUTY, BOTTOMLESS, FLUSH-TO GRADE POLYMER CONCRETE SPLICE BOX WITH TIER 22 RATED BOLTED COVER.
FO = 18" x 24"

PVC CONDUIT FOR LUMINAIRE POWER.

PVC CONDUIT FOR FIBER OPTIC.

3" PVC SLEEVE FOR POWER.

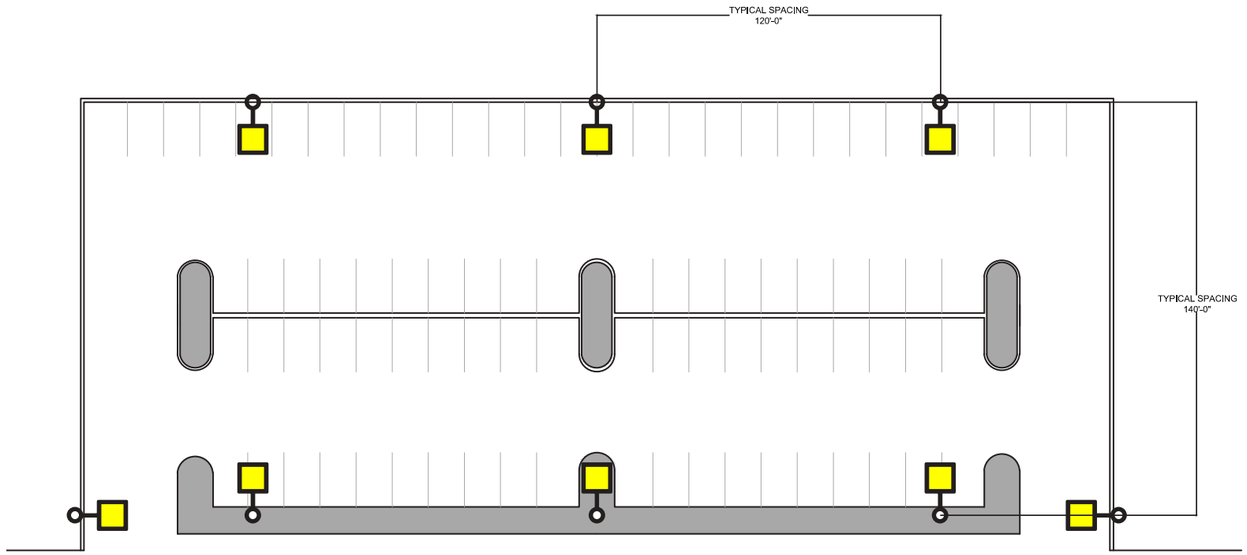
LIGHTING CALCULATION SUMMARY

CRITERIA:

MINIMUM ILLUMINANCE:	0.2FC
MAX:MIN RATIO:	20:1
MINIMUM VERTICAL ILLUMINANCE:	0.1FC

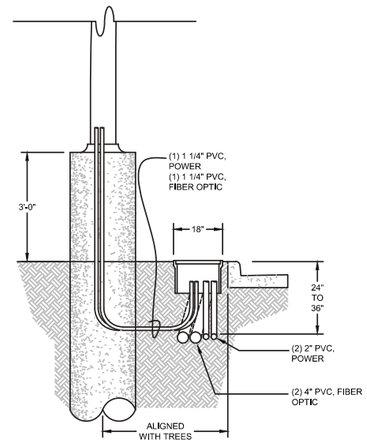
CALCULATION RESULTS:

MINIMUM ILLUMINANCE:	0.2FC
MAX:MIN RATIO:	9.50
MINIMUM VERTICAL ILLUMINANCE:	0.17FC

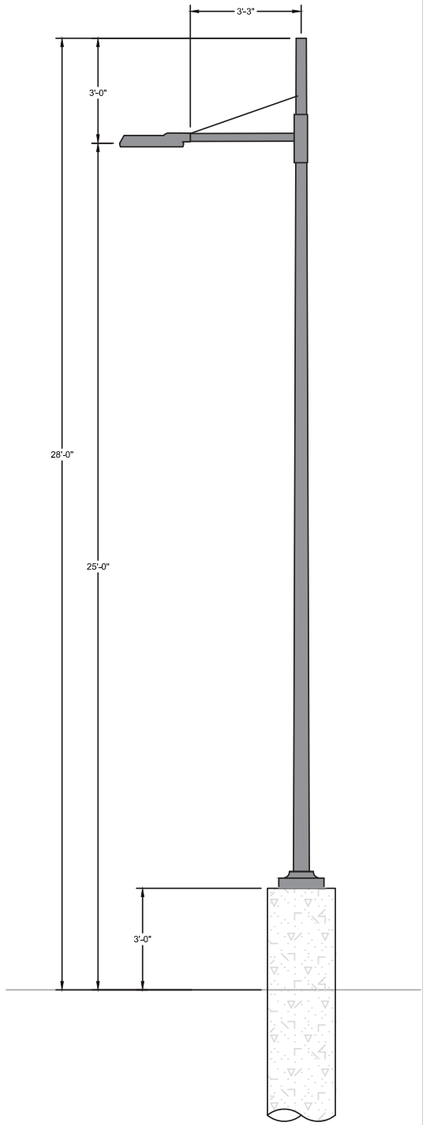


NOTE:
PERIMETER MOUNTED PARKING LOT LIGHTING IS RECOMMENDED WHERE THERE IS NO ADDITIONAL LIGHT CONTRIBUTION FROM ADJECTENT STREET LIGHTING, PEDESTRIAN LIGHTING, OR BUILDING MOUNTED LIGHTING.

