

APPENDIX J

UPTOWN INNOVATION DISTRICT DESIGN GUIDELINES



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ACKNOWLEDGEMENTS

UPTOWN INNOVATION CORRIDOR

Many community leaders, stakeholders and experts have devoted their time and talents to the creation and implementation of the Uptown Innovation Corridor. They will continue to play pivotal roles as the Corridor story unfolds.

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OVERVIEW

UPTOWN INNOVATION DISTRICT

UPTOWN INNOVATION CORRIDOR

The Uptown Innovation District is that rare development opportunity merging location, amenities and market trends. As with dozens of cities across the United States and internationally, the Corridor is leveraging renewed interest in the urban core to create a magnet for high-growth firms, tech and creative start-ups and the people they employ.

Years of preparation have positioned the Corridor to join the international ranks of successful innovation districts, and the unparalleled opportunities it offers to improve the community and foundation of Uptown and Cincinnati.

The Uptown Consortium has led an intensive planning and community engagement effort to establish a vision and framework for the Corridor. In partnership with the Mayor and Cincinnati City Council, the Consortium has secured crucial infrastructure and established site control that will allow the Corridor to progress in a manner consistent with innovation district best practices: well-designed spaces, pedestrian-friendly grids, varied housing choices and an amenities-rich environment.

The opening of the I-71 interchange at Martin Luther King Boulevard – itself a decade in the making – is perhaps the most visible sign of the Corridor’s emergence. Another important component is the University of Cincinnati’s 1819 Innovation Hub. It represents a \$38 million investment and is managed by the University of Cincinnati Research Institute.

The most important components of a successful innovation district have long been in place. Uptown is the region’s center of research and innovation, led by the University of Cincinnati, Cincinnati Children’s Hospital Medical Center, UC Health, TriHealth,

and the Cincinnati Zoo and Botanical Garden and their many spin-off and supporting entities. These anchor institutions drive the innovation economy and, combined with proximity and location, are the foundation of the Corridor.

These Uptown Innovation District Design Guidelines represent one of the next critical steps in advancing Cincinnati’s world class innovation district. With improved access from I-71, location at the intersection of two of the City’s key corridors, vacant and underutilized land, and strategic site control, it is essential to put in place design standards to guide the next round of public and private investment that will fully realize the Innovation Corridor over the next decade. These guidelines will also protect and leverage the substantial public and institutional investment that has already been made along this corridor.

These guidelines outline development principles, design foundation and guidelines that provide a framework for landowners, developers, organizations and companies that look to partner with Uptown. Following national models, this document provides guidance and an overall vision for how the Corridor should develop — from the buildings, amenities, infrastructure and public spaces to how it all integrates with the Uptown community and the regional innovation economy.

There are six sections in this document. Section One is an overview describing the mission, application, and founding principles of these guidelines. Section Two establishes the development principles advancing Uptown stakeholders’ shared vision for creating a healthy, sustainable, and complete community. Section Three, Four and Five discuss in more detail what makes great streets, spaces and places respectively. Section Six is the design guidelines providing general recommendations of standards for design to provide a high quality

DESIGN GUIDELINES DISTRICT FOCUS AREA



public realm. Section Seven provides a hierarchy of streets, complete streets standards and streetscapes, and guidelines to create a cohesive and high-quality public realm experience. It also provides character guidelines for plazas, gateways, and other unique public and quasi-public spaces within the District. And lastly, Section Eight outlines the material palette: a catalogue of materials to ensure a cohesive and high-quality public realm that identifies and ties the District together.

The design guidelines focus area is defined generally by the four quadrants at the MLK and Reading Road intersection. It also establishes guidelines for the streets bounding these blocks - Lincoln Ave., Vernon Pl., Harvey Ave., Hickman Ave., and Whittier St. — providing an appropriate transition from the neighborhood edge into the District.

OVERVIEW

DISTRICT PLAN

THE UPTOWN INNOVATION CORRIDOR EMBODIES THE BEST POSSIBILITIES OF CINCINNATI'S URBAN FUTURE, ONE OF CUTTING-EDGE INNOVATION, A VIBRANT CITYSCAPE, AND BROADLY SHARED PROSPERITY.

As the ongoing work of the Uptown Consortium demonstrates, the Uptown Innovation Corridor is well positioned in the region as an engine of innovation and economic growth. Its cluster of higher education institutions, hospitals, R&D and innovation centers, cultural institutions, and private businesses has attracted significant research funding and job growth in the past decade; a fact that underlines the full potential of the agglomeration effect of innovation activities.

Within this context, the Consortium initiated a planning and design process to advance a distinctive, coordinated vision. The planning effort features the following elements:

1. Market analysis to establish an up-to-date understanding of regional employment drivers, market conditions, and real estate economics;
2. District concept plan to illustrate a unified district/ corridor plan and a compelling story and experience, with a focus on the four quadrants area;
3. Development principles to convey the fundamental physical development characteristics that are critical to realizing the Consortium's vision;
4. Design guidelines to provide specific recommendations for the design of the public realm and private exterior realm within the district.



DISTRICT CONCEPT PLAN

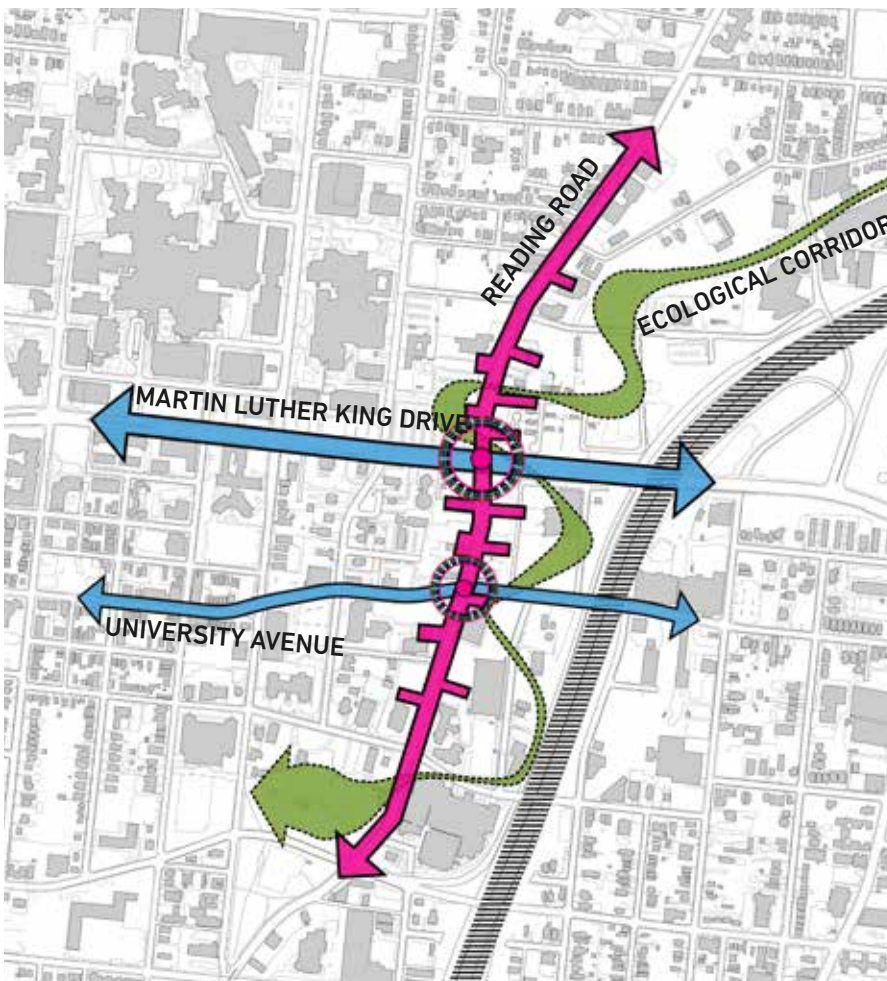


CONNECTED DISTRICT

INNOVATION DISTRICT CONCEPT

The plan emphasizes a highly connected, integrated district anchored by and organized around four critical corridors:

- Reading Road
- Martin Luther King Jr. Drive
- University Avenue
- Ecological Park



DISTRICT CORRIDORS

Reading Road

- Central spine and “main street” of the district.
- Accommodates multi-modal pedestrian, bicycle, transit, and vehicular circulation.
- Public spaces and front doors create an active corridor, connecting the street to interior block innovation and green spaces.

Martin Luther King Jr. Drive

- Critical, highly visible gateway.
- High-volume transportation corridor and urban boulevard.
- Defines the image and initial visual experience of the district.

Ecological Corridor

- Green network that weaves active and passive parks, open spaces, and ecological functions through the district.
- Contributes to a unique district character that links development areas, creates a collaborative common ground, and enhances ecology.

University Avenue

- Primary link between the university and the district.
- Forms the “innovation heart” of the district at its intersection with Reading Road at the 1819 Innovation Hub.

CONCEPTUAL DEVELOPMENT LOOKING NORTH



CONCEPTUAL DEVELOPMENT LOOKING WEST



DEVELOPMENT PRINCIPLES

GREAT STREETS, SPACES, PLACES

THE DEVELOPMENT PRINCIPLES, COUPLED WITH THE DESIGN GUIDELINES, WILL GUIDE THE CONSORTIUM'S CURRENT AND FUTURE DECISION-MAKING REGARDING THE LOCATION, PLANNING AND DESIGN, AND QUALITY OF NEW DEVELOPMENT PROJECTS.

The principles are intended to achieve the following objectives:

1. Ensure that the district is planned, designed, and developed in an orderly, consistent, and high quality urbanistic manner.
2. Ensure that each individual project contributes in a complementary manner to the larger district vision and plan.
3. Provide predictability and instill confidence that development quality will be consistent for the duration of buildout—from the first project to the last.
4. Provide planning and design guidance and direction to all entities considering the development of property in the district.
5. Provide the Consortium with planning and design criteria by which to review and evaluate proposed development plans.

GREAT STREETS

1. **URBANITY:** Organize continuous building frontage along primary streets to reinforce Uptown's identity as an urban place.
2. **ACTIVITY:** Focus urban retail uses and other ground-floor active programming at key locations along primary streets to encourage an active pedestrian street and 18/7 urban environment.
3. **MOBILITY:** Integrate safe connections for all modes of travel by separating the pedestrian and bicycle zone from the vehicular and transit zone.
4. **STREETSCAPE:** Create a distinct, pedestrian street character throughout the district with the creation of a street tree canopy and water management landscapes along primary streets.
5. **QUALITY:** Prioritize architectural and landscape design, material, and construction quality along key streets to reinforce Uptown's identity as a leading innovation district.



The Avenue, Washington DC

GREAT SPACES

6. **ECOLOGY:** Reserve the ecological corridor along I-71 and respect existing topography to create a signature green space that supports the emerging innovation community.
7. **COLLABORATION:** Promote collaboration by establishing gathering spaces along the Reading Road corridor to share technologies and ideas, and create a close-knit ecosystem to foster creative growth.
8. **PERMEABILITY:** Create mid-block pedestrian visibility, access and connections between primary streets and open/green space amenities to welcome the community.
9. **PARKING:** Minimize the impact of parking on the public realm throughout the district by minimizing surface lots, screening garages, and utilizing below grade parking when possible. Ensure surface lots are designed to be programmable, usable spaces when not required for parking.



Hafencity, Hamburg, Germany

GREAT PLACES

10. **DENSITY:** Concentrate density on priority sites to create a vibrant, complete place at each phase of development.
11. **MIXED-USE:** Mix diverse programs within individual buildings and a block to activate the site, maximize investment, and balance land use.
12. **IDENTITY:** Ensure a unified Uptown identity along primary streets through streetscape and public realm design while encouraging complementary design within individual developments and buildings.
13. **TRANSPARENCY:** Buildings should be of high quality, modern design that reflects the image of the Innovation Corridor. Designs should include transparency, articulation, shading, form, materials, and other elements that link indoor and outdoor spaces and create a vibrant urban character.
14. **TRANSITION:** Address residential neighborhood edges with complementary scale, program, and character.



University Park, Cambridge, MA

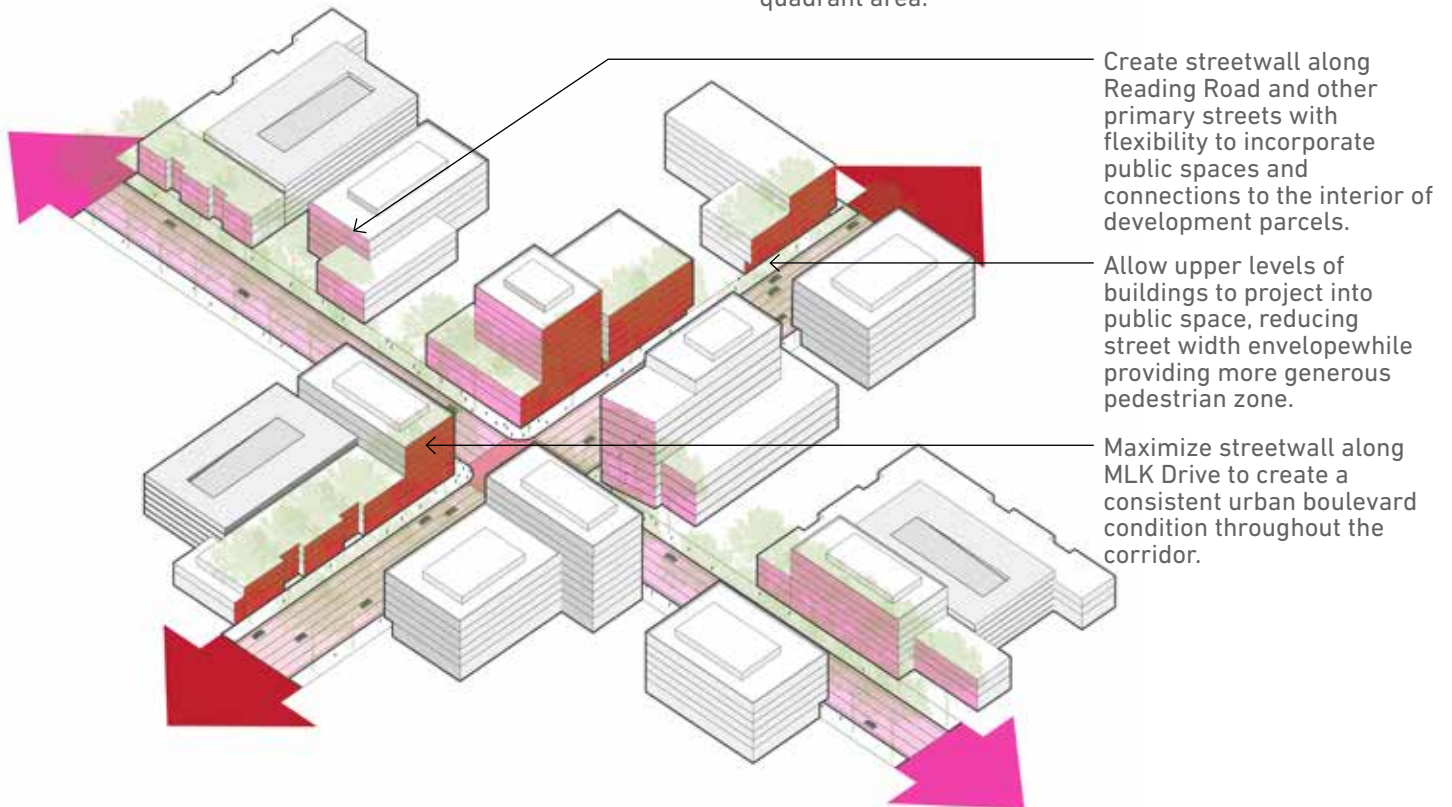
GREAT STREETS

1.URBANITY

ORGANIZE CONTINUOUS BUILDING FRONTAGE
ALONG PRIMARY STREETS TO REINFORCE
UPTOWN'S IDENTITY AS AN URBAN PLACE.

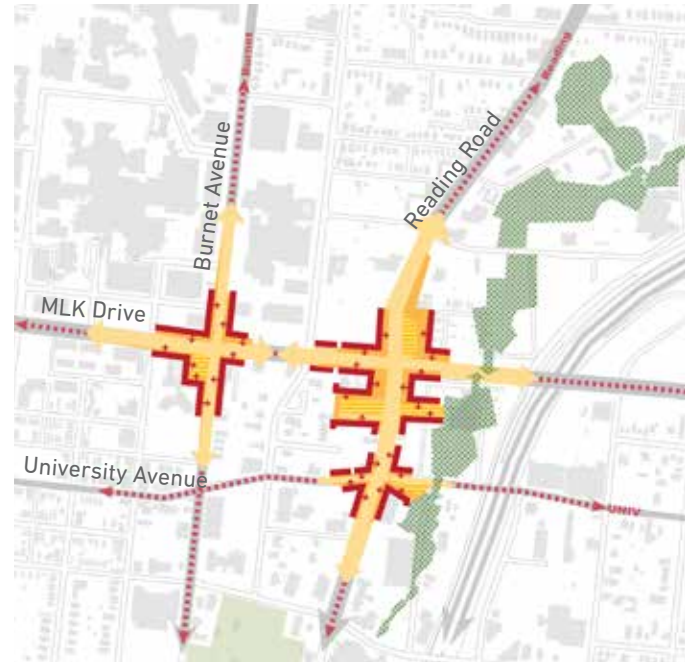


Plan showing application of Urbanity principle in four quadrant area.

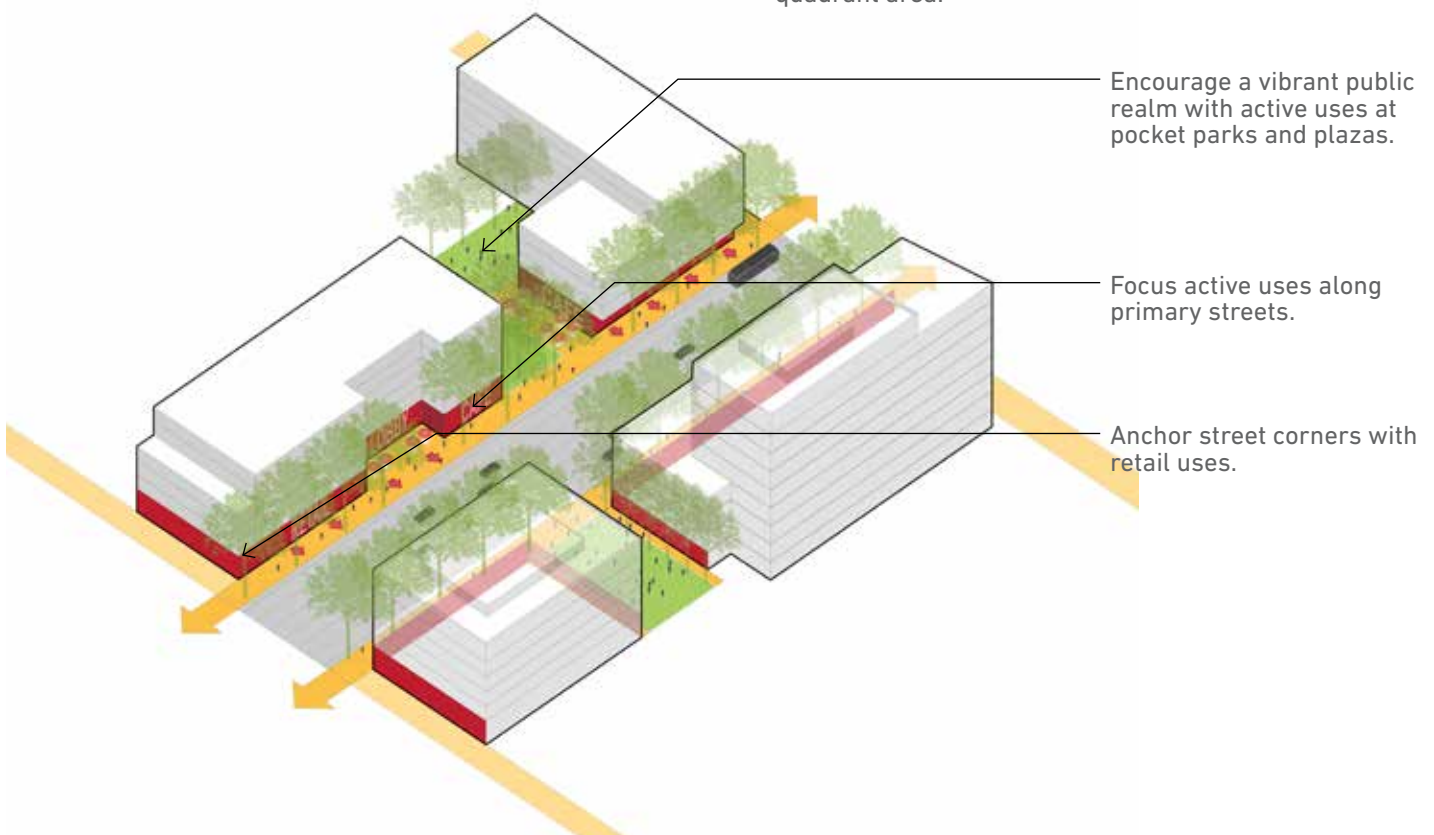


2.ACTIVITY

FOCUS URBAN RETAIL USES AND OTHER GROUND-FLOOR ACTIVE PROGRAMMING AT KEY LOCATIONS ALONG PRIMARY STREETS TO ENCOURAGE AN ACTIVE PEDESTRIAN STREET AND 18/7 URBAN ENVIRONMENT.



Plan showing application of Activity principle in four quadrant area.



3. MOBILITY

INTEGRATE SAFE CONNECTIONS FOR ALL MODES OF TRAVEL BY SEPARATING THE PEDESTRIAN AND BICYCLE ZONE FROM THE VEHICULAR AND TRANSIT ZONE.