PARKING LOT LIGHTING PLAN - SMALL LOT
SCALE 1/4 "=1'-0"



SPLICE BOX AND CONDUIT LAYOUT DETAIL
SCALE: NOT TO SCALE



* Note: see detailed cut sheet on p.109 from the Mountain States Lighting

PARKING LOT LIGHTING SECTION
SCALE 3 "=1'-0"

CLANTON & ASSOCIATES
LIGHTING DESIGN AND ENGINEERING

SMALL PARKING LOT LIGHTING

Drawn: RR Date: 2018-03-13
Checked: DS Scale: N.T.S.

Fitzsimons Innovation Campus
Parking Lot Lighting

LEGEND

P5: STANDARD 25' ROUND TAPERED ALUMINUM POLE BY MOUNTAIN STATES LIGHTING W/ PARKING LOT LUMINAIRE, MOUNTED ON 3'-0" RAISED CONCRETE FOUNDATION.
PARKING LOT LUMINAIRE: WE-EF RFL540 SE LED 661-2525-MOD(7PIN ANSI RECEPTACLE)

S2 S1 NEW HEAVY-DUTY, BOTTOMLESS, FLUSH-TO GRADE POLYMER CONCRETE SPLICE BOX WITH TIER 22 RATED BOLTED COVER.
S1 = 11" x 18", S2 = 18" x 24"

FO NEW FIBER OPTIC HEAVY-DUTY, BOTTOMLESS, FLUSH-TO GRADE POLYMER CONCRETE SPLICE BOX WITH TIER 22 RATED BOLTED COVER.
FO = 18" x 24"

PVC CONDUIT FOR LUMINAIRE POWER.

PVC CONDUIT FOR FIBER OPTIC.

3" PVC SLEEVE FOR POWER.

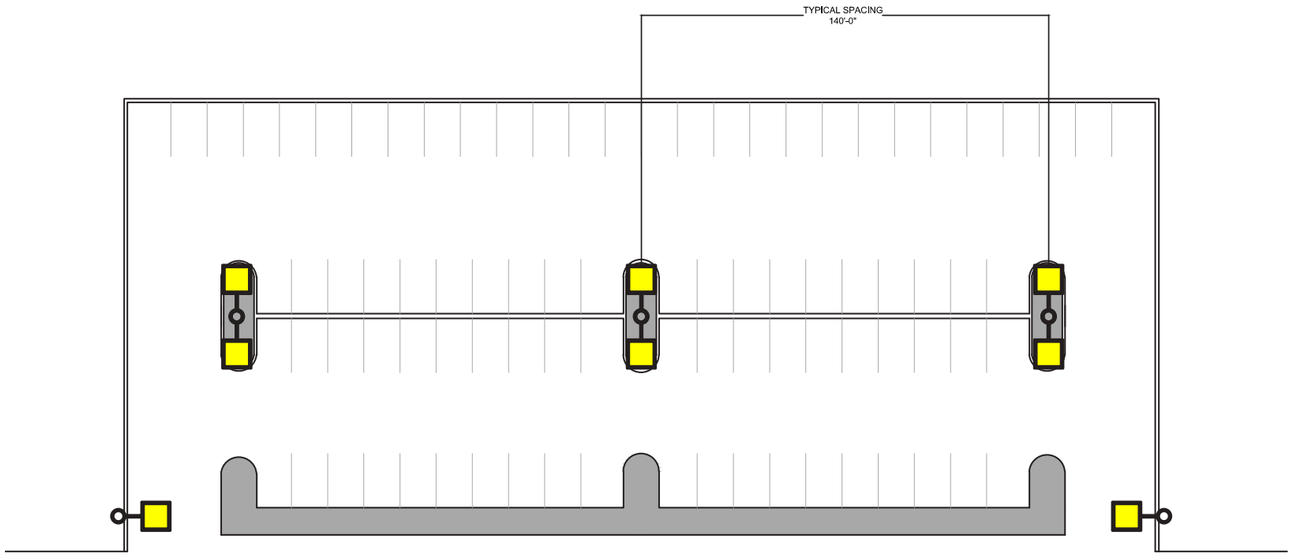
LIGHTING CALCULATION SUMMARY

CRITERIA:

MINIMUM ILLUMINANCE:	0.2FC
MAX:MIN RATIO:	20:1
MINIMUM VERTICAL ILLUMINANCE:	0.1FC

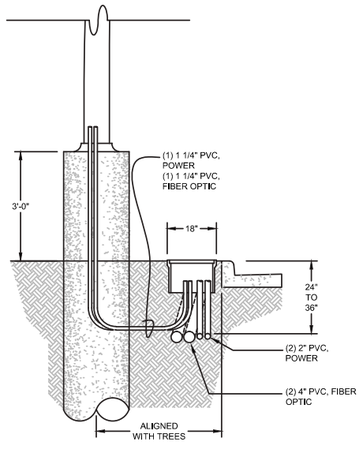
CALCULATION RESULTS:

MINIMUM ILLUMINANCE:	0.2FC
MAX:MIN RATIO:	16.5
MINIMUM VERTICAL ILLUMINANCE:	0.2FC



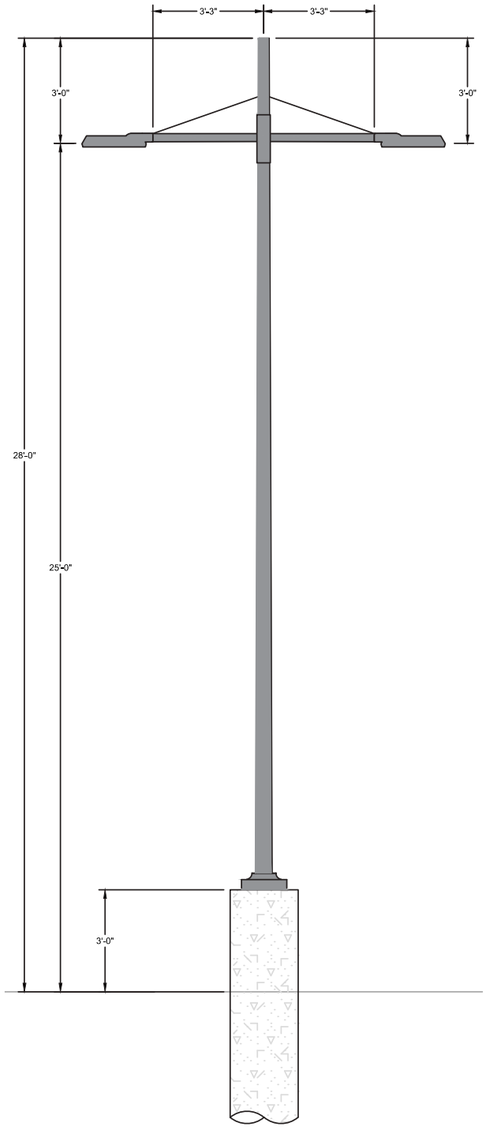
NOTE:
CENTER MOUNTED PARKING LOT LIGHTING IS ONLY TO BE USED WHEN SURROUNDED BY ADJACENT STREET LIGHTING, PEDESTRIAN LIGHTING, OR BUILDING MOUNTED LIGHTING.

PARKING LOT LIGHTING PLAN - SMALL LOT CENTER MOUNTS
SCALE 1/4 "=1'-0"



SPLICE BOX AND CONDUIT LAYOUT DETAIL
SCALE: NOT TO SCALE

* Note: see detailed cut sheet on p.110 from the Mountain States Lighting



PARKING LOT LIGHTING SECTION
SCALE 3 "=1'-0"

CLANTON & ASSOCIATES
LIGHTING DESIGN AND ENGINEERING

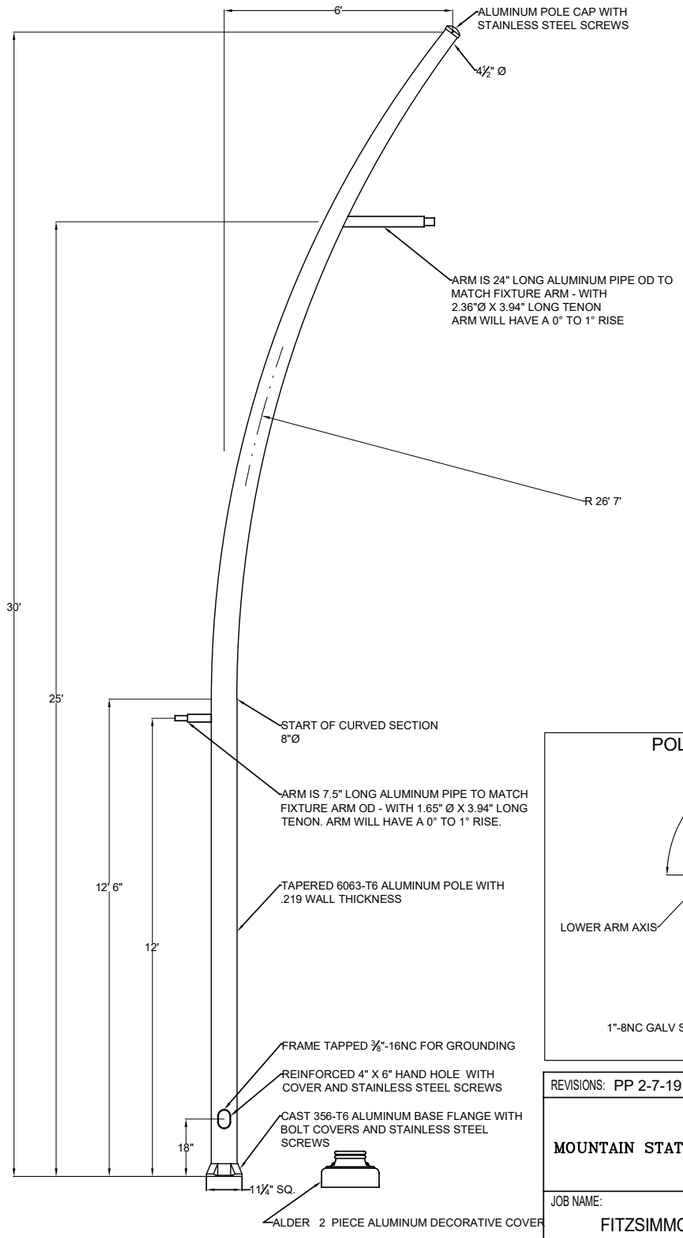
SMALL PARKING LOT LIGHTING CENTER MOUNTED

Drawn:	RR	Date:	2018-03-13
Checked:	DS	Scale:	N.T.S.