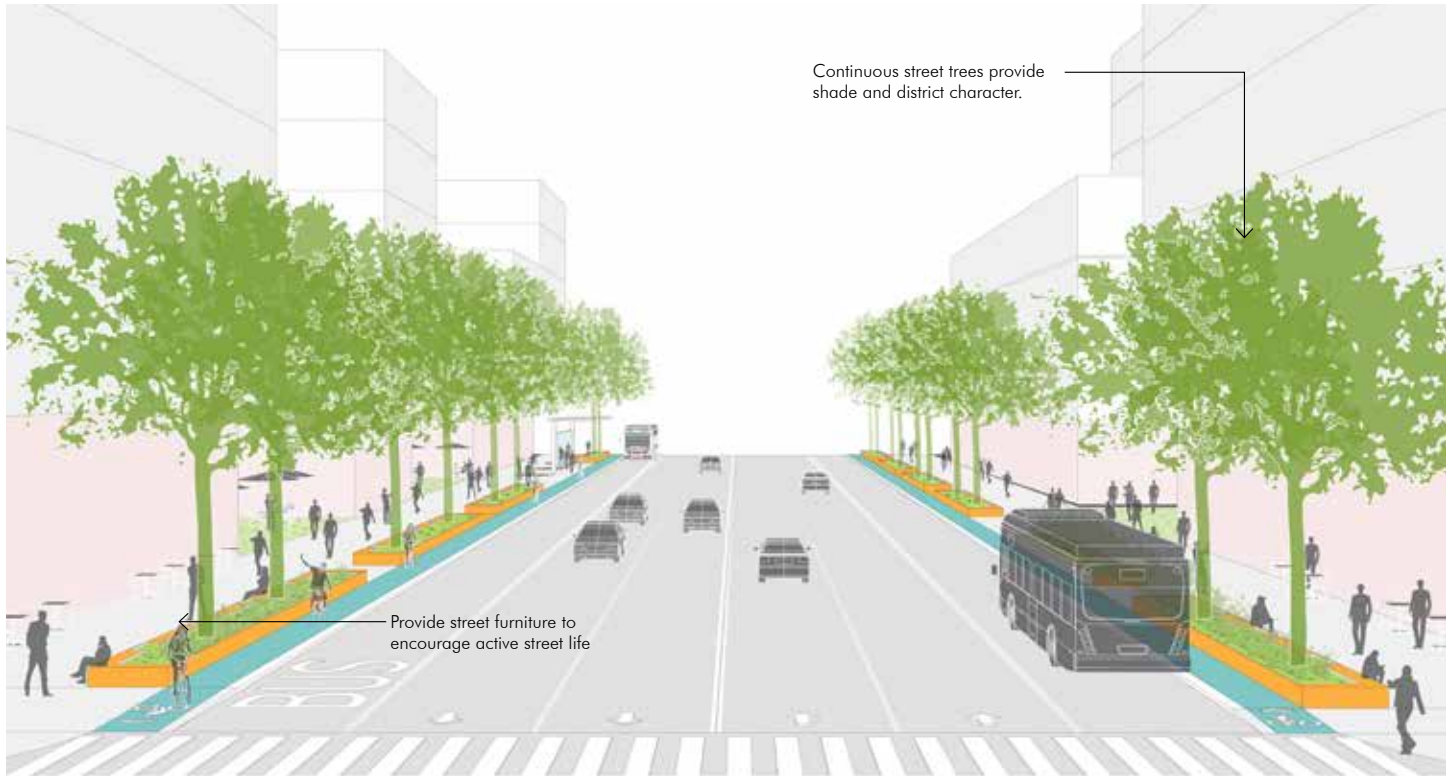
Pedestrian zone along building frontage

Bicycle zone raised and separated from vehicular traffic and separated from pedestrian zone

Vehicular zone

Potential transit-only lanes

4. STREETSCAPE



Plan showing application of Streetscape principle in four quadrant area.

CREATE A DISTINCT, PEDESTRIAN STREET CHARACTER THROUGHOUT THE DISTRICT WITH THE CREATION OF A STREET TREE CANOPY AND WATER MANAGEMENT LANDSCAPES ALONG PRIMARY STREETS.

5. QUALITY

PRIORITIZE ARCHITECTURAL AND LANDSCAPE DESIGN, MATERIAL, AND CONSTRUCTION QUALITY ALONG KEY STREETS TO REINFORCE UPTOWN'S IDENTITY AS A LEADING INNOVATION DISTRICT.



Example material and construction elements:

1. Planting areas designed to manage stormwater
2. Integrated bench and planter wall
3. Stone pavers
4. Stone/brick edge detail along concrete walk
5. Contrasting color pavers
6. High quality, modern street furniture
7. Native landscape
8. Unified signage and lighting design



GREAT STREETS: KENDALL SQUARE EXAMPLE

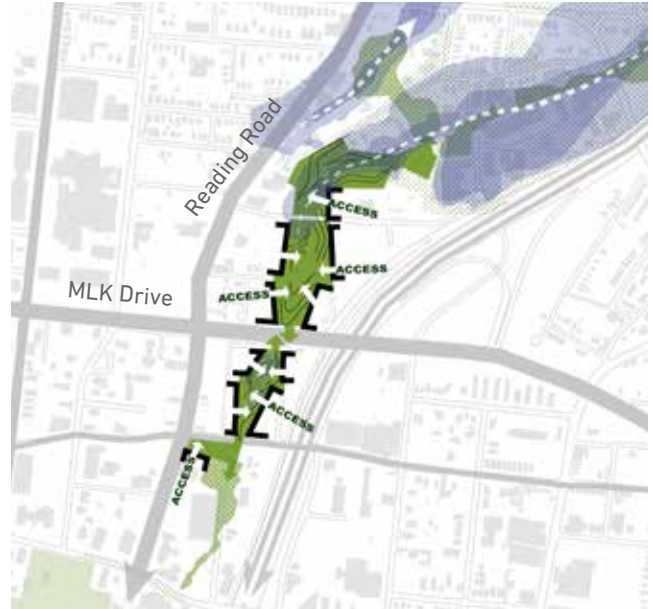
Binney Street at Kendall Square in Cambridge, Massachusetts exemplifies many of the principles of great streets planned for the Uptown Innovation Corridor.

- 1. Urbanity:** Buildings are organized along the street including upper level overhangs to reduce perceived street width while providing generous sidewalk areas.
- 2. Activity:** Retail uses and other ground floor programming are located along the street.
- 3. Streetscape:** Continuous street trees and planting unify the street, provide shade and water management, and improve the pedestrian experience.
- 4. Mobility:** A generous pedestrian zone and dedicated bicycle lane are separated from each other and vehicular traffic, providing safe connections for all modes of travel.

GREAT SPACES

6. ECOLOGY

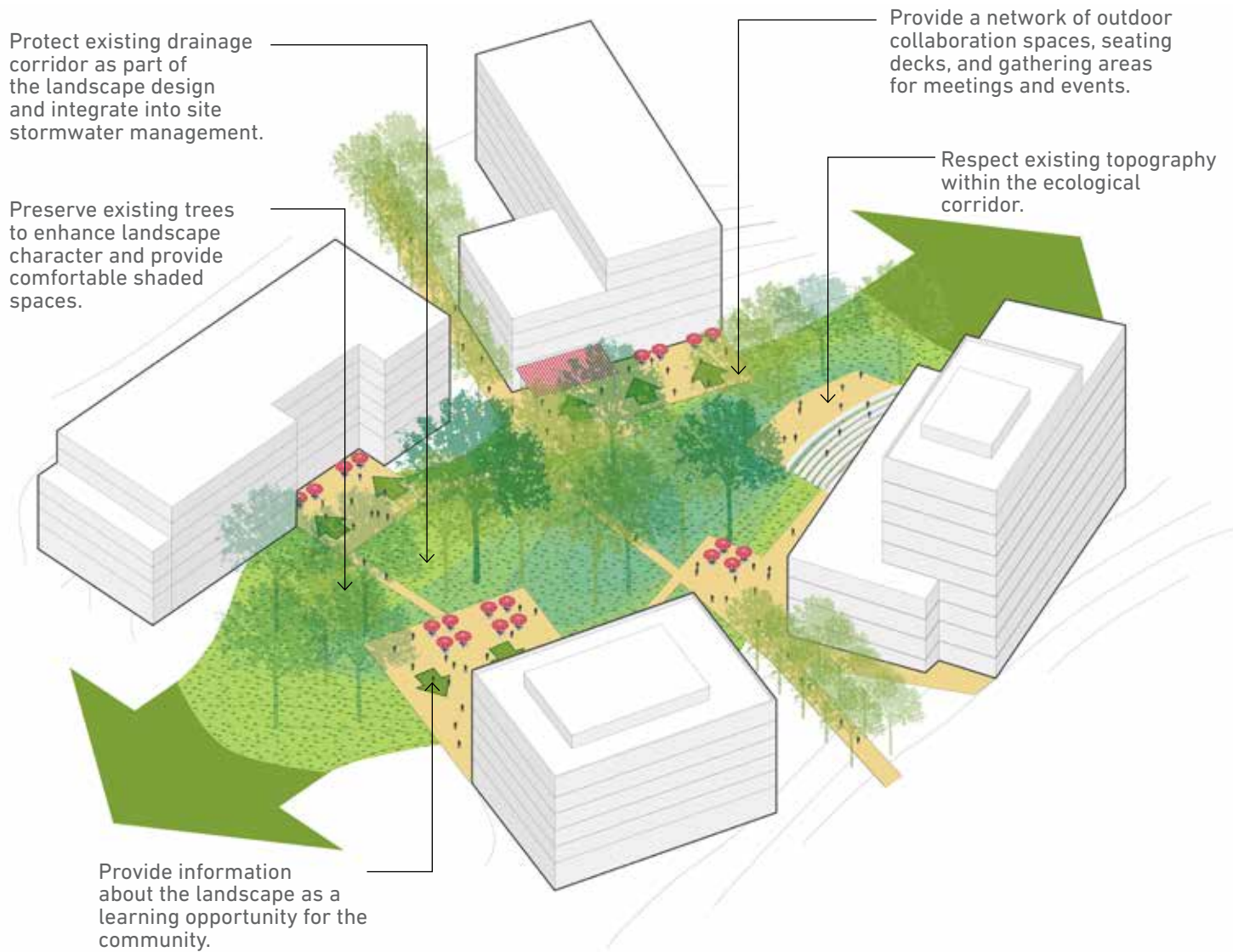
**RESERVE THE ECOLOGICAL CORRIDOR ALONG I-71
AND RESPECT EXISTING TOPOGRAPHY TO CREATE
A SIGNATURE GREEN SPACE AND RECREATION
CORRIDOR TO SUPPORT THE EMERGING INNOVATION
COMMUNITY.**



Plan showing ecological corridor along I-71 in four quadrant area

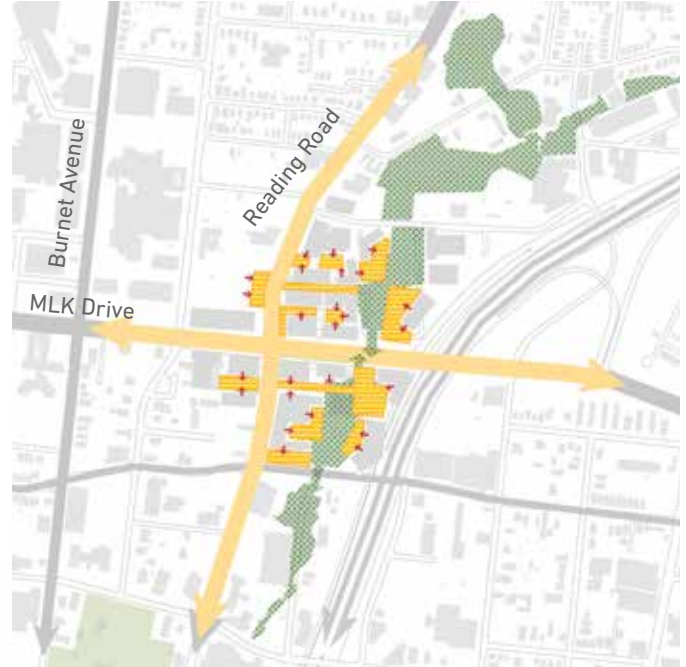
Below: Conceptual view of ecological corridor featuring shared outdoor collaboration spaces, native landscape, and stormwater management





7. COLLABORATION

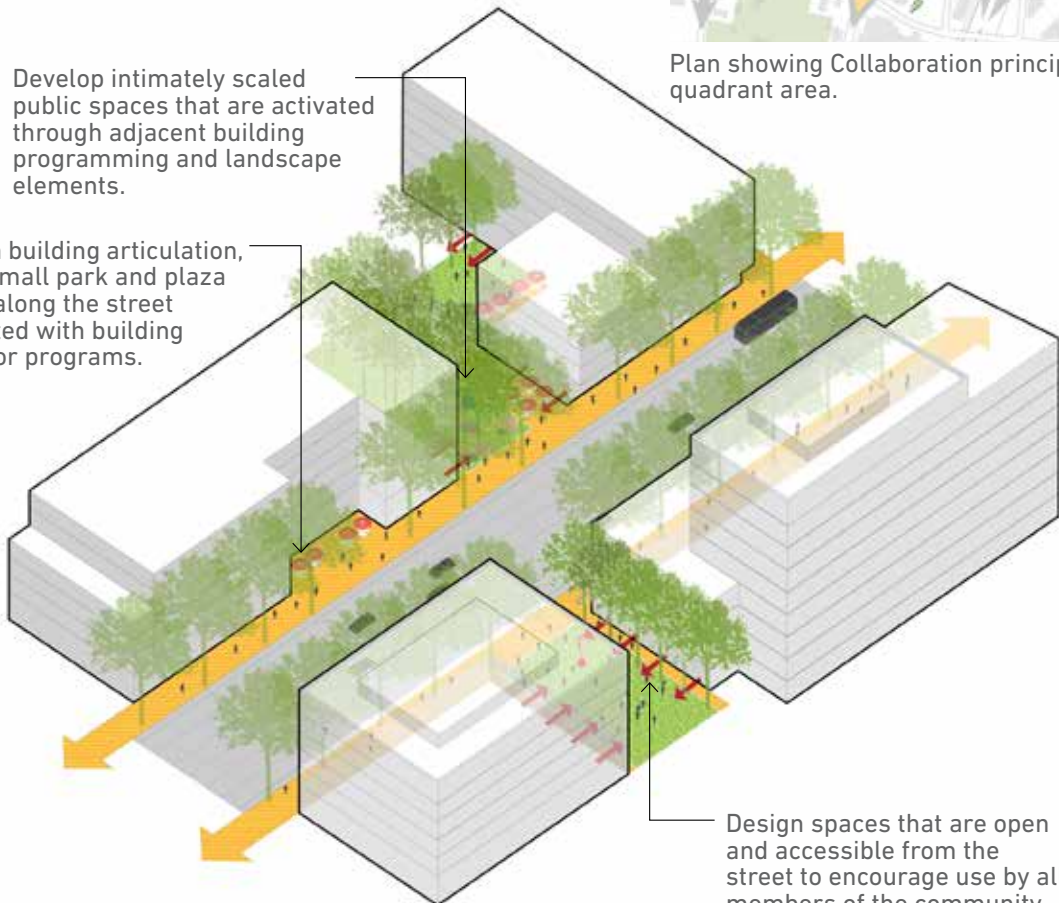
PROMOTE INSTITUTIONAL AND NEIGHBORHOOD COLLABORATION BY ESTABLISHING GATHERING SPACES ALONG THE READING ROAD CORRIDOR TO SHARE TECHNOLOGIES AND IDEAS, AND CREATE A CLOSE-KNIT ECOSYSTEM TO FOSTER CREATIVE GROWTH.



Plan showing Collaboration principle applied in four quadrant area.

Develop intimately scaled public spaces that are activated through adjacent building programming and landscape elements.

Through building articulation, create small park and plaza spaces along the street associated with building entries or programs.



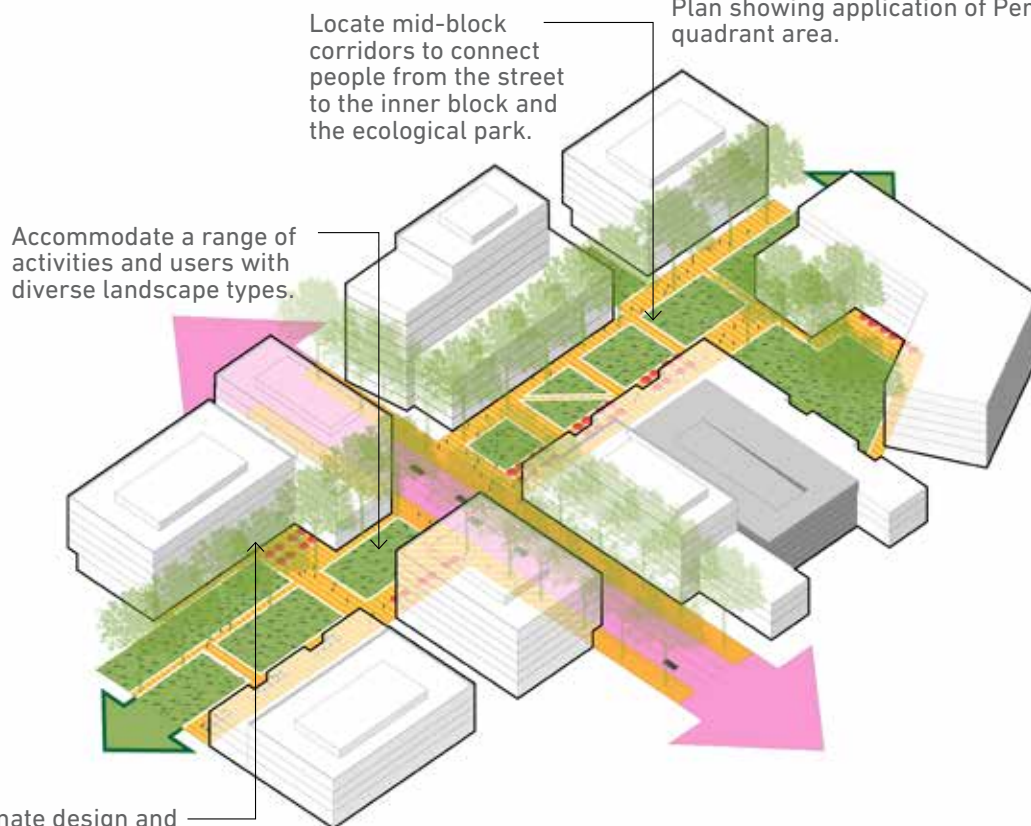
Design spaces that are open and accessible from the street to encourage use by all members of the community.

8. PERMEABILITY

CREATE MID-BLOCK PEDESTRIAN VISIBILITY, ACCESS AND CONNECTIONS BETWEEN PRIMARY STREETS AND CIVIC/GREEN SPACE AMENITIES TO WELCOME THE COMMUNITY.



Plan showing application of Permeability principle in four quadrant area.



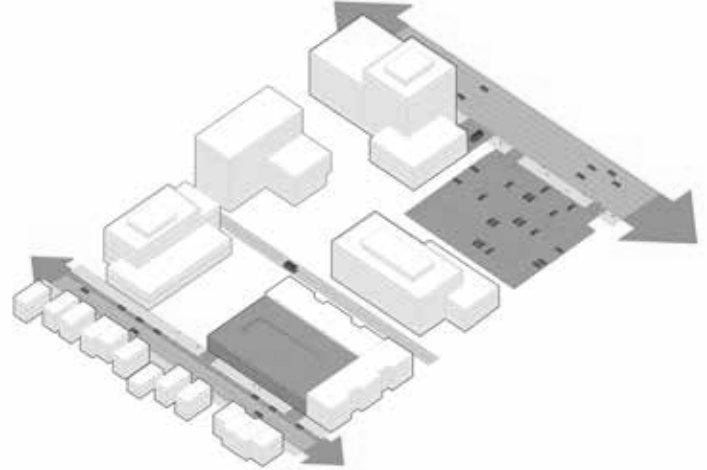
Locate mid-block corridors to connect people from the street to the inner block and the ecological park.

Accommodate a range of activities and users with diverse landscape types.

Coordinate design and programming with surrounding buildings to encourage active use of outdoor spaces.

9. COLLABORATION

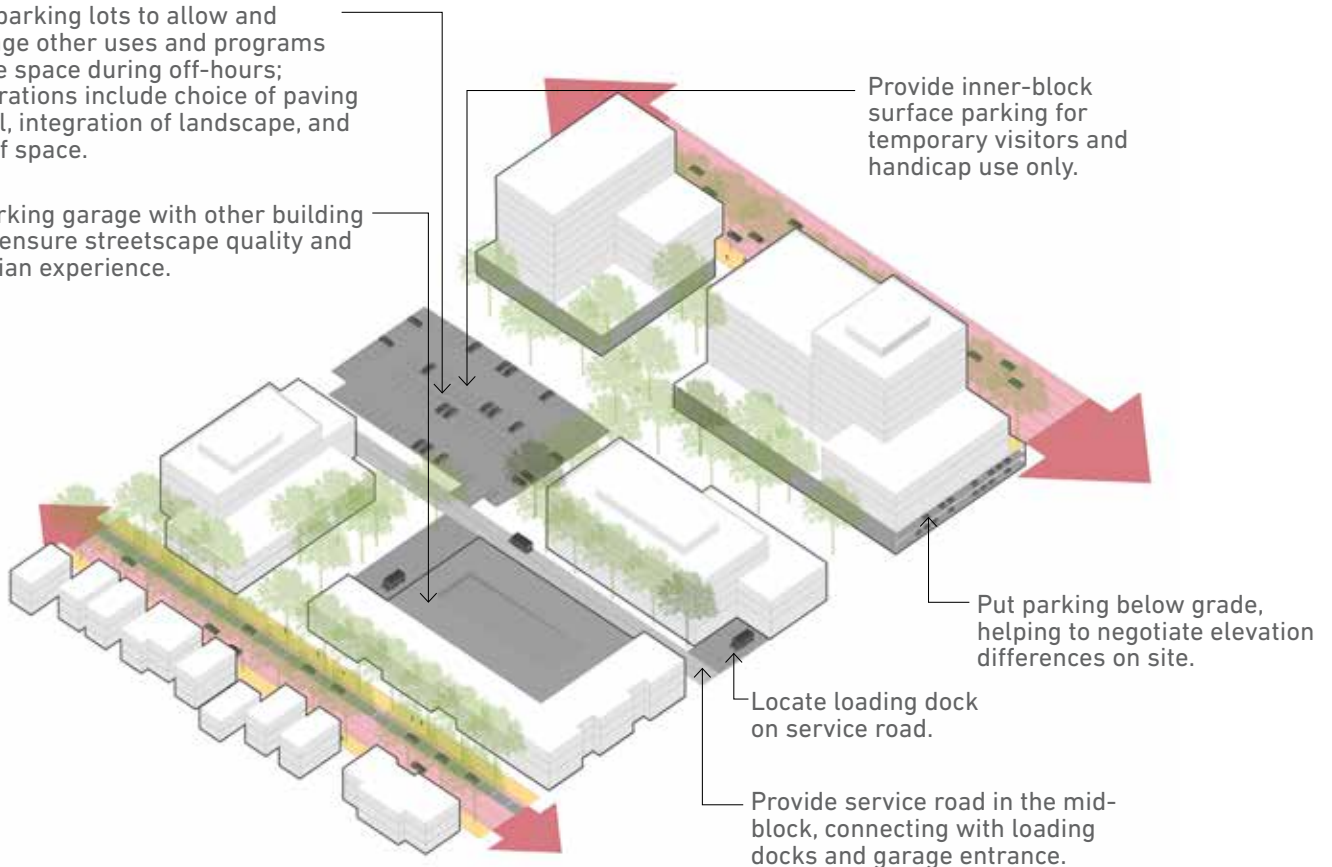
MINIMIZE THE IMPACT OF PARKING ON THE PUBLIC REALM THROUGHOUT THE DISTRICT BY MINIMIZING SURFACE LOTS, SCREENING GARAGES, AND UTILIZING BELOW GRADE PARKING WHEN POSSIBLE. ENSURE SURFACE LOTS ARE DESIGNED TO BE PROGRAMMABLE, USABLE SPACES WHEN NOT REQUIRED FOR PARKING.