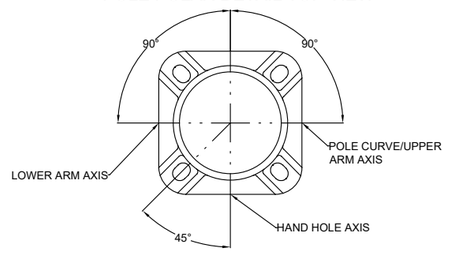
Fitzsimons Innovation Campus
Parking Lot Lighting

APPENDIX D: TYPICAL LIGHTING CUT SHEETS

PART# 30RTACUR-SKTB112817D-8/3.8-DBLSM24"UP/7.5"LA-HH-ALDER-TC-COLOR



POLE POLAR DETAIL TOP VIEW



1"-8NC GALV STEEL ANCHOR BOLTS ON 11" TO 12" Ø BOLT CIRCLE

REVISIONS: PP 2-7-19 Alum BC

MOUNTAIN STATES LIGHTING	P.O. Box 449 Conifer, CO 80433 Phone 303-838-4430 Fax 801-605-9058

JOB NAME: FITZSIMMONS INNOVATION CAMPUS CURVED POLE

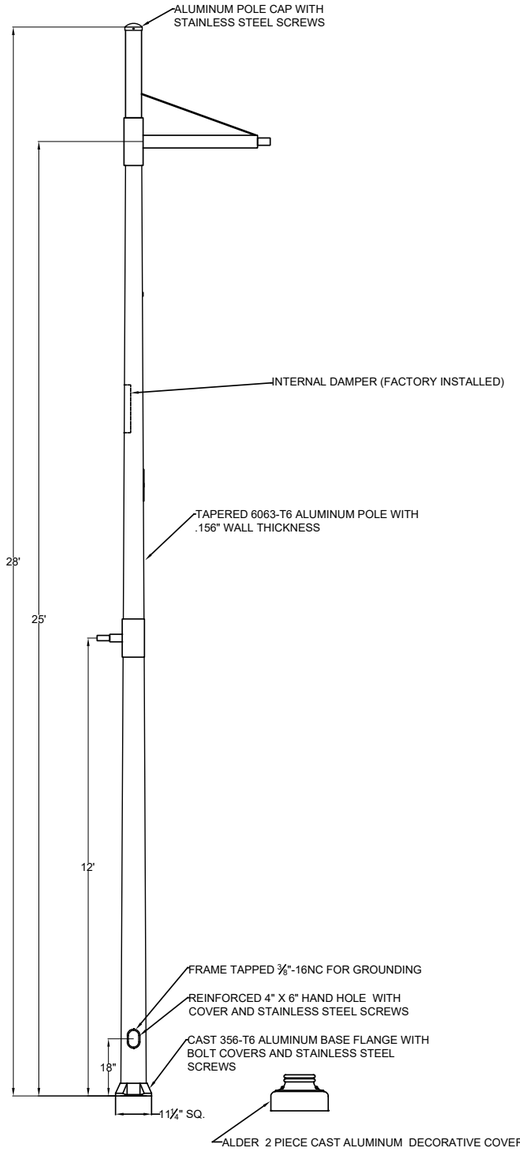
SCALE:	DATE:	DRAWN BY:	DRAWING NUMBER:
NTS	03/25/2018	Ry/Pp	30' CURVED POLE

REP:	QUOTE #:	DIST.:
Mountain States		

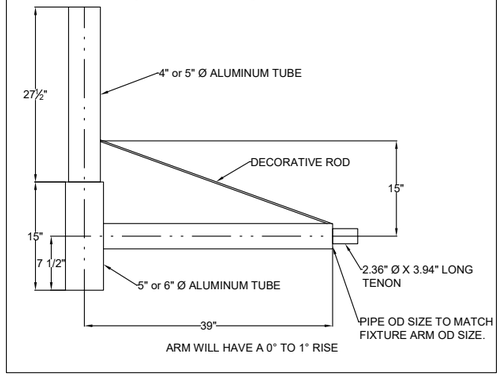
SCRANTON SPECIALTY POLE (P1)

DECORATIVE LIGHTING STANDARDS
BY MOUNTAIN STATES LIGHTING/HAPCO

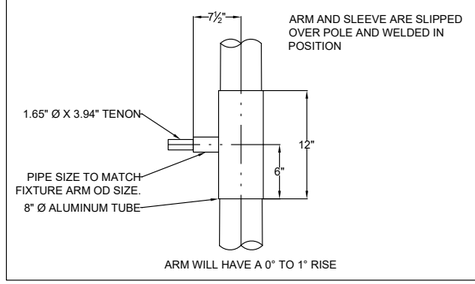
PART# 28RTA-SKTB112917AX-UA3'EXT/3'L/LA-4"HORSA-HH-ALDER-COLOR