DON'T - Streetfront Parking

Design parking lots to allow and encourage other uses and programs to utilize space during off-hours; considerations include choice of paving material, integration of landscape, and layout of space.

Hide parking garage with other building uses to ensure streetscape quality and pedestrian experience.





GREAT SPACES: HAFENCITY, HAMBURG EXAMPLE

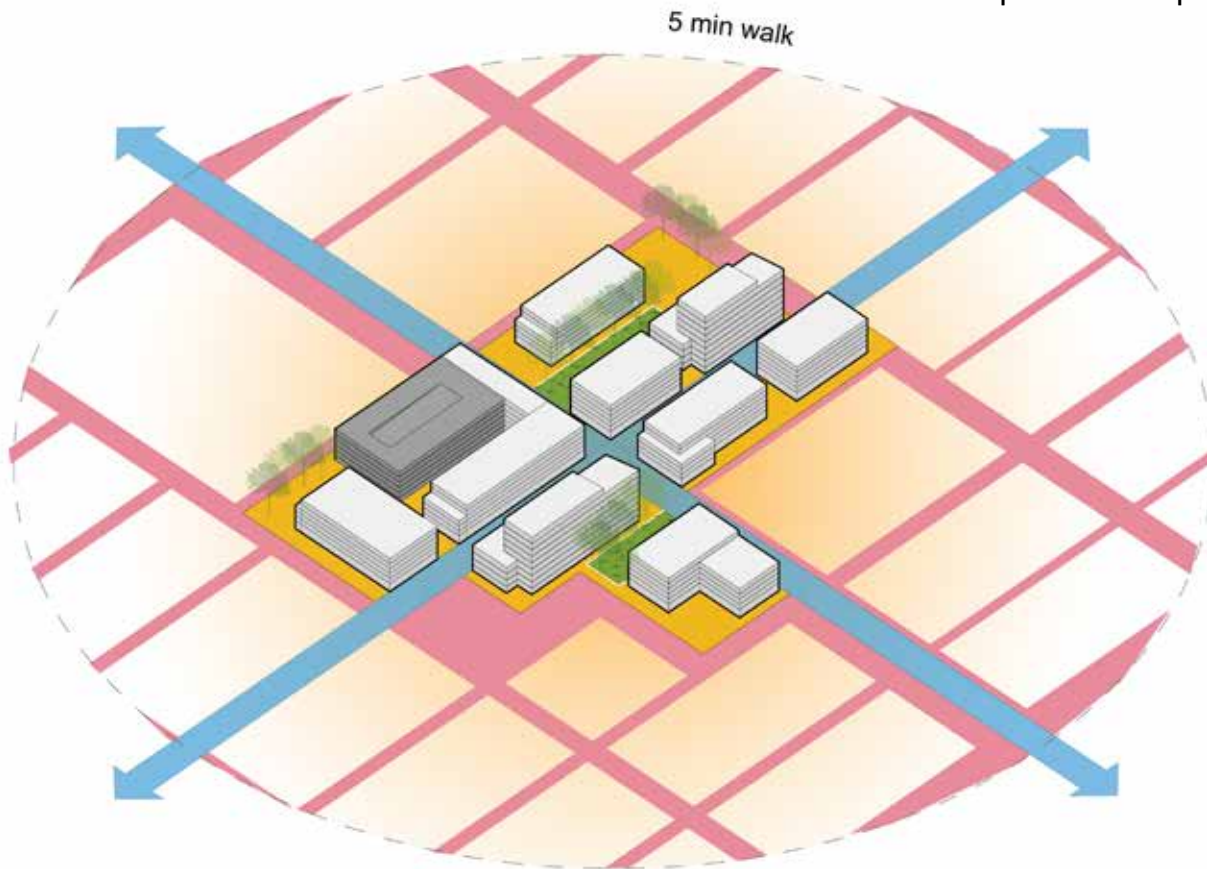
The main plaza at HafenCity in Hamburg, Germany exhibits many of the principles of great spaces planned for the Uptown Innovation Corridor.

- 1. Urbanity:** Buildings help define the space with enclosure and ground level uses.
- 2. Collaboration:** Gathering space with multiple program elements creates a space for collaboration and interaction.
- 3. Quality:** High quality pavers, benches, lighting, and materials as well as special elements create a unique yet unified quality to the space.
- 4. Activity:** Retail uses are located along the plaza bringing activity to the space.

GREAT PLACES

10.DENSITY

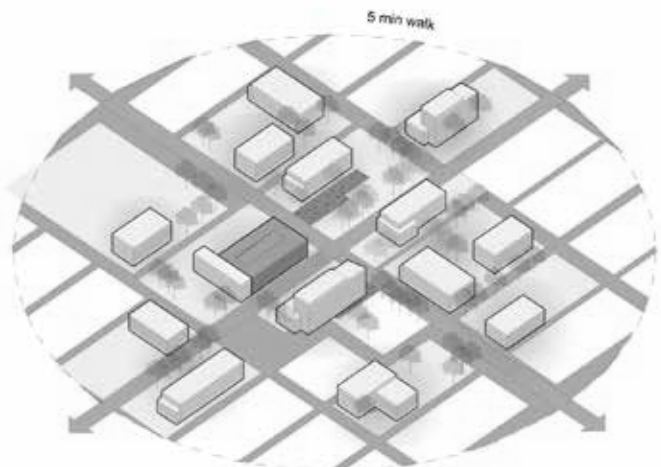
DO - Compact Development



ENCOURAGE AND CONCENTRATE DENSITY ON PRIORITY DEVELOPMENT SITES TO CREATE A VIBRANT, COMPLETE PLACE AT EACH PHASE OF DEVELOPMENT.

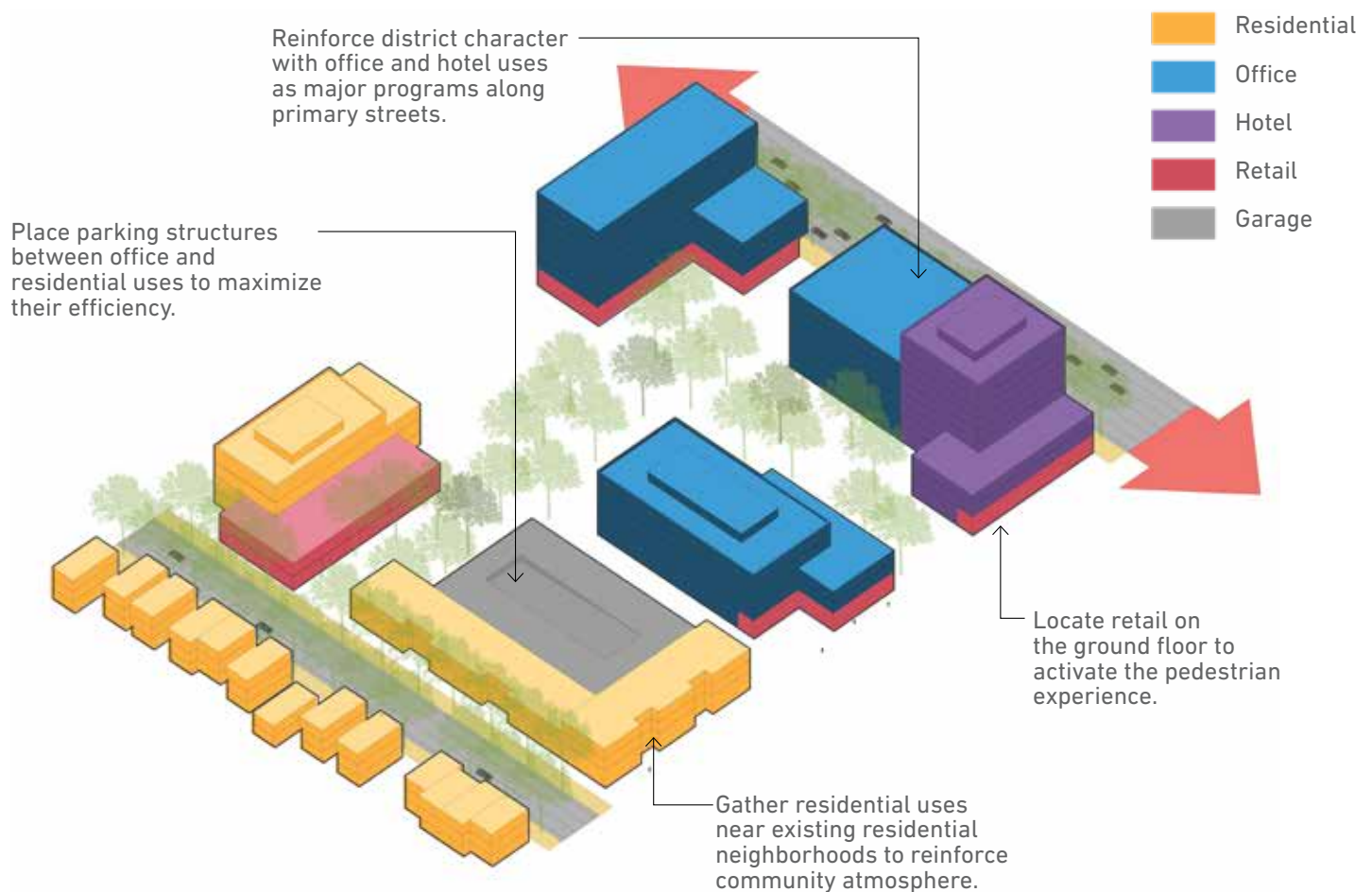
CAREFULLY PLAN PHASES SO THAT THEY FIT TOGETHER AND COMPLEMENT EACH OTHER ACROSS TIME AND ARE NOT FRAGMENTED.

DON'T - Fragmented Development



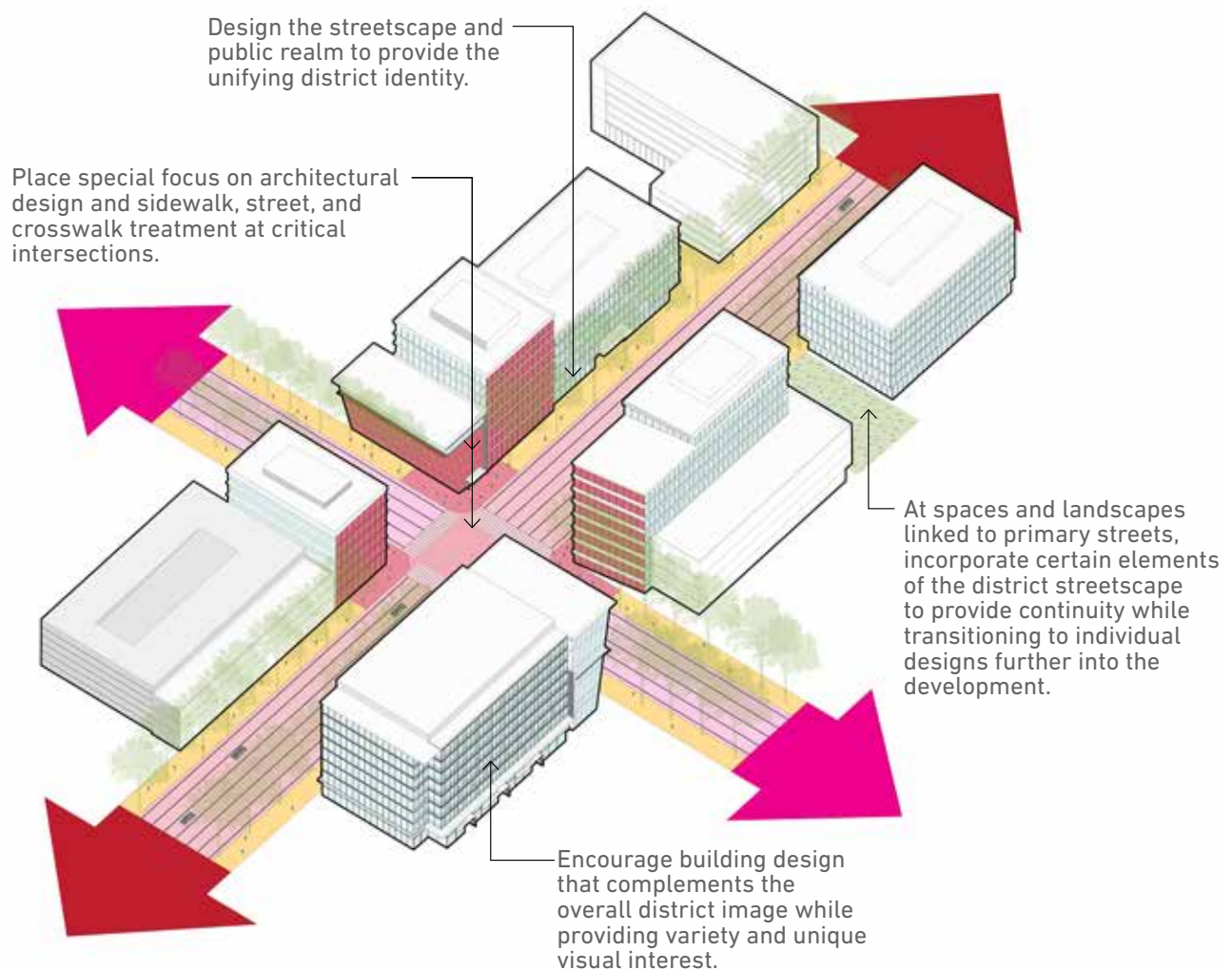
11.MIXED-USE

MIX DIVERSE PROGRAMS WITHIN INDIVIDUAL BUILDINGS AND BLOCKS TO ACTIVATE SITES, MAXIMIZE INVESTMENT, AND BALANCE LAND USES.



12.IDENTITY

CREATE A UNIFIED UPTOWN IDENTITY ALONG PRIMARY STREETS THROUGH STREETSCAPE AND PUBLIC REALM DESIGN WHILE ENCOURAGING COMPLEMENTARY, YET UNIQUE DESIGN WITHIN INDIVIDUAL DEVELOPMENTS AND BUILDINGS.



13.TRANSPARENCY

BUILDINGS SHOULD BE OF HIGH QUALITY, MODERN DESIGN THAT REFLECTS THE IMAGE OF THE INNOVATION CORRIDOR. DESIGNS SHOULD INCLUDE TRANSPARENCY, ARTICULATION, SHADING, FORM, MATERIALS, AND OTHER ELEMENTS THAT LINK INDOOR AND OUTDOOR SPACES AND CREATE A VIBRANT URBAN CHARACTER.



14. TRANSITION

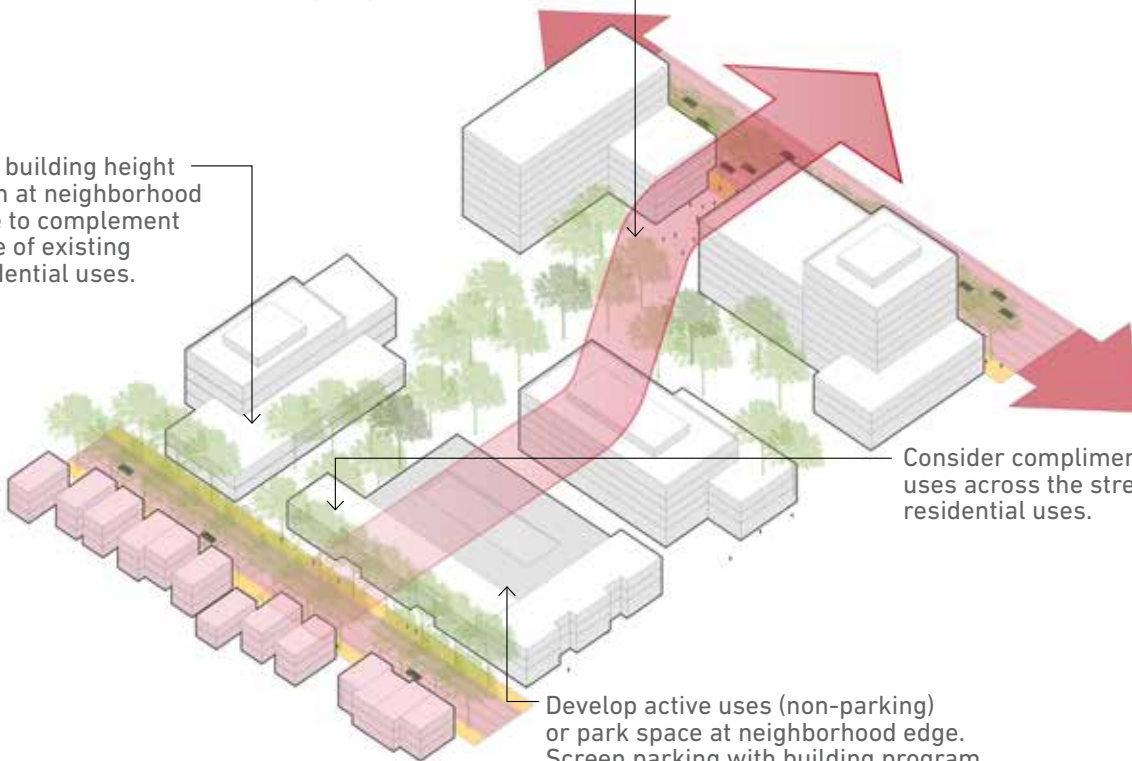
ADDRESS RESIDENTIAL NEIGHBORHOOD EDGES WITH COMPLEMENTARY PROGRAM, DESIGN, SCALE, AND CHARACTER.



Plan showing application of Transition principle in four quadrant area.

Step building height down at neighborhood edge to complement scale of existing residential uses.

Transition massing to larger scale as it moves away from existing neighborhood edge.



Consider complimentary residential uses across the street from existing residential uses.

Develop active uses (non-parking) or park space at neighborhood edge. Screen parking with building program if located along neighborhood.



GREAT PLACES: UNIVERSITY PARK, CAMBRIDGE, MA EXAMPLE

University Park at MIT is an urban mixed-use district featuring office, research, residential, and retail uses. The scale and form of development respond to the community context, with higher densities closer to Massachusetts Avenue and MIT, and progressively lower densities approaching existing residential neighborhoods.

- 1. Density:** Initial development was concentrated in a compact area around a central park to create a sense of completion and a unique place early in the development phasing.
- 2. Collaboration:** A central park creates a gathering space for collaboration and contemplation.
- 3. Transition:** Large scale, mixed-use buildings transition to smaller scale residential buildings at the neighborhood edge to complement the community context.
- 4. Mixed-use:** The development includes a mix of office, laboratory, hotel, residential, and retail uses.

DESIGN GUIDELINES

DESIGN FOUNDATIONS

DESIGN FOUNDATIONS

Great streets and memorable places are signature components of successful Innovation District. They can be achieved with a wide variety of design elements, as illustrated in these examples. These guidelines outline design standards specifically developed for the Uptown Innovation District.

A key component of Great Streets is multiple modes and catering to pedestrians.

GREAT STREETS

Great streets help to define important places by establishing an image and sense of identity. Streets that serve as major connections to and through the Innovation Districts provide an opportunity to “set the tone” for the district’s appearance. Streetscape elements and materials, when thoughtfully designed and installed, can be used to create a visual signature that represents the character, quality, and activity of a place. The use of consistent and coordinated palettes of materials, colors, textures and patterns will create a cohesive visual identity for the public realm of the District.

GREAT PLACES

Great places evolve through a combination of public and private actions and activities that shape the physical environment. Businesses and residents will change over time, and with them, building facades, signs and outdoor spaces like patios and front yards. These changes add character that helps to create a sense of place. The design of public streets, however, is the unifying force and should incorporate consistent and coordinated elements, while private developments provide visual variety along the street.

HIGH QUALITY

High quality, durable and aesthetically pleasing materials are critical to creating places where people are comfortable and enjoy spending time. The goal in urban areas and Innovation Districts is to mix uses and get people outside and walking between uses. Thus great streets should be designed like great parks, with attention to detail in all aspects of construction and installation. Quality materials like brick and stone add value to the public realm, transitions between different materials should be seamless, and no aspects of the street design should appear as an afterthought.

PUBLIC WORKS

Public works include a wide variety of infrastructure elements and facilities ranging in purpose from the purely utilitarian to the highly ornamental. Public roadways fall in the middle of this spectrum. They serve a basic utilitarian function by providing mobility and access and must be designed to meet safety, maintenance, and transportation service standards. But streets are also part of the built environment that people physically experience on a daily basis. The visual experiential quality of the public right-of-way is critical. Streets within the Uptown Innovation District should function as an extension of the public open space system.

PUBLIC REALM DESIGN PRINCIPLES

1



ENGAGING PEDESTRIAN ZONES

Create generous and high-quality pedestrian zones that encourage people to walk and stroll. The most successful pedestrian zones are at least wide enough for two pairs of people walking abreast to comfortably pass; and have ample and attractive pedestrian-scale lighting, planting, and street trees. At the pedestrian scale, people notice and experience materials and quality, so details and construction level are very important.

2



ACTIVE RETAIL ZONES

Encourage active retail adjacent to the public realm along sidewalks by placing buildings close to the sidewalk with transparent storefronts and frontage/forecourt space for outdoor dining, display, and interactive seating.

3



INVEST IN THE CORNERS

Focus investment and the highest quality materials and design around the street corners, as corners are where multiple streams of people and modes cross and often places of great vitality. Corners are also important places for wayfinding and identity placemaking.

4



EMBRACE MULTIMODEL

Design streets to encourage and support multiple modes of transportation. In the 21st century great streets must be multi-modal, serving the diverse mobility needs of the population. This means accommodating walkers, joggers, strollers, dogs, wheelchairs, scooters, bicyclists, vehicles, parking & drop-off, autonomous vehicles, trucks, deliveries, busses, and future transit technologies. Great streets provide dedicated zones for pedestrian, bicycle, and vehicular travel. There are challenges to provide for all modes in built street environments, so communities may need to prioritize different modes throughout the street network but be sure to support them all within the district.

PUBLIC REALM DESIGN PRINCIPLES

5



PLACES FOR STAYING

Encourage the inclusion of lushly landscaped forecourts, pocket parks, pedestrian allees, and open courtyards along streets that invite people outside to relax and interact. These spaces should draw people off the sidewalk and could include outdoor dining, play, and other activities. These are especially effective mid-block to provide access from the sidewalk to the interior of the block and rear parking areas, as well as to reduce the perception of fortress building massing and impenetrable blocks.

6



APPROPRIATE SPACIAL STRUCTURE

Size and place buildings and landscape zones along streets to appropriately frame the street corridor. The wider the street, the more important it is for taller, vertical architecture and trees to line the street and space, helping to create an appropriate scale. For large streets like MLK Boulevard and Reading Road, buildings should be at least five stories in size and placed close to the street corridor edge, with a wider streetscape zone to allow for a robust street tree and pedestrian area. Robust plantings reinforce spatial structure and are also a fundamental part of great streets.

7



IMPORTANCE OF STREET TREES

Incorporate street trees fully into the public realm. Street trees provide a myriad of beneficial public and private benefits: from aesthetics, to shade, to storm water, to air quality, to habitat, to nature, to pleasing people, to increased property value. To achieve these benefits, the right tree species, placement, and planting soil must be selected. Proper street trees are deciduous, grow tall, and are pruned so that the bottom of the canopy is above the first floor - providing visibility to storefronts and signs while providing summer shade, fall color, winter sun, and spring flowers.

8



INTEGRATE WATER MANAGEMENT

Design streetscapes that integrate water management into the overall design. Addressing storm water requirements is often a challenge for new development. The design and re/construction of streets is the best time to incorporate water management to help with storm water quantity and quality requirements. From street trees and planters, to opportunities for bioretention and bioswales, to incorporation of pervious pavers and pavement, streetscapes and the public realm provide opportunities to address water management and sustainability.

9



MULTI-FUNCTIONAL SPACES

Promote flexible design of streets, streetscape, and public spaces so that they can be used in different ways at different times. For example, parking zones or medians can be designed to serve as additional plaza and event space on weekends or evenings for things like farmer's markets or festivals. Or they could be designed to convert into outdoor dining in certain locations. Considerations could include material selection, the use of curbless edges, the placement of additional electric capacity, etc. The key is to build in flexibility in strategic locations.

10



TRANSITIONS + MIXING ZONES

Carefully design areas of transition, such as those where different modes or activities intersect, or where public space/right-of-way borders private space. Areas such as streets or drives crossing the pedestrian zone, or where a bike/mobility lane abuts a sidewalk, should be designed with material changes that help signal where this is occurring and how to safely navigate it. It is equally important for the transition between public and private space to be subtle, so that private frontage feels both visually and functionally a part of the street corridor while allowing for some individual expression.

11

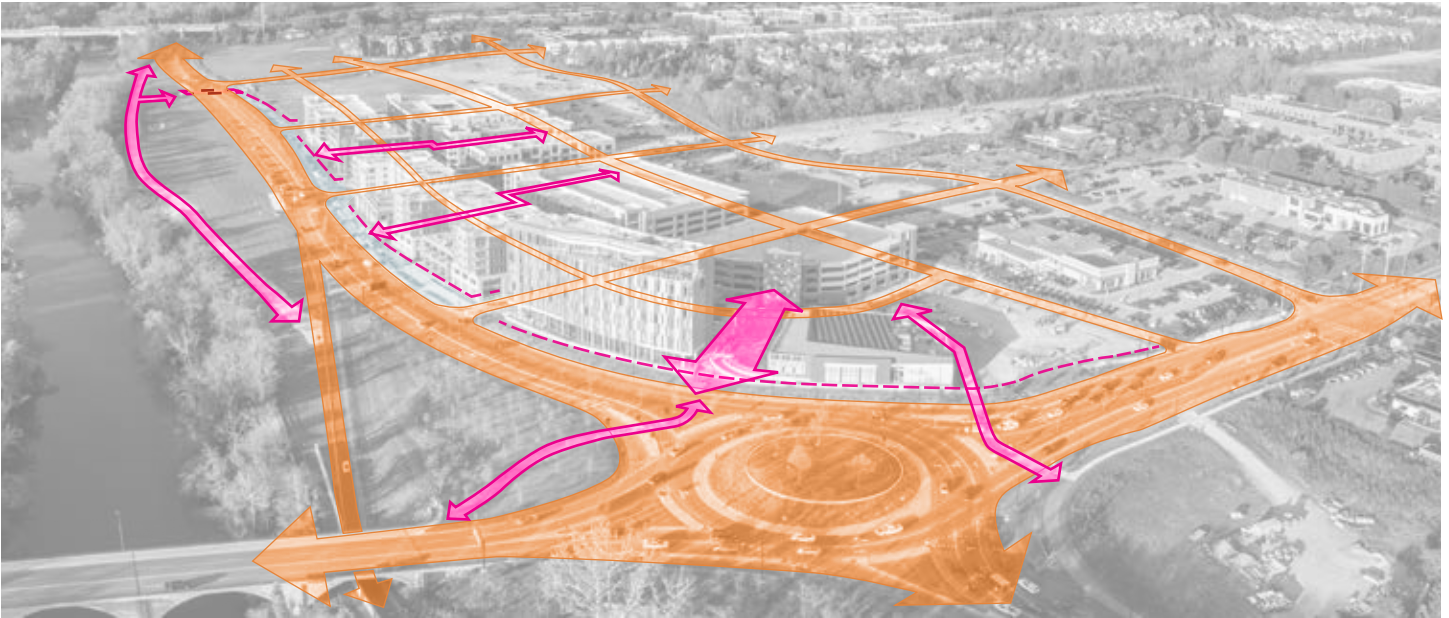


RETHINKING LEFTOVER SPACES

Focus on the potential of all spaces. In urban districts, there should be no "leftover" space. Streets, blocks, and sites should be designed to create places with purpose. Leftover spaces can sap the energy of innovation districts and divide areas. Design or convert unprogrammed spaces into contributing and intentional spaces. This may be placing trails and seating in natural areas, creating plazas or greens, converting an area into a dog park, or incorporating public art, just to name a few strategies.

DESIGN GUIDELINES

BLOCK PATTERN



INTENT

Short blocks that are approachable and can be traveled easily by foot contribute to a pedestrianized environment. Right-sized permeable blocks create an environment conducive of pedestrian movement.

The best and most walkable urban environments have blocks no larger than 300 x600 feet. Districts with blocks at this scale are inviting to people and establish a foundation for a vibrant and active place. They enhance connectivity and add corners which are important location for retail activity. Large blocks, aka “superblocks”, with fortress-like building walls, impede desired activity and should be avoided. The use of alleys, pedestrian vias, a building arcades that provide pedestrian passage through blocks are important, facilitating walkability, adding character, and creating more opportunities for commerce and interactions.

GENERAL GUIDELINES

- 1 Require walkable blocks that are scaled to the pedestrian experience by encouraging block sizes between 400 and 600 ft.
- 2 Connect new development to existing sidewalks.
- 3 Encourage pedestrian cut-through to break block size and increase pedestrian connectivity and permeability
- 4 Encourage activation of pedestrian cut-through and internal roads
- 5 Avoid conflict between pedestrian circulation and vehicle access

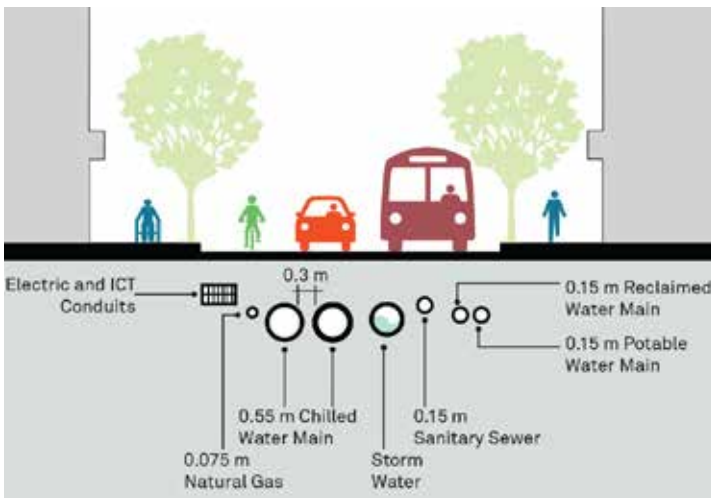
D0



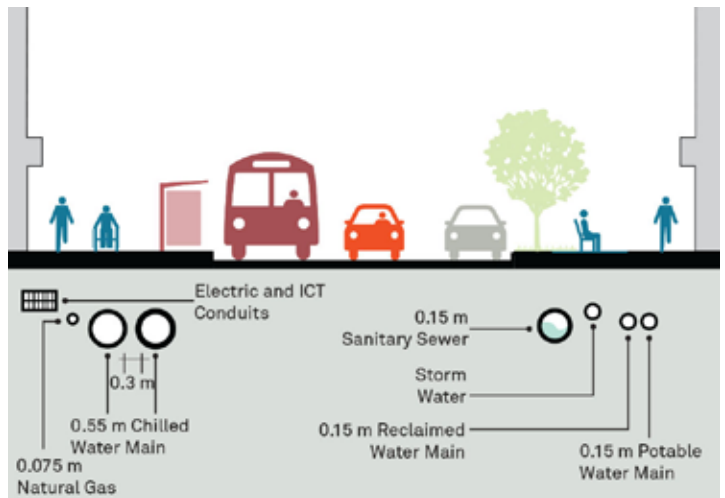
DESIGN GUIDELINES

UTILITIES

OPTION 1. Install Utilities in the Roadbed



OPTION 2. Install Utilities Adjacent to the Roadbed



Source: Adapted by Global Street Design Guide published by Island Press.

INTENT

Commonly found utilities in the public realm are water supply and firefighting, stormwater and wastewater, electricity and communications, greeninfrastructure, lighting and gas. Minimize the utilities visual impact enhance the pedestrian experience while keeping quality service provided.

The two diagrams above illustrates the underground utilities placement guidance adapted by Global Street Design.

GENERAL GUIDELINES

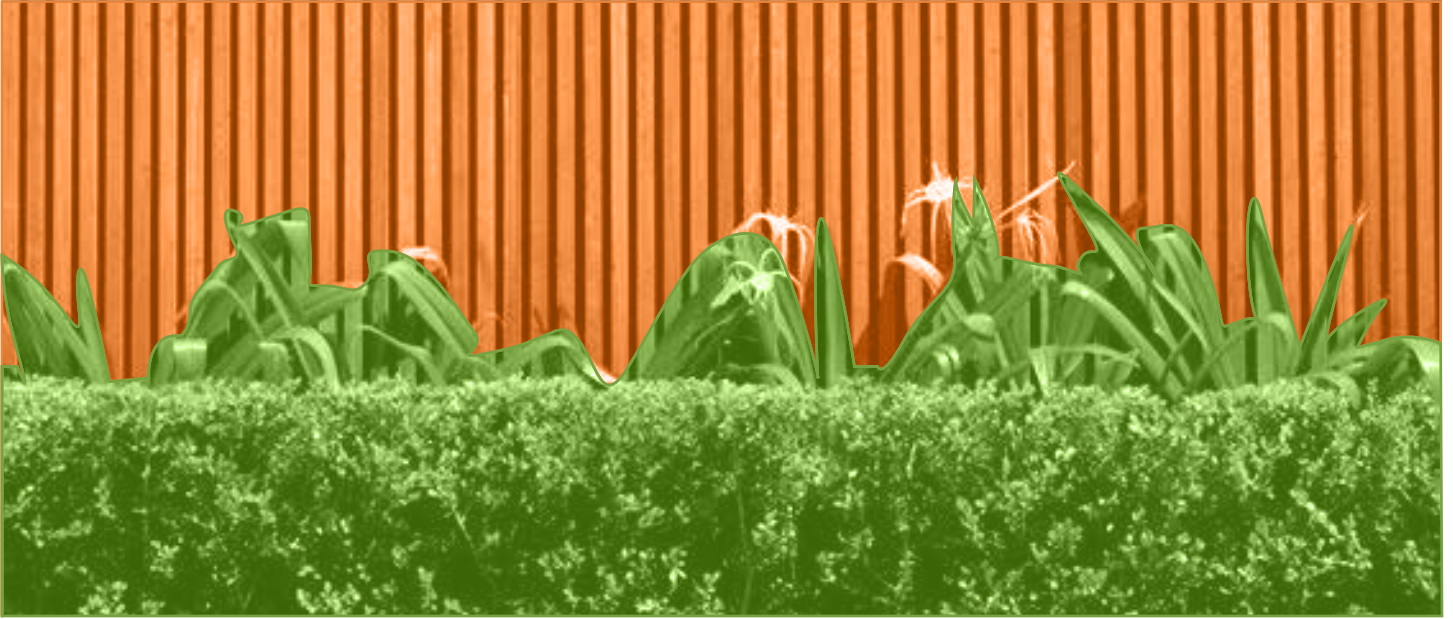
- 1 Whenever feasible bury utilities.
- 2 Encourage the use of green renewable energy sources.
- 3 Locate “back-of-house” utilities out of sight but accessible for service.
- 4 Minimize number of utilities at corners to maximize the pedestrian experience.
- 5 Utilize adequate planting or architectural screening.
- 6 Encourage artistic expressions on utility boxes.

DO



DESIGN GUIDELINES

WALLS, FENCING, AND SCREENING



INTENT

Upright structures such as wall, fences and screening positively impact walkability when properly designed, and installed. It is used to protect pedestrians from potential dangerous or unsightly areas. It is also an opportunity to add lighting, seating and artistic expression to the streetscape.

GENERAL GUIDELINES

- 1 Use durable and lasting materials and ensure it is compatible of adjacent buildings as design should complement its architectural and integrated to it.
- 2 No walls are allowed between the street and any building, except low retaining walls and screening for authorized off-street loading area.
- 3 If utilizing a landscape screen refer to species in this guideline (page#)
- 4 Encourage seating walls in areas of high pedestrian traffic. Seating wall should be between 16-18 inches tall and 18" deep.
- 5 Allow and encourage artistic expression to amenitize streetscape.

DO



DESIGN GUIDELINES

PARKING LOTS



INTENT

On-site parking can be accommodated in surface parking lots, although structured and on-street is preferred. Surface parking lots must be designed and placed to provide proper access without compromising the public realm or pedestrian activity. Surface parking lot can be utilized as part of a phasing implementation strategy.

GENERAL GUIDELINES

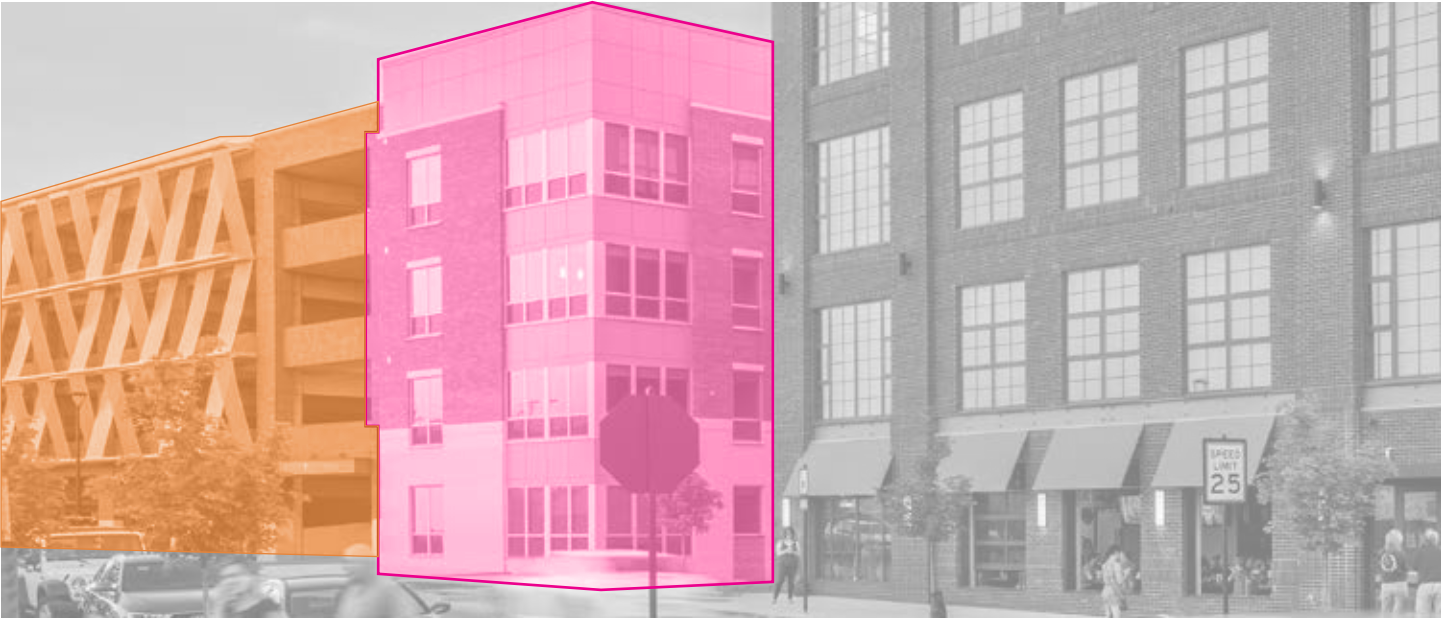
- 1 On-street parking and structured parking is encouraged where possible.
- 2 Parking should be located behind buildings. If parking lots are visible from a street, they should be buffered or screened with landscaping or low walls.
- 3 Parking lots should be accessed by alley or side street where possible.
- 4 Encourage the use of tree canopy, bioswales, and low-impact site development strategies.

DO



DESIGN GUIDELINES

PARKING STRUCTURES



INTENT

Parking structures are crucial to dense development, but they should not distract from the overall character or environment. Parking structures should be designed in a way that adequately accommodates parking needs while adding to the aesthetic quality of a place or fitting in with the surrounding context.

GENERAL GUIDELINES

- 1 Parking should be structured.
- 2 Parking should be wrapped with, screened, or built with materials and articulation that complement the surrounding context.
- 3 Surface parking lots should be prohibited except when part of project phasing.
- 4 Parking structures should be accessed by alleys and side streets.
- 5 Ground-level street frontage should include active storefronts or pedestrian spaces.
- 6 Encourage the use of public art, lighting and creative materials.

DO



DESIGN GUIDELINES

BUILDING PLACEMENT



INTENT

The placement of buildings, entries, drives, parking, service areas and public spaces are important to the block pattern. Appropriate placement of buildings creates a street wall that provides a consistent edge, maintains a human scale, and establishes the overall character or feel of a place.

Orienting building façades to the sidewalk edge establishes a street wall that promotes safety and comfort in the pedestrian realm.

Outdoor dining brings lively activity from the private realm into the public realm. Ensure that outdoor dining and other active ground floor uses do not encroach on the flow of pedestrian traffic.

Terraced walls respond to major changes of elevation while maintaining walking paths and providing additional seating.

Parking areas tucked into the middle of the block provide more opportunity for vibrant pedestrian areas along the street wall.

GENERAL GUIDELINES

- 1 Building frontage should be aligned uniformly and along the sidewalk edge.
- 2 Public areas within buildings should face the public realm.
- 3 On-site parking should not be visible from the street where possible and should not conflict with pedestrian activity.
- 4 Ensure that outdoor dining does not interrupt pedestrian traffic.

DO



DESIGN GUIDELINES

BUILDING MASSING & ARTICULATION



INTENT

The general shape of buildings or series of buildings should be designed with scale, proportion in mind to maintain compatibility with surrounding buildings and promote a pedestrian-scaled public realm. Articulation of building facades can help break down the scale of large buildings and accentuate certain site or building elements through the use of architecture features, materials, fenestration, awnings, balconies, heights and setbacks.

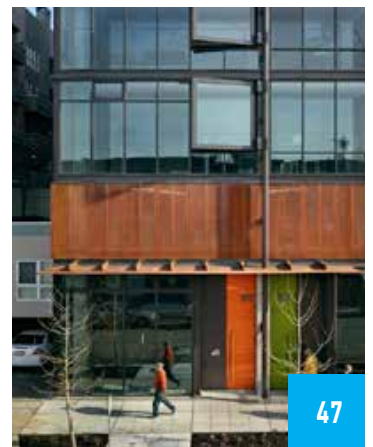
Providing definition between the ground floor and upper floors of buildings creates variety in the private realm. Stepping upper stories back from the primary façade helps the overall achieve a human scale by reducing the impact of tall buildings along the street wall.

Divide larger buildings and their façades into smaller modules so that the form and massing can better relate to its surroundings. Horizontal and vertical elements provide variety and visual appeal that relates to its surrounding context. Design street level stories at a human scale such that they relate to the pedestrian user and adjacent properties.