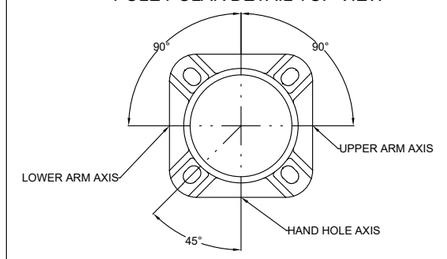
POLE EXTENSION ARM DETAIL



LOWER ARM AND SLEEVE DETAIL



POLE POLAR DETAIL TOP VIEW



1"-8NC GALV STEEL ANCHOR BOLTS ON 11 1/2" Ø BOLT CIRCLE

WARNING: DO NOT INSTALL LIGHTING POLES WITHOUT LUMINAIRES

REVISIONS: N/A

MOUNTAIN STATES LIGHTING	P.O. Box 449 Conifer, CO 80433 Phone 303-838-4430 Fax 801-605-9058

JOB NAME: FITZSIMMONS INNOVATION CAMPUS P2 DBL UP/LOW ARM

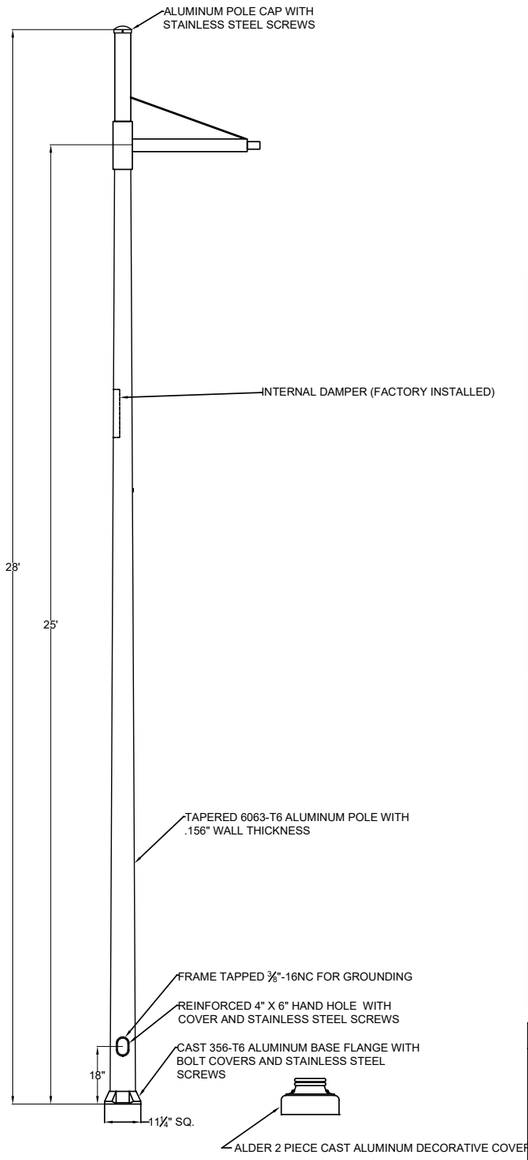
SCALE:	DATE:	DRAWN BY:	DRAWING NUMBER:
NTS	12/19/2018	Ry/Pp	28'RTA P2 DBL L/U

REP:	QUOTE #:	DIST.:
Mountain States		

STREET & PEDESTRIAN POLE COMBO (P2)

DECORATIVE LIGHTING STANDARDS
BY MOUNTAIN STATES LIGHTING/HAPCO MFG

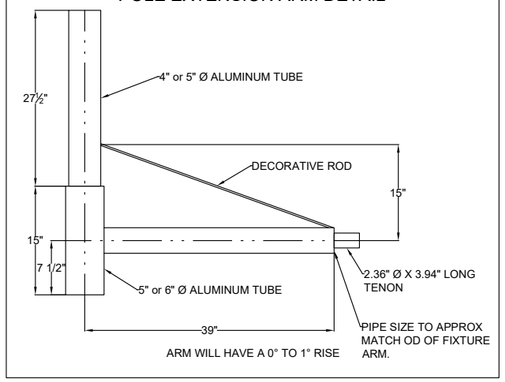
PART# 28RTA-SKTB112917B-3'EXT/3'LARM-HH-ALDER-COLOR



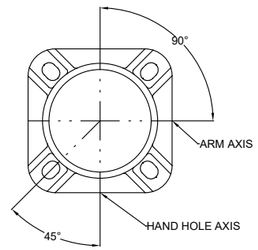
STREET POLE (P3)

DECORATIVE LIGHTING STANDARDS
BY MOUNTAIN STATES LIGHTING/HAPCO MFG

POLE EXTENSION ARM DETAIL



POLE POLAR DETAIL TOP VIEW



1"-8NC GALV STEEL ANCHOR BOLTS ON 11" TO 12" Ø BOLT CIRCLE

REVISIONS: N/A

MOUNTAIN STATES LIGHTING	P.O. Box 449 Conifer, CO 80433 Phone 303-838-4430 Fax 801-605-9058