GENERAL GUIDELINES

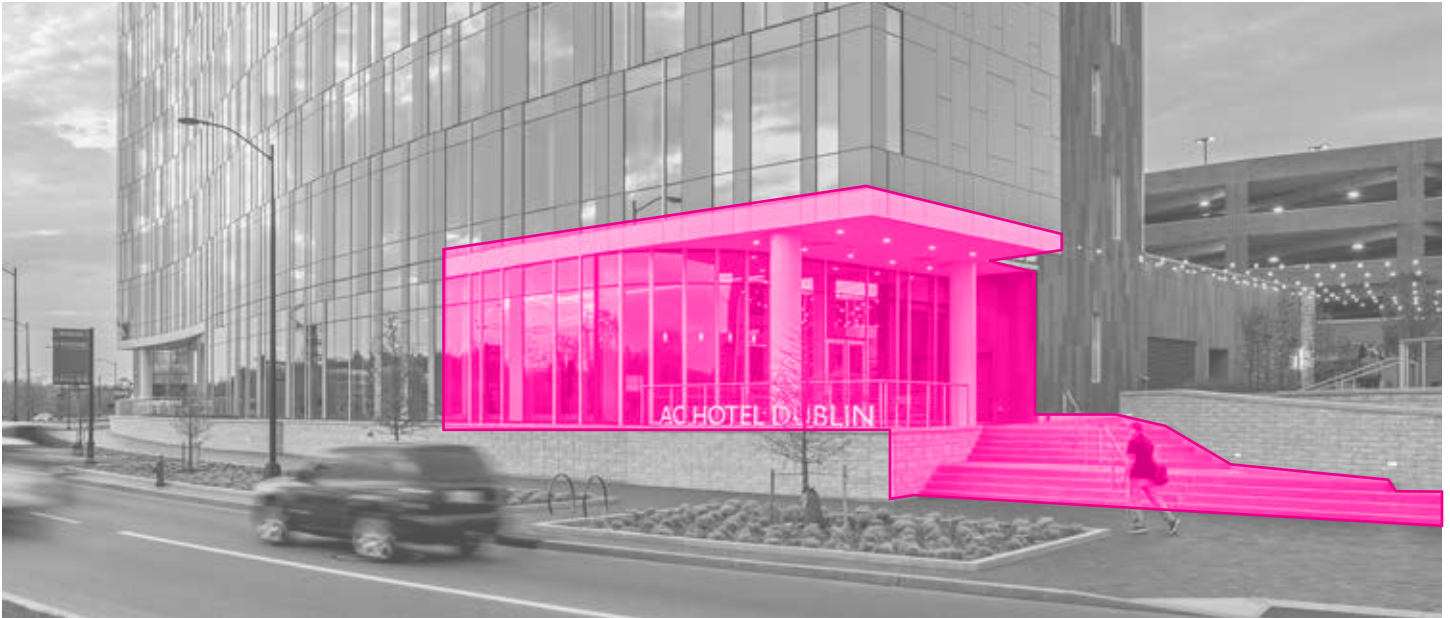
- 1 Building mass, scale, articulation and proportion should reflect and complement its surrounding context.
- 2 The ground floor should be articulated differently than the upper floors to create pedestrian scale.
- 3 Transparency of the ground floor should be maximized to allow views of activity.
- 4 Avoid monotonous facades and encourage the use of horizontal and vertical articulation to express facade widths.
- 5 For buildings at corners, accentuate the corner with architectural elements.
- 6 Encourage the use of creative facade materials and details.

D0



DESIGN GUIDELINES

BUILDING ENTRY



INTENT

A building entry is an access point into a building. Building entries should be located and designed to promote activity and walkability. Building entries can also be used to articulate building facades and differentiate storefronts. Buildings need to interact seamlessly with adjoining sidewalks, streets and open spaces.

Successful entries are distinct and legible to pedestrians, without dominating a building's overall composition. Locating entrances along active areas of the public realm promotes a steady flow of pedestrian traffic into and out of buildings. Large buildings with multiple entrances create variety and provide flexibility to accommodate future uses.

Clean, transparent windows make a more active and interesting ground floor for pedestrians. Restaurants with open windows and doors draw in visitors and pronounce their purpose as a destination. Separated residential entries that face onto the public realm create an inviting street edge.

Corner entrance can either be setback or with doors on both sides of the street. While the former requires only one entrance the latter addresses each side equally.

GENERAL GUIDELINES

- 1 Entrances must face the public realm and be located at active and convenient locations to encourage walkability.
- 2 Entrances must be accessible by all levels of physical ability.
- 3 For buildings at corners, entrances should be used to anchor the intersection.
- 4 Entrances must be articulated using architectural elements such as awnings, signs, recessed entries, materials or furnishings and/or landscape elements.
- 5 Entrances should be designed to pronounce their purpose and differentiated by use.

DO



PUBLIC REALM

ZONES OF THE PUBLIC REALM

ZONES OF THE PUBLIC REALM

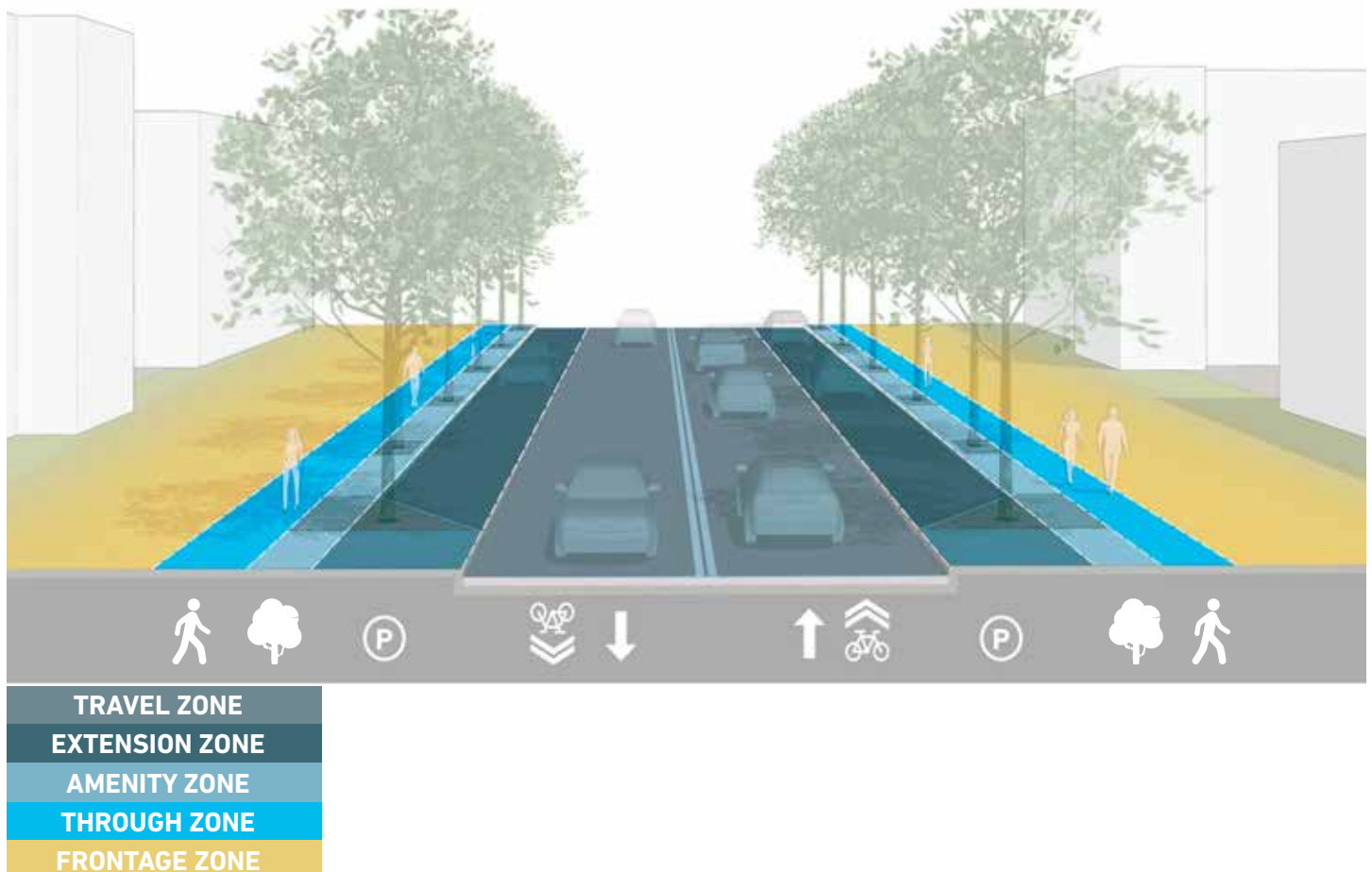
The public realm is the space around, and between buildings that is publicly accessible, including streets, sidewalk, parks and open spaces. This area is predominately within public rights-of-way, but also includes privately owned public space (POPS), land which, though privately owned, open to and is made available to the public.

For the purpose of these guidelines, the public realm is categorized into five zones. Each zone

includes unique features and functions of the public realm. The diagram below illustrates the five zone types while the following page further describes each zone as well as how this document addresses each zone.

To achieve great streets, it is imperative to get the design of this space correct. Complete Streets principles are also critical in Innovation Districts and this document embraces those principles to accommodate all modes of travel within the District.

ZONE TYPES



TRAVEL ZONE

The Travel Zone is the portion of the street dedicated to the through movement of vehicular traffic. Generally auto-oriented, the Travel Zone also accommodates mass transit systems and on-street bike facilities such as bike lanes and sharrows.

EXTENSION ZONE

This area, typically used for parallel, on-street parking, is also where pedestrian space may be extended into the parking lane, via features such as bulb-outs and mid-block curb extensions. This document prescribes which types of street should accommodate on-street parking and where pedestrian friendly Extension Zone techniques may be used.

AMENITY ZONE

This area, generally still within the public right-of-way, is adjacent to the sidewalk and is home to street trees, landscaping, transit stops, street lights, traffic control and wayfinding signs, and site furnishings. Also referred to as the buffer zone, this area provides physical separation between the pedestrian and vehicular travel zones. This area may be a planted streetscape or an extension of the Through Zone hardscape or a combination thereof. The Amenity Zone may also include the area generally referred to as an edge zone, which is the area used by people getting in and out of vehicles parked at the curbside. This document prescribes dimensional, material, and landscaping standards for the Amenity Zone.

THROUGH ZONE

This is the portion of the sidewalk dedicated to the unobstructed, linear through movement for pedestrian travel along the street. The Through Zone is subject to specific standards to comply with the Americans with Disabilities Act (ADA). These standards recommend sidewalk widths which allow two parties walking abreast to pass each other comfortably. This document prescribes dimensional and material standards for the Through Zone.

FRONTAGE ZONE

This is the area adjacent to the property line where transitions between the public sidewalk and ROW and the private forecourt and building face occurs. It provides a zone of transition from the sidewalk to building entries while also activating building fronts. This area is predominantly, but not exclusively, privately owned. This document prescribes standards for setbacks, landscaping, and appropriate street-side activities within the Frontage Zone.

CONDITIONAL ZONES

Certain portions of the streetscape require special consideration in terms of the spacing and placement of streetscape elements.

- + Intersections/Corners
- + Transit Stops
- + ADA Parking
- + Driveways
- + Medians

STREET HIERARCHY

OVERVIEW

Public works include a wide variety of infrastructure elements and facilities ranging in purpose from the purely utilitarian to the highly ornamental. Public roadways often fall in the middle of this spectrum. They serve a basic utilitarian function by providing mobility and access and must be designed to meet safety and transportation service standards. But streets are also part of the built environment that people physically experience on a daily basis. They establish the baseline experience for people moving through them. To create the desired identity

and environment desired in the Uptown Innovation District, the visual quality of the public right-of-way is critical.

Street design must be a balance of providing for the safe and effective movement of people in various modes and the creation of an appealing aesthetic and foundational sense of place. Streets can be classified into groups based upon the traffic and modes they accommodate and the type of character they establish. Provided here is the street hierarchy for the Uptown Innovation District study area.

STREET HIERARCHY







STREET DESIGN MATRIX

We have classified the streets into seven types in three groups. The arterial streets that carry traffic to and through the area are identified as “Signature Boulevard” (Martin Luther King Jr. Boulevard) and “Primary Avenue” (Reading Road). The collector streets that provide access within the Uptown District and surrounding neighborhoods are “District Avenue” (Harvey Avenue/Vernon Place and University Avenue/Lincoln Avenue) and “Neighborhood Collector” (Ridgeway Avenue, Whittier Street, Winslow Avenue, etc.). The last group are internal streets and ways, a number of

which do not exist today and which will be built as the area and blocks develop. They are “ceremonial street”, “courtyard commons”, and “pedestrian way”. These internal streets and ways may include both publicly-dedicated streets and private streets. Generally, the vehicular traffic volumes range from greatest – Signature Boulevard, to least – Courtyard Commons.

The following matrix summarizes the characteristics and define parameters for each of the street types.

						MEDIAN	TRAVEL LANES	LANE WIDTH	SPEED	ROW WIDTH	BIKE FACILITIES
ARTERIAL	SIGNATURE BOULEVARD	●	●	◐	◐	Allowed Turn Lane Planted	6	12'	30-40 mph	100' - 132'	Off-Street Through Zone
	PRIMARY AVENUE	●	●	◐	◐	Allowed Turn Lane	4 - 5	11'	25-35 mph	74' - 112'	On-Street Bike Lanes
COLLECTOR	DISTRICT AVENUE	◐	●	◐	◐	Prohibited	2 - 3	11'	25-35 mph	60' - 72'	On-Street Bike Lanes
	NEIGHBORHOOD CONNECTOR	○	●	●	●	Prohibited	2	10'	25 mph or less	48' - 52'	On-Street Sharows
INTERNAL STREETS	CEREMONIAL STREET	○	●	◐	◐	Allowed Planted Programed	2	10'	25 mph or less	52' - 166' Street may be private.	Off-Street Through Zone
	COURTYARD COMMONS	○	◐	◐	◐	Allowed	2	10'	20 mph or less	40' - 60' Street may be private.	Off-Street Through Zone
	PEDESTRIAN VIADOR	○	○	◐	●	n/a	n/a	n/a	n/a	18'-45' Alley private	Shared Through Zone

COMPLETE STREETS
BALANCING MODE EMPHASIS

- Mode Emphasized
- ◐ Mode Balanced with Other Modes
- Mode Not Emphasized

STREETSCAPE HIERARCHY

OVERVIEW

While the Street Hierarchy focuses on travel and modes, the Streetscape Hierarchy provides additional guidance for the street and streetscape design – particularly behind the curb. To create the identity and environment desired in the Uptown Innovation District, the visual quality of the public right-of-way and the private frontage behind it is crucial. Intersections also represent important identity and wayfinding opportunities. This matrix

highlights the component public realm zones and streetscapes of the various street types.

The objective is to create a distinct pedestrian street character throughout the district that encourages an active pedestrian environment. Fundamental components include the creation of a street canopy, and aesthetically-pleasing, comfortable, and appropriately lighted sidewalks. It is also important to provide for on-street parking to support active first-floor uses.

STREETSCAPES



STREETSCAPE DESIGN MATRIX

This also helps to describe the character of the quasi-public space between the right-of-way and building face on private property. These are the expanded outdoor seating, entry, forecourt, and pocket park areas that create an engaging street and place. They should be of materials and function as an extension of the public street and open space system.

It is expected that these streetscapes are all complementary and part of the same general

identity. Streets within the Uptown Innovation District should prioritize architectural/ landscape design, high-quality materials, and construction quality to reinforce Uptown's identity as a leading innovation district.

The following pages further expand upon these design details.

The following matrix summarizes the characteristics and define parameters for each of the streetscape and public realm types.

		EXTENSION ZONE	AMENITY ZONE	THROUGH ZONE	FRONTAGE ZONE	AMENITY ZONE PERMEABILITY	ON-STREET PARKING	LIGHTING	STREET TREES	MATERIAL PALETTE
ARTERIAL	SIGNATURE BOULEVARD	n/a	8'	12' - 20'	0' - 35'	Low	Not Allowed	Street, pedestrian and accent	Canopy	Palatte A
	PRIMARY AVENUE	0' - 8'	8'	10'	0' - 10'	Medium	Permitted	Street, pedestrian and accent	Standard	Palatte A
COLLECTOR	DISTRICT AVENUE	8' - 12'	6' - 12'	8' - 9'	0'-30'	Medium	Permitted	Street, pedestrian and accent	Standard	Palatte B
	NEIGHBORHOOD CONNECTOR	0' - 8'	4'-6'	4' - 6'	0'-15'	High	Encouraged	Street and pedestrian	Standard	Palatte C
INTERNAL STREETS	CEREMONIAL STREET	8'	8'	8' - 10'	0' - 10'	High	Encouraged	Street, pedestrian and accent	Standard	Palatte A
	COURTYARD COMMONS	n/a	4' - 6' *	10' *	0' - 10'	High	Encouraged	Street, pedestrian and accent	Ornamental	Palatte B,C
	PEDESTRIAN VIADOR	n/a	n/a	n/a	n/a	n/a	n/a	Pedestrian and accent	Ornamental	Palatte A
PUBLIC REALM STREETSCAPE										

RIGHT-OF-WAY

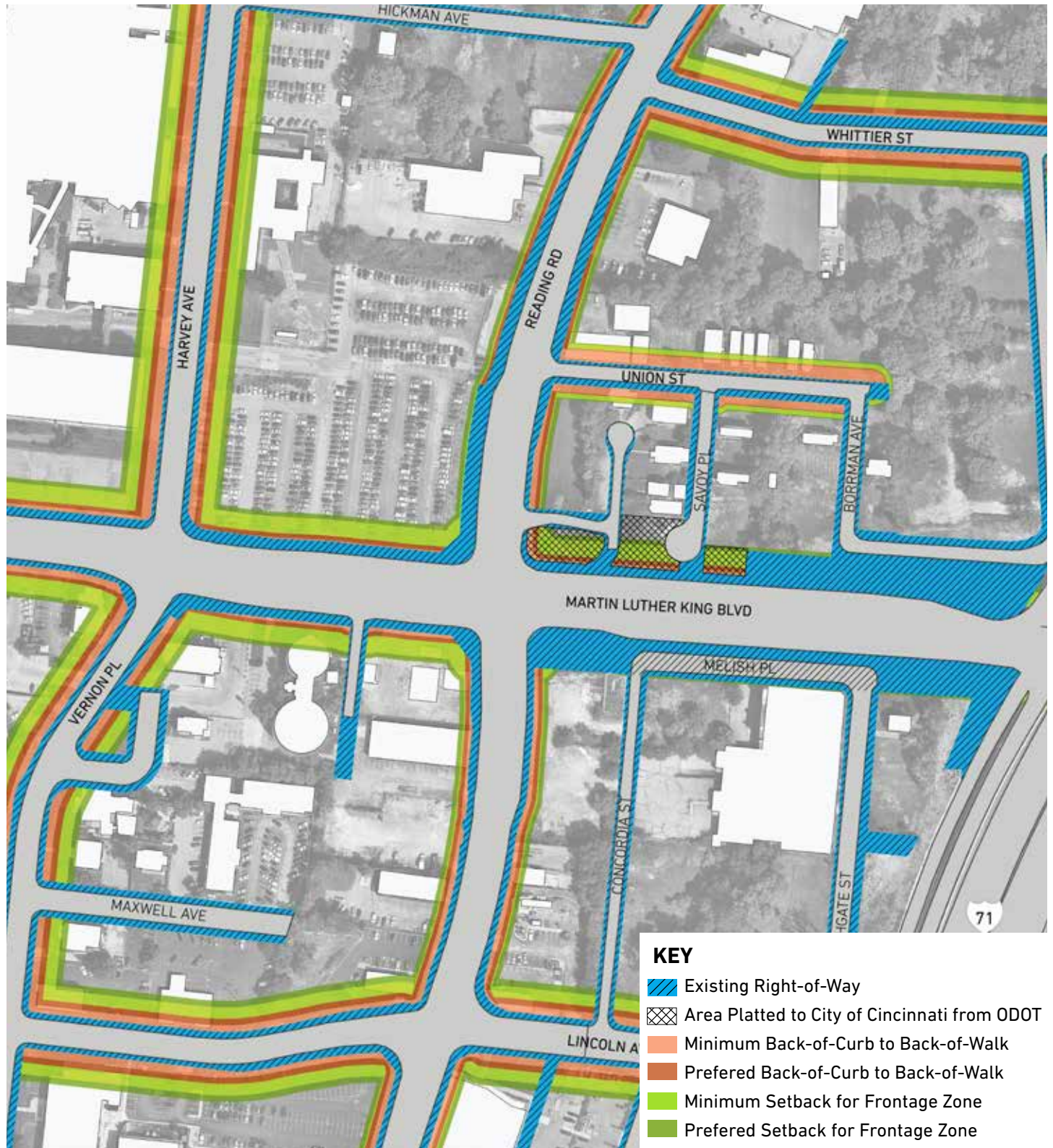
IMPLICATIONS OF THE RIGHT-OF-WAY

The amount of right-of-way necessary to achieve the streetscape hierarchy for the Uptown Innovation District varies depending upon the location within the district. This is because existing right-of-way varies along streets and blocks, and because the design of the street responds to its classification and location. As a result, there are areas within the district where additional right-of-way, streetscape easements, or private landowner partnerships will be necessary. Creating the appropriate and desired streetscape will require coordination and cooperation between public agencies, the city of Cincinnati, and private landowners. Because the four corners of the focus area are slated for complete transformation, it is possible to achieve this vision and meet the guidelines.

To provide a more detailed understanding of these issues, the desired streetscape hierarchy has been compared to the existing right-of-way. The map to the right highlights the existing right-of-way, and areas where additional ground will be needed to achieve the identified streetscape. Blue hatched areas highlight the existing right-of-way. Orange highlights the area where additional ground is needed to achieve the minimum identified streetscape. Red highlights the area needed to achieve the preferred identified streetscape. The combined blue, orange, and red areas are necessary to achieve the desired streetscape for the Uptown Innovation District. The green areas highlight the proposed building setback.

Note, these dimensions are based upon the Street and Streetscape Hierarchy.

PROPOSED RIGHT-OF-WAY/EASEMENT



SIGNATURE BOULEVARD

STREETSCAPE OVERVIEW

Martin Luther King Jr. Boulevard is Uptown's signature boulevard and the main east-west connector and entry way to the Innovation District. It is the signature gateway from the new I-71 interchange and must immediately establish a positive impression. It must also be made a comfortable pedestrian experience. To accomplish this along a wide, ten-lane corridor requires substantial, majestic street trees, a wide pedestrian thoroughway, and five-plus story development that frames the street. The preferred condition is a large tree planter zone (8') that buffers a combined bicycle and pedestrian multiuse way (15 ft.) and private frontage zone in front of new signature buildings. It is important to create a double-row of street trees on each side of MLK east of Reading and this can be achieved because the needed ground is publicly-controlled.

STREETSCAPE APPLICATION ZONES



STREETSCAPE DESIGN STANDARDS

EXTENSION ZONE N/A

AMENITY ZONE 8'

THROUGH ZONE 12' - 20'

FRONTAGE ZONE 0' - 35'

AMENITY ZONE PERMEABILITY LOW

ON-STREET PARKING NOT PERMITTED

MATERIAL PALETTE PALETTE A (SEE PAGE ##)

LIGHTING PALETTE # (SEE PAGE ##)

STREET TREES CANOPY (SEE PAGE ##)

SIGNAGE PALETTE # (SEE PAGE ##)

PREFERRED SECTION A

This diagram illustrates a preferred sidewalk section with the following components and dimensions:

- 8' FURNISHING OR BUFFER ZONE:** The initial section of the sidewalk, shown in blue.
- 15' MULTIPATH:** A central section containing:
 - THROUGHWAY OR PEDESTRIAN THROUGH ZONE:** A blue area for pedestrian travel.
 - PEDESTRIAN THROUGH ZONE:** A grey area for pedestrian travel.
 - GARAGE:** A grey area for bicycle travel, indicated by a bicycle icon and an upward arrow.
- 0'-25' FRONTAGE ZONE:** The final section of the sidewalk, shown in orange.
- EXISTING BACK OF SIDEWALK:** A red line indicating the boundary of the existing sidewalk.
- 3' SIDEWALK:** A dimension indicating the width of the sidewalk adjacent to the building.

The diagram illustrates a 15-foot wide sidewalk layout adjacent to a street and a building. The sidewalk is divided into three main sections: a blue 'FURNISHING OR BUFFER ZONE' (8 feet wide), a dark blue 'THROUGHWAY OR PEDESTRIAN THROUGH ZONE' (15 feet wide), and an orange 'FRONTAGE ZONE' (0-20 feet wide). The blue zone contains a planter box with trees and a bench. The dark blue zone has a white bicycle icon with a double arrow. The orange zone has a white bicycle icon with a single arrow. A 'GARAGE' label is positioned between the dark blue and orange zones. A red line marks the 'EXISTING BACK OF SIDEWALK' at the edge of the blue zone. A 3-foot dimension is shown for the building's frontage. The background shows a street with cars and a building with people sitting outside.

SIGNATURE BOULEVARD

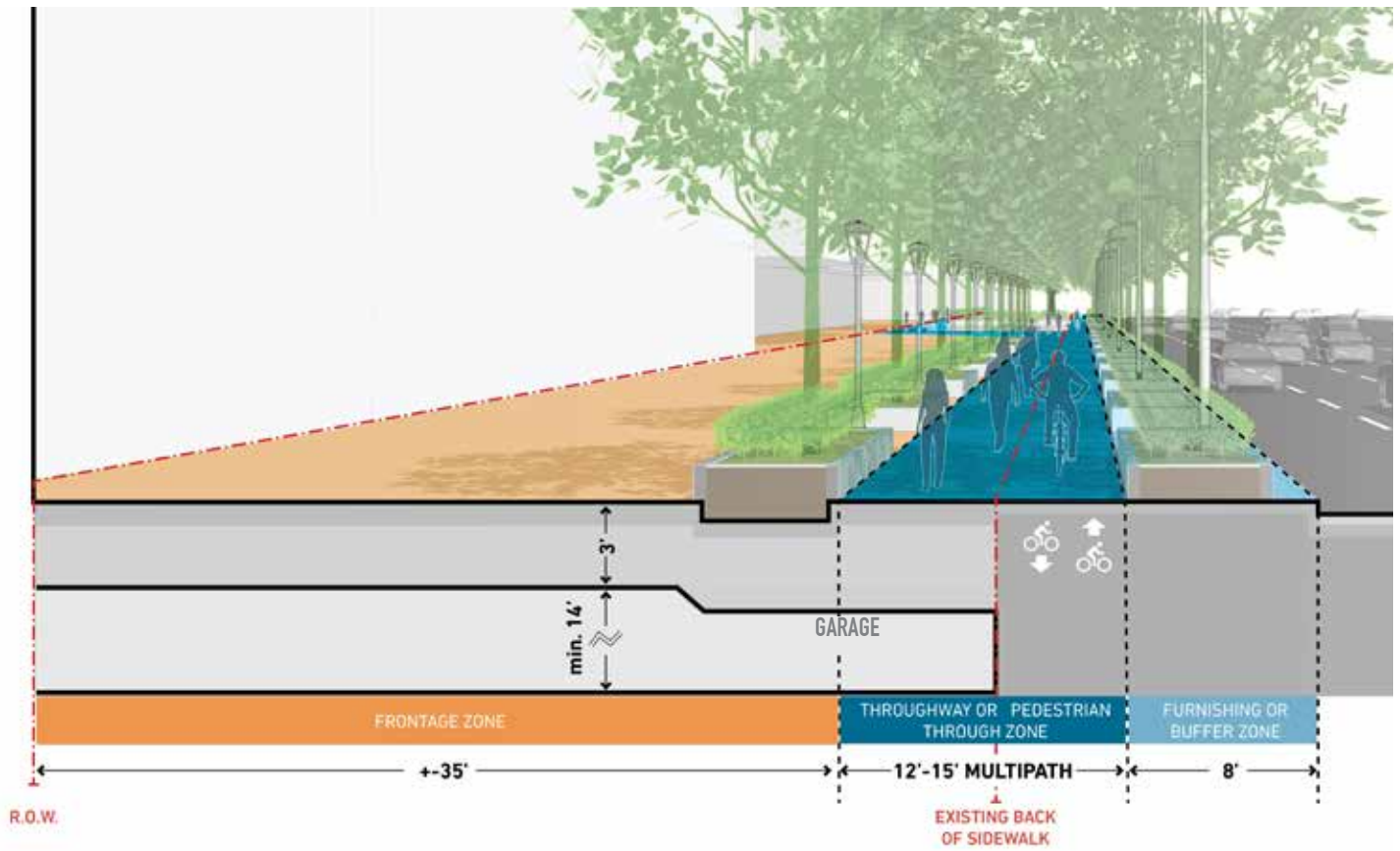
SPECIAL CONDITIONS - MELISH PLACE

The design of the south side of MLK Blvd. between I-71 and Reading Road is complicated by the presence of Melish Place. While this street can be abandoned and there is enough ROW to meet the Guidelines, below this street are substantial regional utilities that cannot be moved or substantially buried. As a result, this requires a special condition. On the roughly third of the block closest to Reading Road, the utilities can be buried, and the desired streetscape can be achieved. On the third closest to

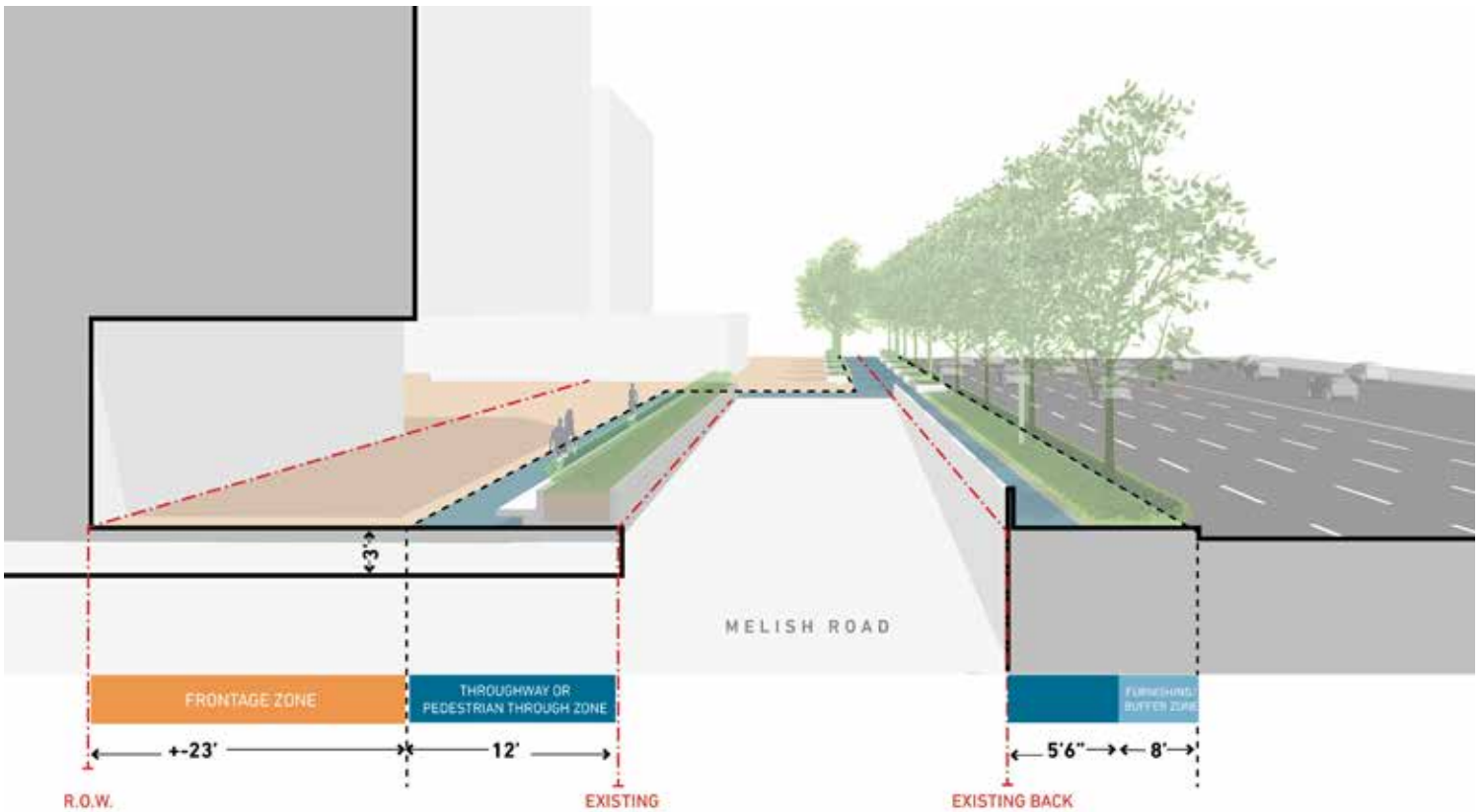
I-71, a cap or parking garage transfer slab should extend over the Melish easements and support the desired streetscape, with parking below that still allows access to the utilities (14' vertical clearance is required). In the middle third, where there is not enough height for a below grade structure, an opening can be provided, and the pedestrian sidewalk rerouted closer to the buildings. The buildings in this area can have recessed first floors to create a comfortable and engaging streetscape environment.



PREFERRED SECTION C.1



PREFERRED SECTION C.2

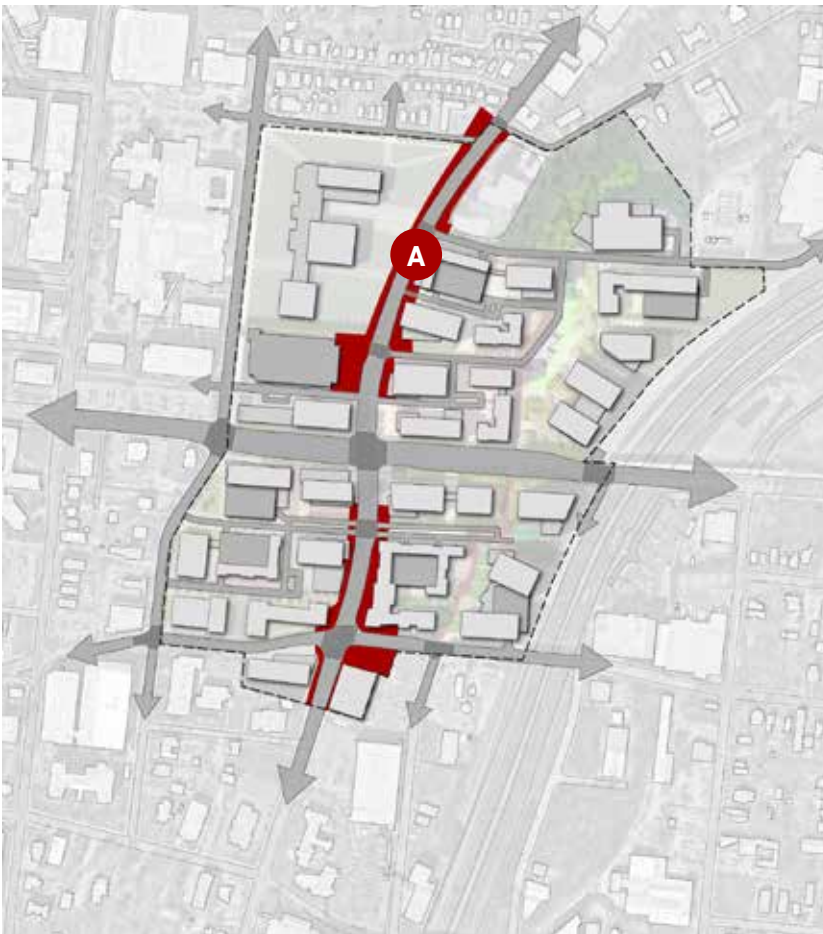


PRIMARY AVENUE

STREETSCAPE OVERVIEW

The primary avenue is the main north-south connector and is also a major entryway to the Innovation District. This six lanes corridor needs to be designed to provide a comfortable pedestrian experience. Buffering the wide street that is highly traveled is critical, this preferred condition is a large tree planter zone between the pedestrian zone and the street.

STREETSCAPE APPLICATION ZONES



STREETSCAPE DESIGN STANDARDS

**EXTENSION
ZONE** 0' - 8'

**AMENITY
ZONE** 8'

**THROUGH
ZONE** 10'

**FRONTAGE
ZONE** 0' - 10'

**AMENITY ZONE
PERMEABILITY** MEDIUM

**ON-STREET
PARKING** PERMITTED

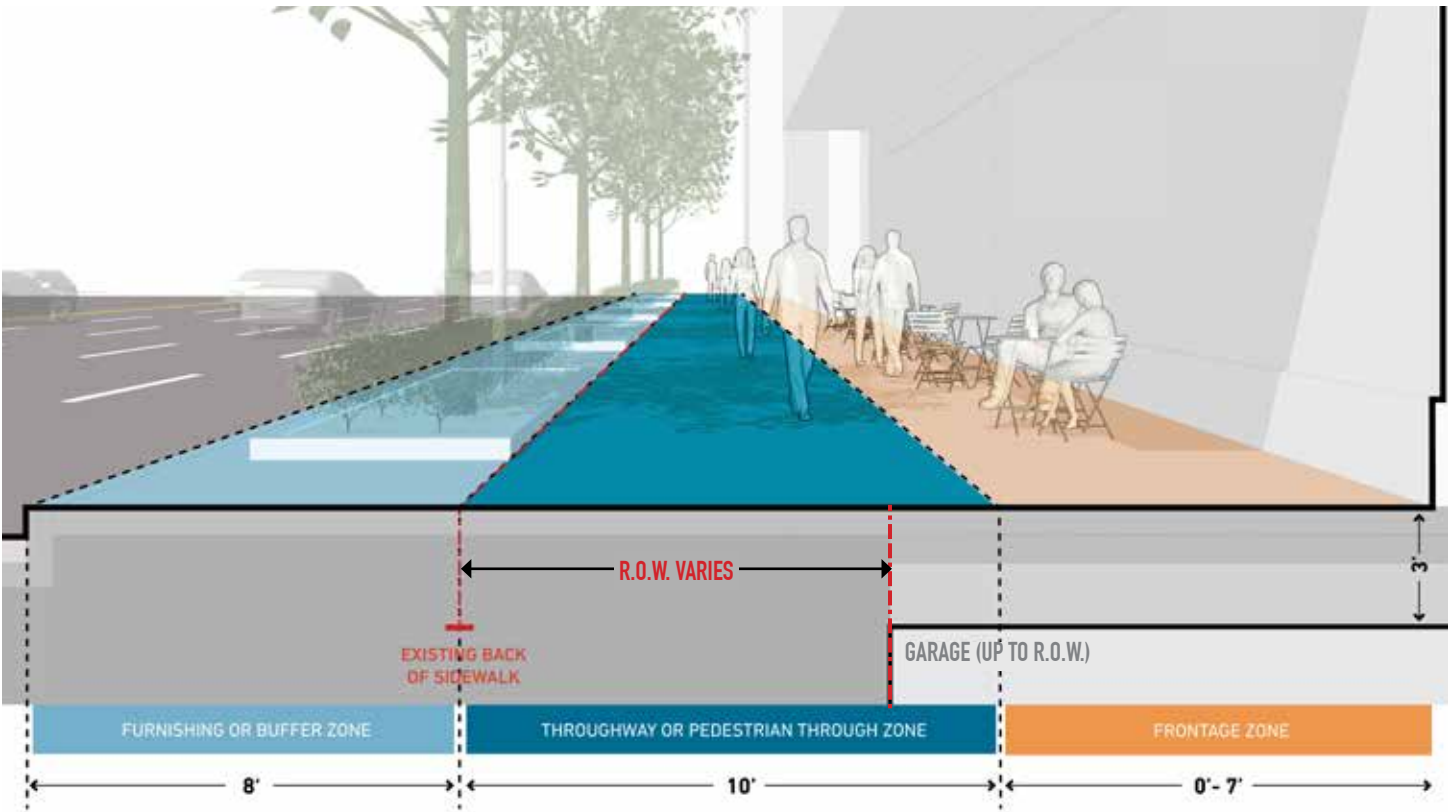
**MATERIAL
PALETTE** PALETTE A
(SEE PAGE ##)

LIGHTING PALETTE #
(SEE PAGE ##)

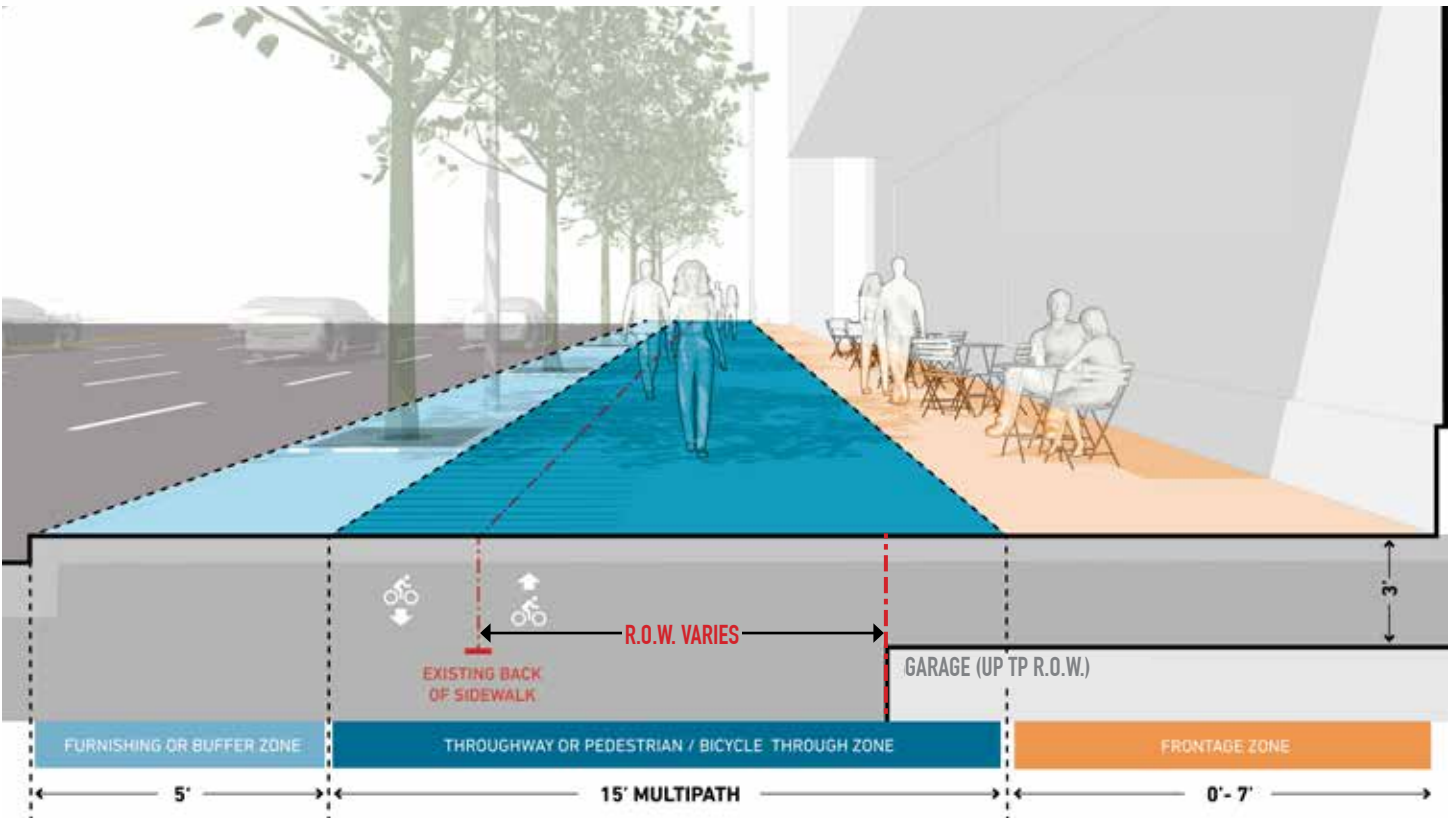
**STREET
TREES** CANOPY
(SEE PAGE ##)

SIGNAGE PALETTE #
(SEE PAGE ##)

PREFERRED SECTION A



PREFERRED SECTION A - ALTERNATE



DISTRICT AVENUE

STREETSCAPE OVERVIEW

The district avenues are important district streets but are secondary to the signature boulevard and primary avenue. District avenues do not carry the vehicular volumes of those streets and therefore are generally four to five lane sections, often with off-peak on-street parking. Most have sidewalks adjacent to the curb. As the blocks along the edges of these streets redevelop, there is the opportunity to create dedicated parking, a moderate buffer zone with street trees, and curb extensions at intersections for pedestrian safety. Street trees location may need to be adjusted to the outboard side of the sidewalk depending on utility locations, though this is not preferred. Where traffic conditions allow, reducing street sections to two or three travel lanes with dedicated parking and and/or bike lanes is recommended.