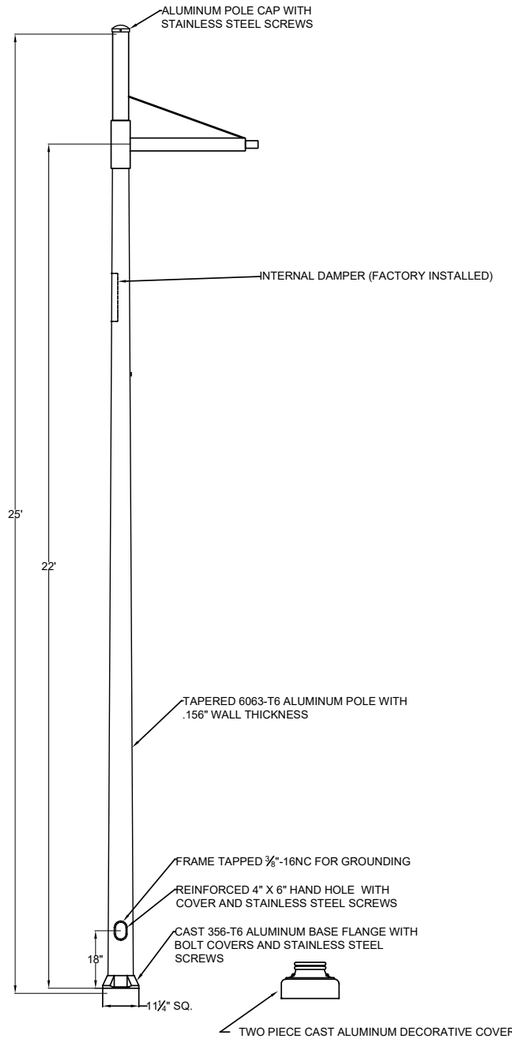
JOB NAME: FITZSIMMONS INNOVATION P3 SGL ARM POLES

SCALE:	DATE:	DRAWN BY:	DRAWING NUMBER:
NTS	12/19/2018	Ry/Pp	28' RTA P3 POLE 1 ARM

REP:	QUOTE #:	DIST.:
Mountain States		

PART# 25RTA-SKTB112917C-3'EXT/3'LARM-HH-ALDER-RAL9004

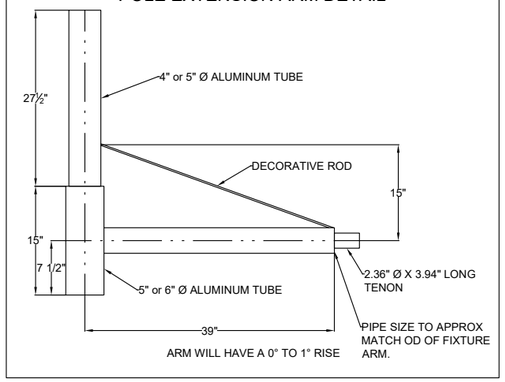
FINISH: RAL9004 BLACK



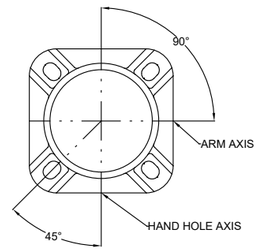
PARKING LOT POLE WITH SINGLE UPPER ARM (P3)

DECORATIVE LIGHTING STANDARDS
BY MOUNTAIN STATES LIGHTING/HAPCO MFG

POLE EXTENSION ARM DETAIL



POLE POLAR DETAIL TOP VIEW



1"-8NC GALV STEEL ANCHOR BOLTS ON 11" TO 12" Ø BOLT CIRCLE

REVISIONS: N/A

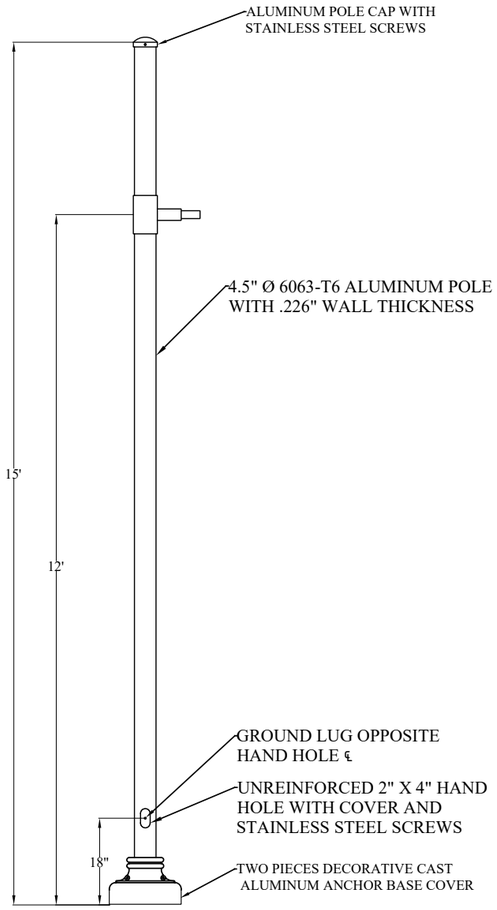
MOUNTAIN STATES LIGHTING	P.O. Box 449 Conifer, CO 80433 Phone 303-838-4430 Fax 801-605-9058