STREETSCAPE APPLICATION ZONES



STREETSCAPE DESIGN STANDARDS

EXTENSION ZONE 8' - 12'

AMENITY ZONE 6' - 12'

THROUGH ZONE 8' - 9'

FRONTAGE ZONE + 30'

AMENITY ZONE PERMEABILITY MEDIUM

ON-STREET PARKING PERMITTED

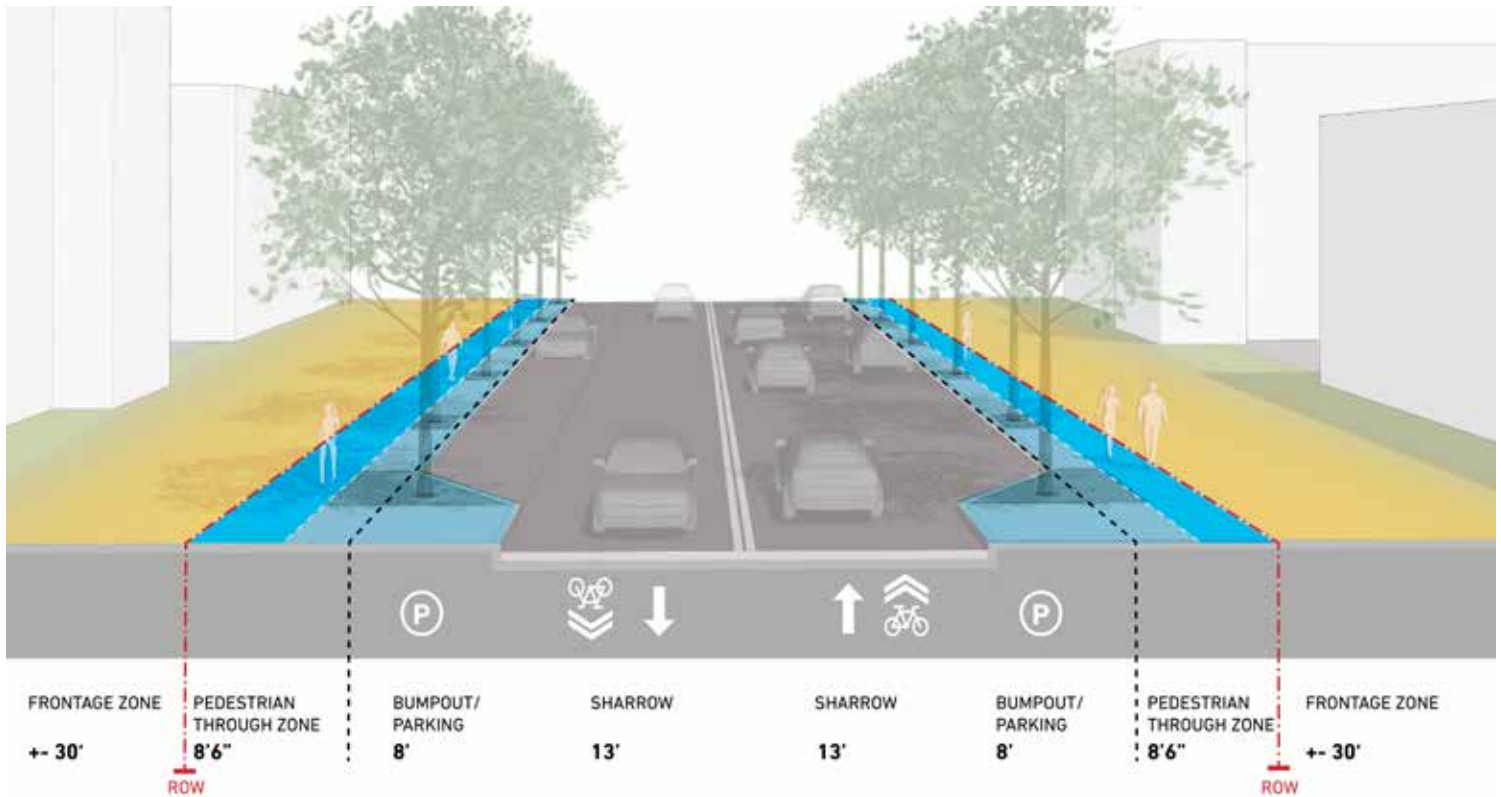
MATERIAL PALETTE PALETTE B (SEE PAGE ##)

LIGHTING PALETTE # (SEE PAGE ##)

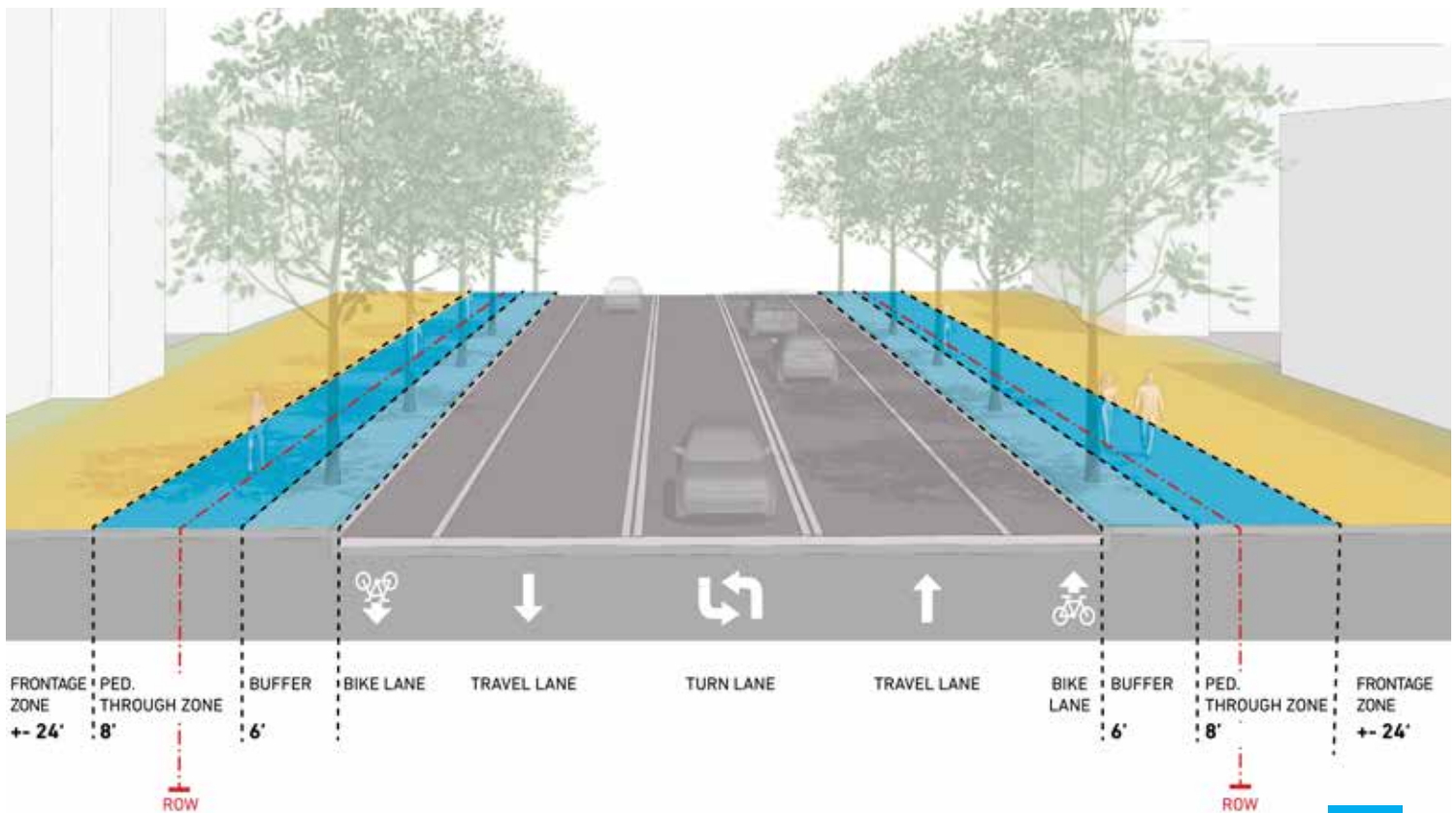
STREET TREES STANDARD (SEE PAGE ##)

SIGNAGE PALETTE # (SEE PAGE ##)

PREFERRED SECTION A



PREFERRED SECTION B



NEIGHBORHOOD CONNECTOR

STREETSCAPE OVERVIEW

The neighborhood transition streets generally border existing residential areas and are smaller in scale with lower traffic volumes. The purpose of Neighborhood Connectors is to transition from the Innovation District back into the existing surrounding neighborhood. The preferred street condition is two travel lanes with dedicated on-street parking on one side of the street. This is similar to the existing condition. The desired streetscape is a moderate tree buffer zone that separates the pedestrian zone from the travel lanes and creates a tree-lined street.

STREETSCAPE APPLICATION ZONES



STREETSCAPE DESIGN STANDARDS

EXTENSION ZONE 0' - 8'

AMENITY ZONE 0' - 6'

THROUGH ZONE 4' - 6'

FRONTAGE ZONE +15'

AMENITY ZONE PERMEABILITY HIGH

ON-STREET PARKING ENCOURAGED

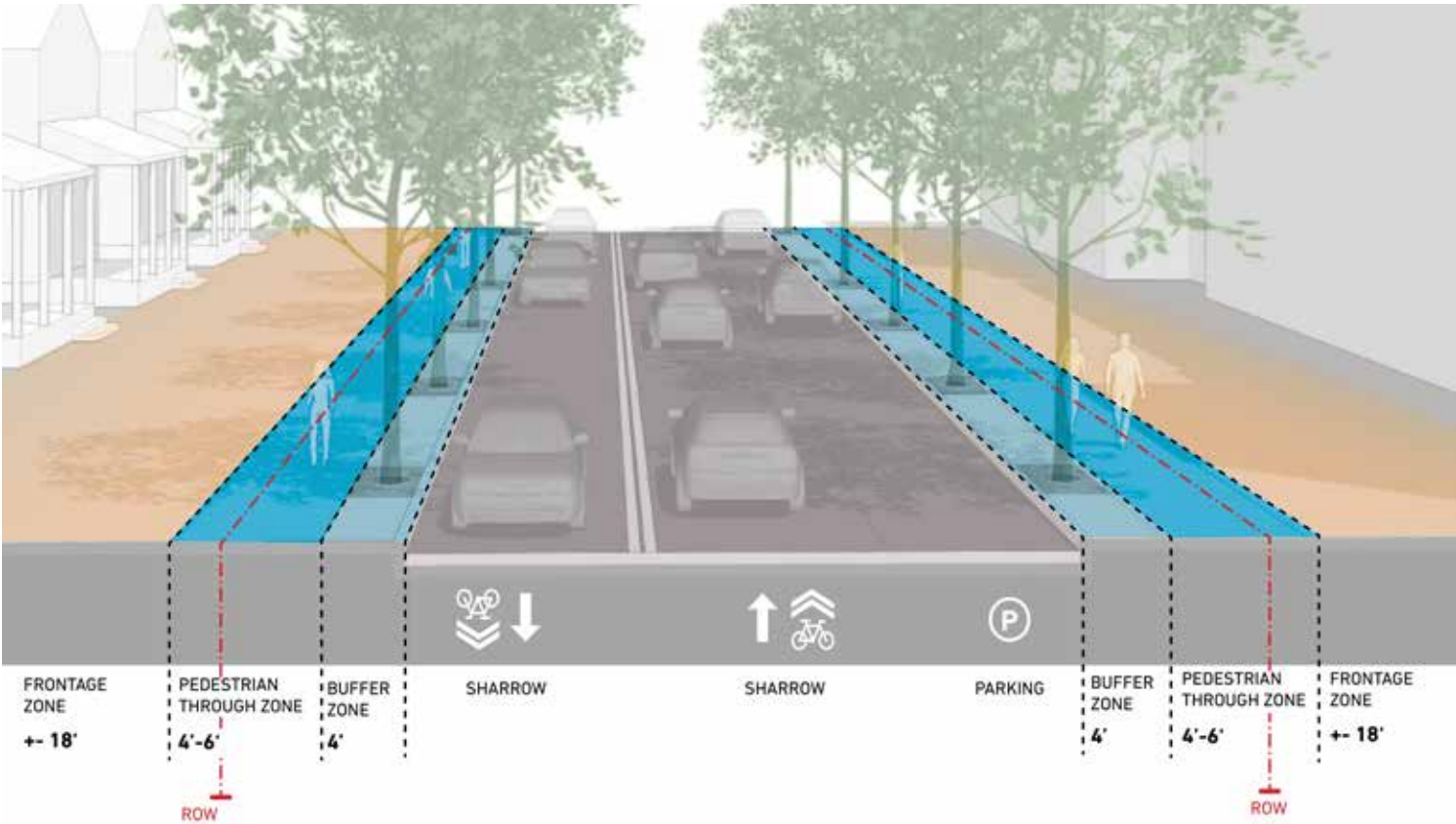
MATERIAL PALETTE PALETTE C (SEE PAGE ##)

LIGHTING PALETTE # (SEE PAGE ##)

STREET TREES STANDARD (SEE PAGE ##)

SIGNAGE PALETTE # (SEE PAGE ##)

PREFERRED SECTION A



CEREMONIAL STREET

STREETSCAPE OVERVIEW

Ceremonial streets are new internal streets to the Uptown Innovation District blocks. These will likely be privately built and may remain private streets or be publicly dedicated. As such, they may take many forms. The guidelines' objectives for these streets is to create attractive and welcoming entrances into the development that are striking and visible from Reading Road. These streets should provide a sense of arrival for visitors into the internal parking and circulation system of the District. As such they are slow-speed streets and should be designed to be flexible spaces and encourage pedestrian connectivity across them. They could even include central gathering greens or plazas. Because they will be new roads, they can be designed with appropriate space for comfortable pedestrian walks and lush landscape.

STREETSCAPE APPLICATION ZONES



STREETSCAPE DESIGN STANDARDS

EXTENSION ZONE 0' - 8'

AMENITY ZONE 8'

THROUGH ZONE 8' - 10'

FRONTAGE ZONE 0' - 10'

AMENITY ZONE PERMEABILITY HIGH

ON-STREET PARKING ENCOURAGED

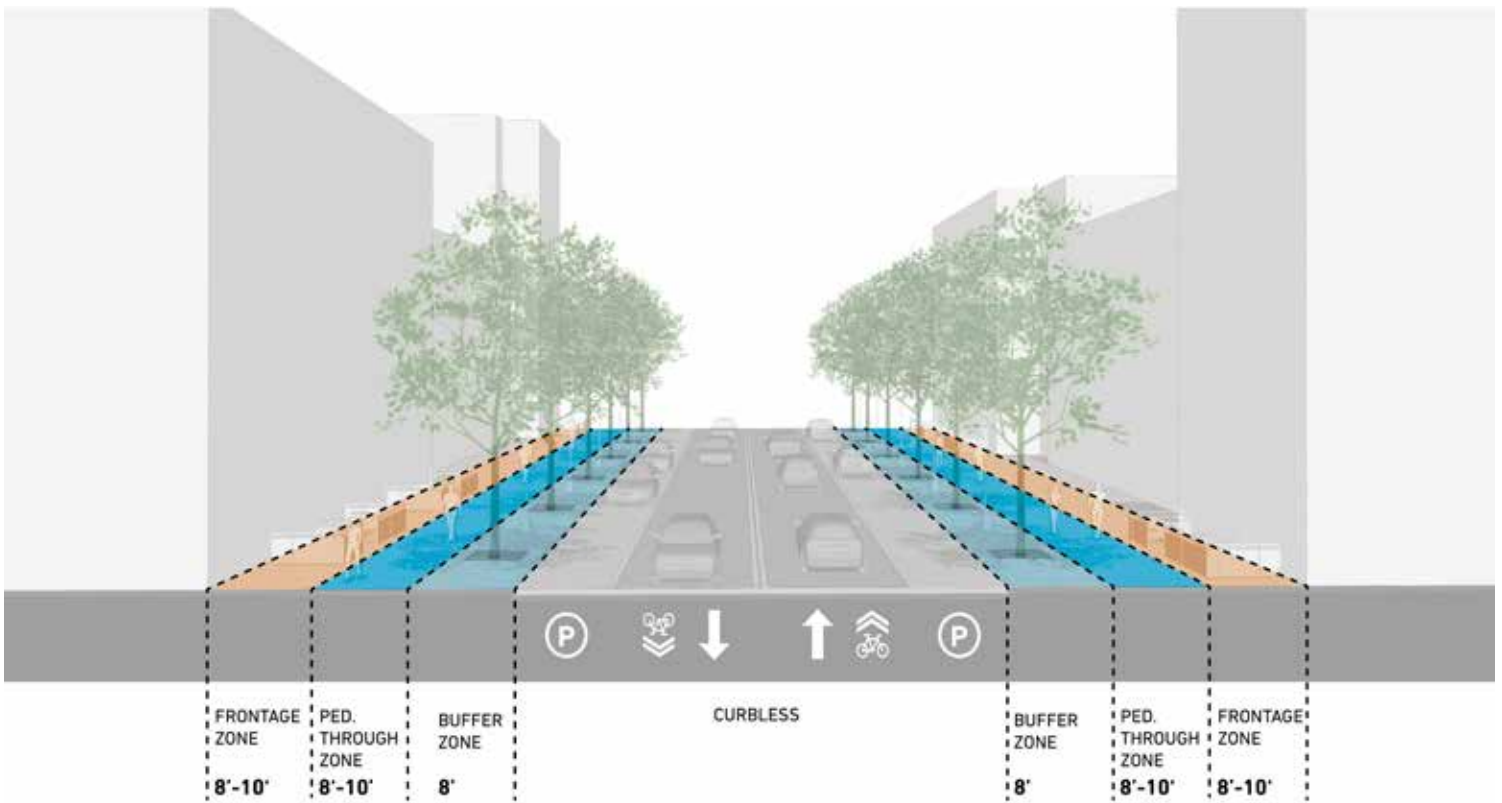
MATERIAL PALETTE PALETTE B (SEE PAGE ##)

LIGHTING PALETTE # (SEE PAGE ##)

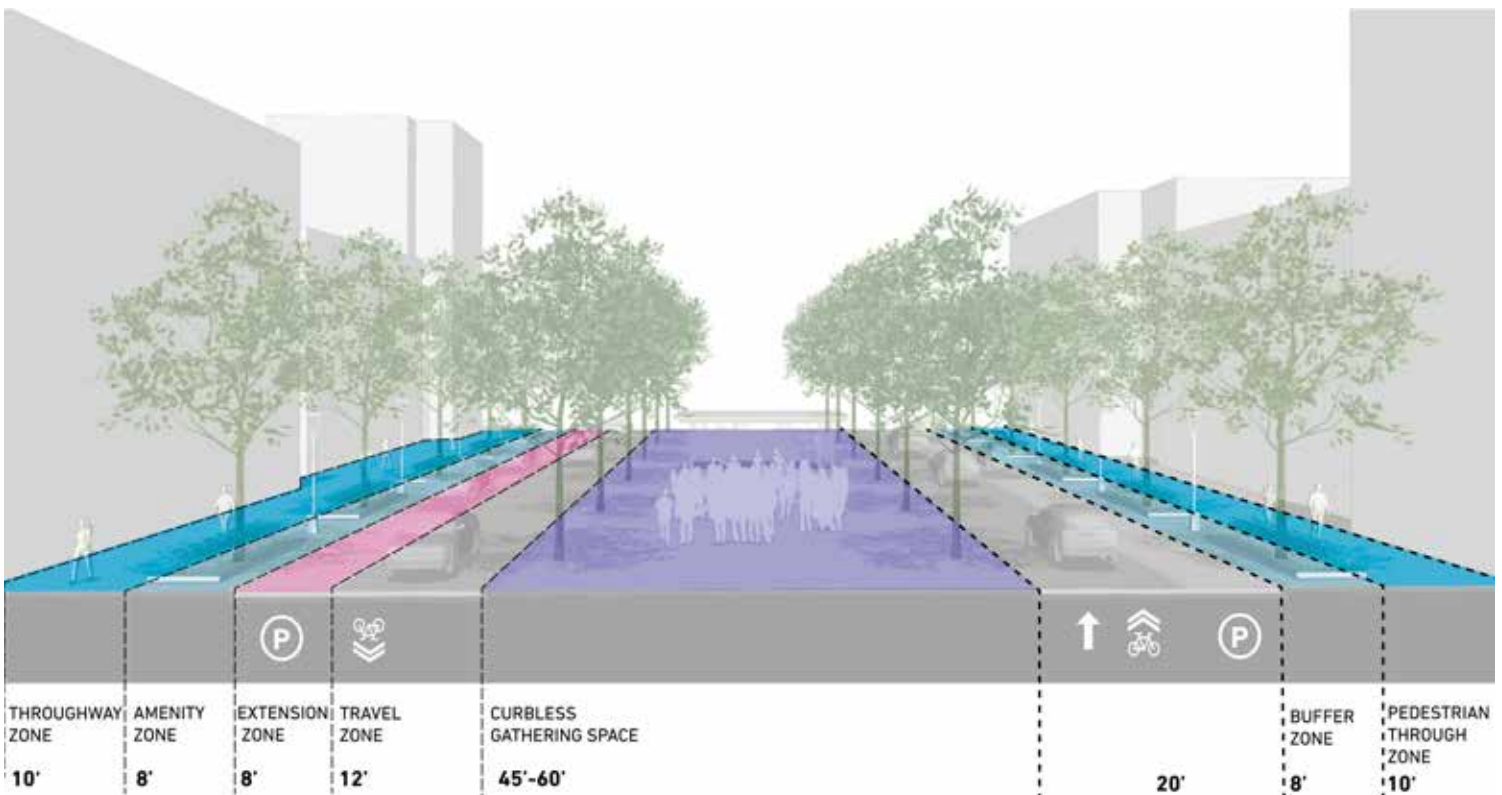
STREET TREES STANDARD (SEE PAGE ##)

SIGNAGE PALETTE # (SEE PAGE ##)

PREFERRED SECTION A



PREFERRED SECTION B



COURTYARD COMMONS

STREETSCAPE OVERVIEW

Courtyard Commons are primarily new private streets that allow access internal to the blocks and are primarily for access to individual buildings and parking. These streets do not serve through traffic. Although specifically for those working, living, or visiting the Innovation District, these streets should be built to public street standards including street pedestrian zones, tree amenity zones, and lighting. These will typically be narrow two-lane roads without parking, although parking could be included if desired. They can also be service alleys.