JOB NAME: FITZSIMMONS INNOVATION P3-25 SGL ARM POLES

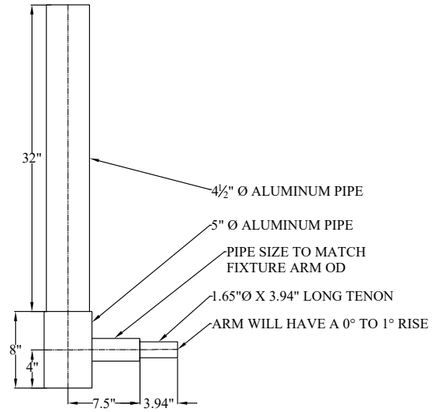
SCALE:	DATE:	DRAWN BY:	DRAWING NUMBER:
NTS	1/30/2019	Ry/Pp	25' RTA P3-25 POLE 1 ARM

REP:	QUOTE #:	DIST.:
Mountain States		

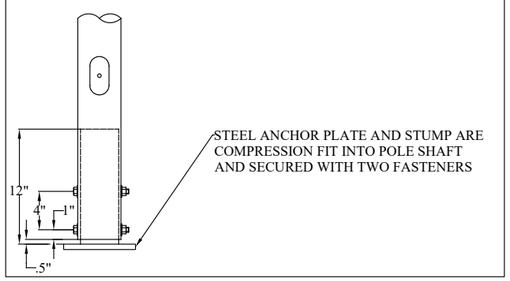
PART# 15RSA-4.5-3'EXT/5"LARM-HH-ABC-TC-JEF-COLOR



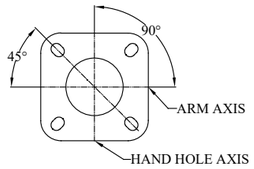
POLE EXTENSION DETAIL



POLE BASE DETAIL



ANCHOR PLATE & POLAR DETAIL TOP VIEW



ANCHOR PLATE IS 7 ½" X 7 ½" X ⅝" STEEL WITH SLOTS FOR 4 EA. ¾"-10NC GALV. STEEL ANCHOR BOLTS ON 7" TO 7½" Ø BOLT CIRCLE

REVISIONS: N/A

MOUNTAIN STATES LIGHTING	P.O. Box 449 Conifer, CO 80433 Phone 303-838-4430 Fax 801-605-9058

JOB NAME: *FITZSIMMONS INNOVATION CAMPUS 15' PED POLE*

SCALE:	DATE:	DRAWN BY:	DRAWING NUMBER:
NTS	05/28/2018	Ry/Pp	15'X4.5"RSA PED POLE

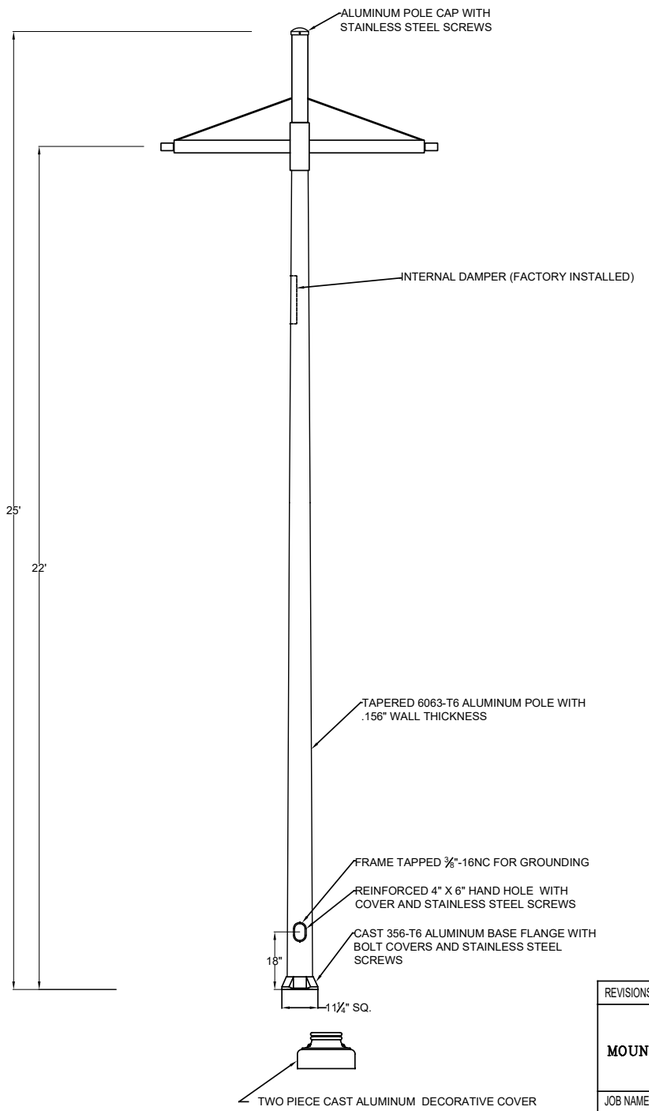
REP:	QUOTE #:	DIST.:
Mountain States		

PEDESTRIAN POLE (P4)

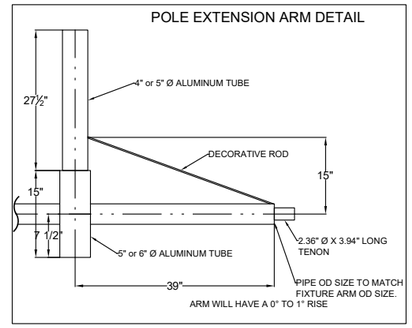
DECORATIVE LIGHTING STANDARDS
BY MOUNTAIN STATES LIGHTING/HAPCO

PART# 25RTA-SKTB112917CX-DBL UA3'EXT/3'L-HH-TC-ALDER-RAL9004

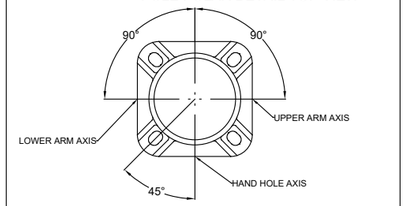
FINISH: RAL9004 BLACK



POLE EXTENSION ARM DETAIL



POLE POLAR DETAIL TOP VIEW



REVISIONS: N/A

MOUNTAIN STATES LIGHTING	P.O. Box 449 Conifer, CO 80433 Phone 303-838-4430 Fax 801-605-9058

JOB NAME: FITZSIMMONS INNOVATION CAMPUS P-25 DBL UPPER ARM POLE

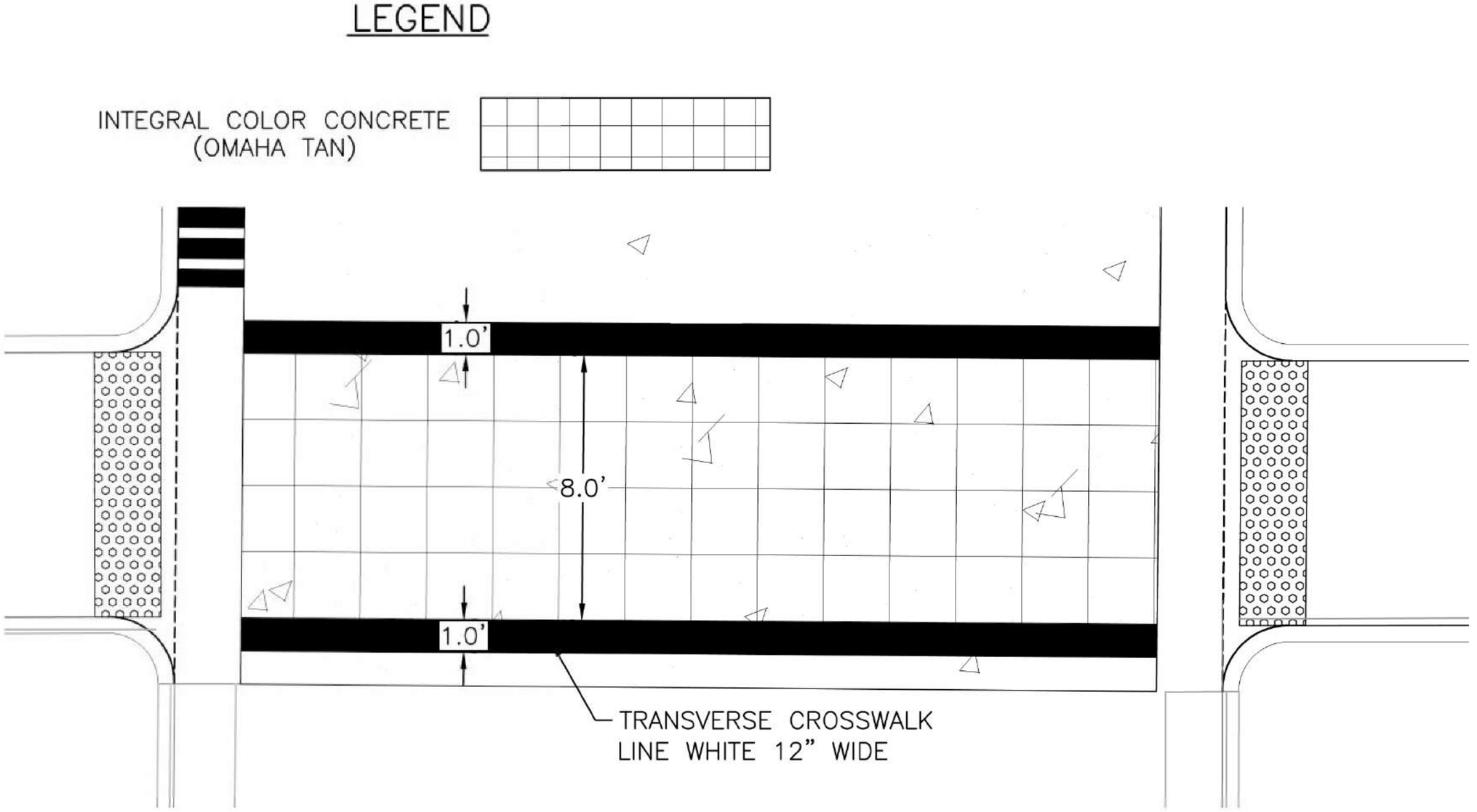
SCALE:	DATE:	DRAWN BY:	DRAWING NUMBER:
NTS	1/30/2019	Ry/Pp	25'RTA P5-25 DBL UPPER

REP:	QUOTE #:	DIST.:
Mountain States		

PARKING LOT POLE WITH DOUBLE UPPER ARMS (P5)

DECORATIVE LIGHTING STANDARDS
BY MOUNTAIN STATES LIGHTING/HAPCO MFG

APPENDIX E:
CROSSWALK DETAIL



ENHANCED CONCRETE CROSSWALK DETAIL

SCALE: 1"=5'