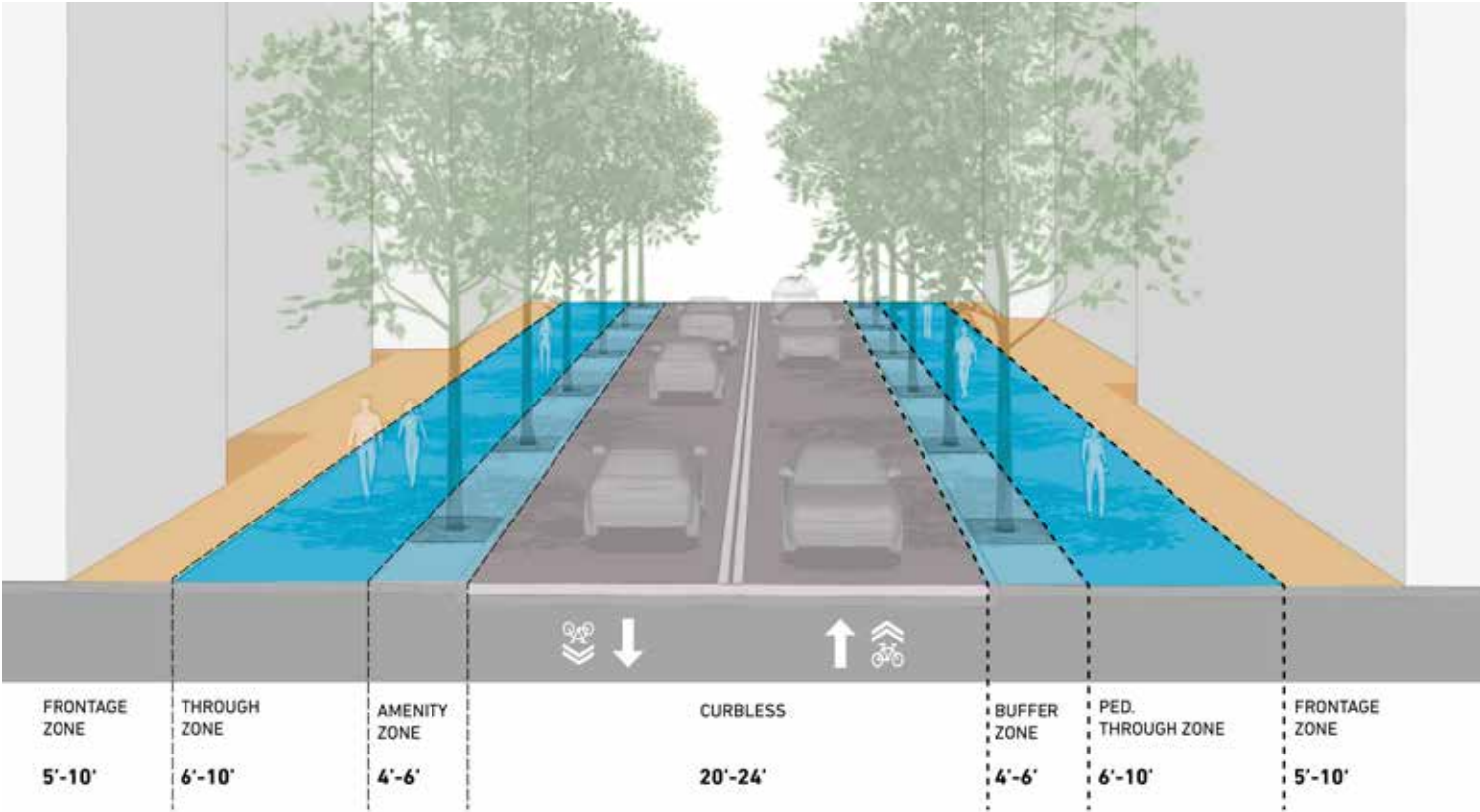
STREETSCAPE APPLICATION ZONES



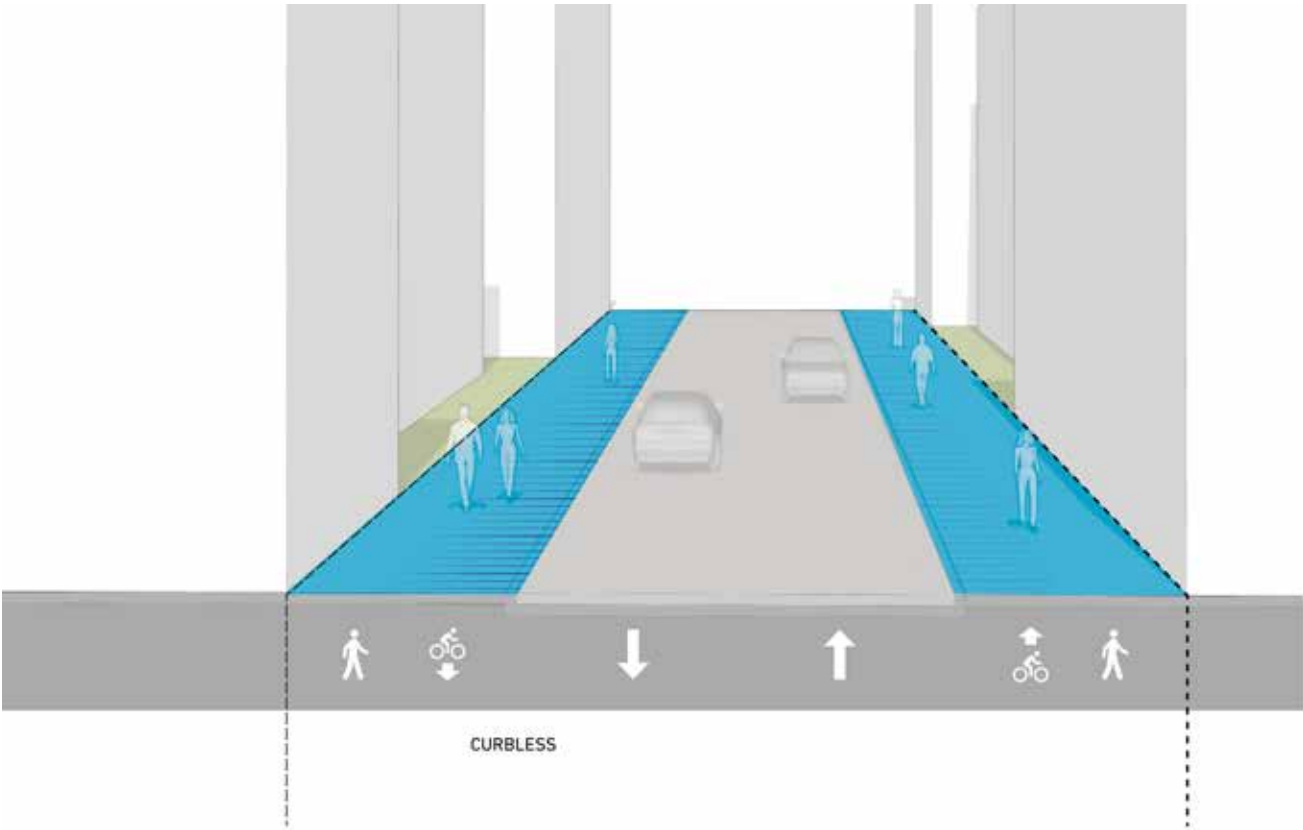
STREETSCAPE DESIGN STANDARDS

EXTENSION ZONE	N/A
AMENITY ZONE	4' - 6'*
THROUGH ZONE	10'*
FRONTAGE ZONE	0' - 10'
AMENITY ZONE PERMEABILITY	HIGH
ON-STREET PARKING	ENCOURAGED
MATERIAL PALETTE	PALETTE B (SEE PAGE ##)
LIGHTING	PALETTE # (SEE PAGE ##)
STREET TREES	ORNAMENTAL (SEE PAGE ##)
SIGNAGE	PALETTE # (SEE PAGE ##)

PREFERRED SECTION A



PREFERRED SECTION B



PEDESTRIAN VIADOR

STREETSCAPE OVERVIEW

The pedestrian viadors are critically important to provide pedestrian access from the surrounding streets through the blocks and between developments within the Innovation District. They help to break down the overall size of the district's blocks and should be used to prevent buildings from becoming too long or imposing. These pedestrian viadors should be designed to feel safe and inviting for pedestrians and should be well lit. Viadors are part of what caters to the walkable, mixed-use nature of innovation districts.

STREETSCAPE APPLICATION ZONES



PASSAGEWAY

Passive pedestrian connections. Throughway or contemplation spaces.

ACTIVATION & PROGRAMING

Active pedestrian environment through activation and programing. Brings the community together to experience and exchange ideas.

PEDESTRIAN VIADOR BENCHMARKS

PASSAGEWAY



ACTIVATION & PROGRAMING

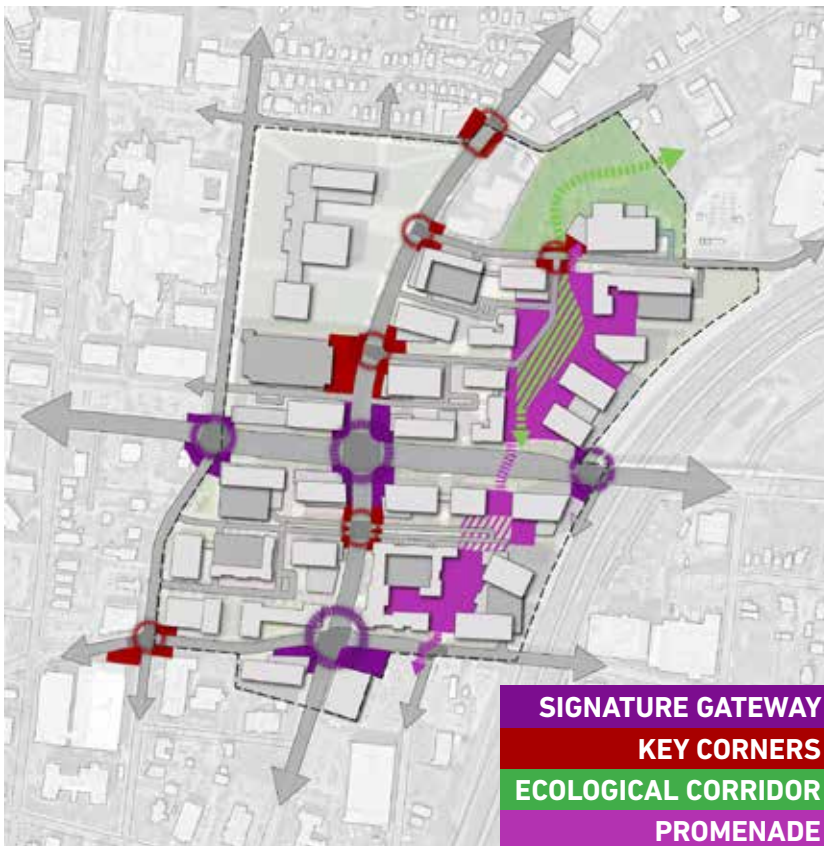


PLACES FOR STAYING

OVERVIEW

Great places are anchored by a variety of elements that appeal to the human condition and scale. They are often unique and defining to the place. One potential defining character of the Uptown Innovation District is the “ecological corridor.” This is an opportunity to incorporate the natural ravine that bifurcates the east side of the district and could even serve as a connection to the Wasson Way trail network. It could be extended as a signature promenade through the southern quarter of the district. Other opportunities include defining key corners as gateways and places for activity; as well as the creation of signature plazas to foster special events, gathering, and interaction. Connecting to nature, neighbors, and those one would not otherwise meet should be hallmarks of the Uptown Innovation District.

GREAT PLACES



SIGNATURE PLAZAS

Ample setbacks at significant intersections. Commercial activity should also be focused on these nodes.

KEY CORNERS

Smaller plazas centered on key corners as well as areas fronting buildings which generate significant pedestrian traffic.

ECOLOGICAL CORRIDOR

Preserve natural features and systems. Allow for recreational trails. Provide alternative connection to district from Wasson Way.

PROMENADE

Incorporate nature into hardscape. Will allow for physical and visual north-south connections to the Ecological Corridor as well as east-west connectivity.

BENCHMARKS

SIGNATURE PLAZAS



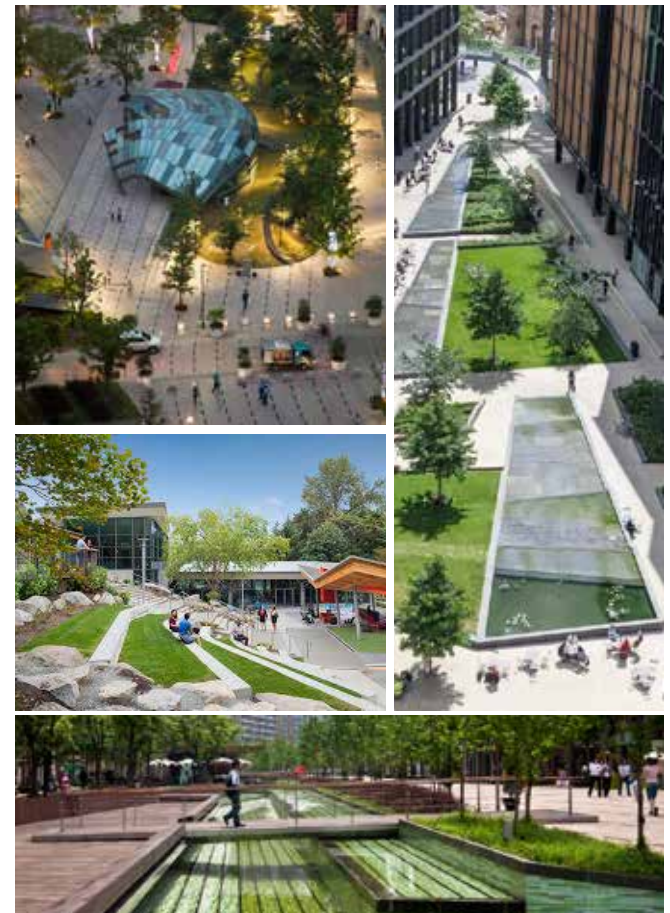
KEY CORNERS



ECOLOGICAL COORIDOR



PROMENADE



MATERIAL PALETTE

PALETTE A

PALETTE A OVERVIEW

The Uptown Innovation District must prioritize architectural and landscape design, material, and construction quality along key streets to reinforce Uptown's identity as a leading innovation district. The building architecture of the district is expected to be a high-quality, modern design that reflects the image of the innovation corridor. This includes transparency, articulation, shading, form, materials, and other elements that link indoor and outdoor spaces to create a vibrant urban character.

The streetscape must reflect this and establish the foundational character of the district. The palette of materials and components should be modern, clean, durable, forward-looking, and sustainable. The signature and primary streets and gateways of the district must have particular emphasis of the highest quality materials and engaging design.

Palette 'A' consists of the highest quality materials including signature and custom design furnishings. Primary use along the arterials and more visible streets within the Innovation District as indicated in the matrix.

PRIMARY HARDSCAPE

GRANITE PAVERS



ARCHITECTURAL FINISH CONCRETE



ACCENT MATERIAL

ARCHITECTURAL FINISH CONCRETE



PREMIUM CONCRETE UNIT PAVERS



CURBS



GRANITE CURB



PAVER CROSSING



STREET FURNITURE



SIGNATURE DESIGN



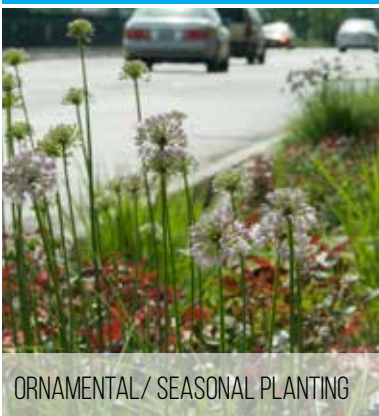
SEATING



SIGNATURE/CUSTOM SEATING



PLANTINGS



ORNAMENTAL/ SEASONAL PLANTING



LANDSCAPED EDGE



CURBED STREETSCAPE PLANTERS



PALETTE B

PALETTE A OVERVIEW

Palette 'B' is complementary to Palette 'A' and reflects similar high quality. Includes clean design and premium and customizable furnishings. Land

Its intended use is along the collector streets, particularly the District Avenues, within the Innovation District as indicated in the matrix.

PRIMARY HARDSCAPE



ARCHITECTURAL FINISH CONCRETE

ACCENT MATERIAL



STONE ACCENT PAVER



PREMIUM CONCRETE PAVERS

CURBS

GRANITE CURB



CONCRETE CURB

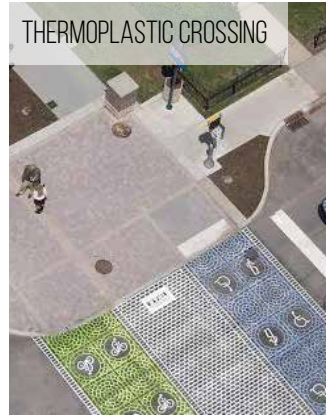


CROSSINGS

PAVERS CROSSING



THERMOPLASTIC CROSSING



STREET FURNITURE

CLEAN DESIGN



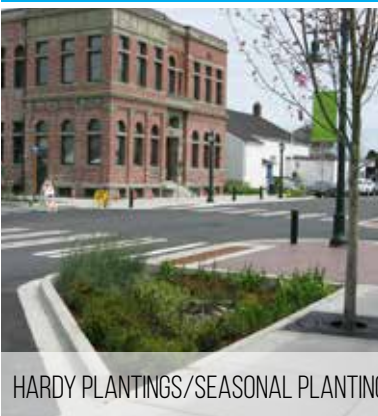
SEATING

PREMIUM/CUSTOMIZED SEATING



PLANTINGS

HARDY PLANTINGS/SEASONAL PLANTINGS



LANDSCAPED EDGE

SIMPLE LANDSCAPE EDGE



PALETTE C

PALETTE A OVERVIEW

Palette 'C' is a simplified version of palettes 'A' and 'B'. Includes clean and simple design, standard furnishings and low maintenance landscaping. Its primary use is along the Neighborhood Connector streets at the neighborhood edges of the Innovation District, as indicated in the matrix.

PRIMARY HARDSCAPE



ACCENT MATERIAL



CURBS

CONCRETE CURB



CROSSINGS

STANDARD STRIPPING



STANDARD THERMOPLASTIC



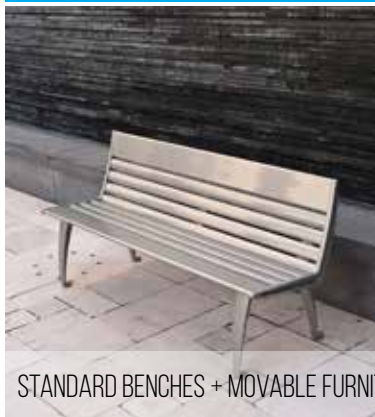
STREET FURNITURE

SIMPLE/BASIC DESIGN



SEATING

STANDARD BENCHES + MOVABLE FURNITURE



PLANTINGS

LOW MAINTENANCE PLANTING



LANDSCAPED EDGE

OPEN PLANTER



LIGHTING

OVERVIEW

Lighting and the character of the related fixtures and poles reinforces the district identity and helps create special, memorable experiences. Sleek, timeless fixtures have been selected for the Uptown Innovation District. The street lights complement those that already exist along the central Uptown section of MLK Boulevard.

In addition to consistently spaced and placed street lights, appropriate and thorough pedestrian lighting contributes to a safe and comfortable pedestrian environment. Distinctive pedestrian lights could be used to highlight retail and gathering places within the district. Likewise, additional accent lights, bollard lights, catenary lights and other artistic lighting are encouraged to activate public spaces and outdoor dining areas.



LIGHTING STANDARDS

STREET LIGHTING

- Pavement illumination
- Glare (75-90 degrees)
- Illumination uniformity
- Vertical object illumination
- Higher illumination levels
- Coordinate color temperatures for all
- 20'-30' tall

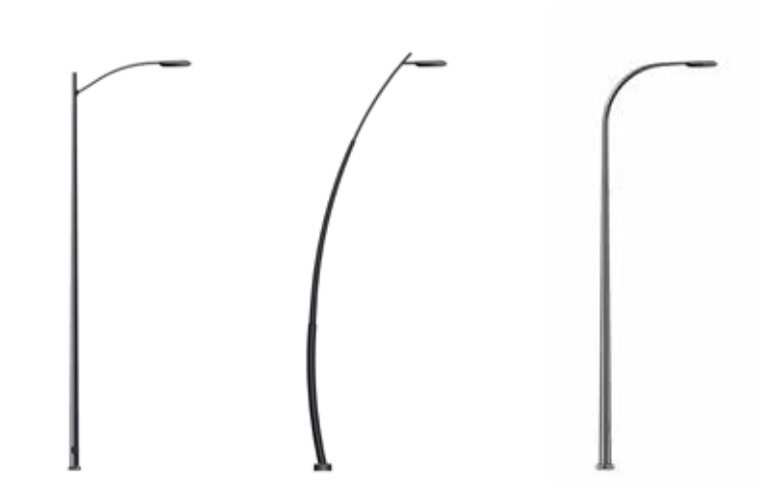
PEDESTRIAN LIGHTING

- Daytime appearance of fixture
- Glare (0-75 degrees)
- Diffused horizontal illuminance patterns
- Warm light color — outdoor dining
- 2700k LED all other others 3000-3500k LED
- Lower illumination levels
- 10'-15' tall

ACCENT LIGHTING

- Various types
- Artistic
- Uploight/Downlight
- Placemaking

STREET LIGHTING



PEDESTRIAN LIGHTING



ACCENT LIGHTING



LANDSCAPE

STREET TREES

Trees and landscaping are critically important to the creation of great streets. In fact, few streets can be great without them. Street trees and landscape help to balance the modern design and aesthetic of innovation districts and introduce nature and sustainability into the corridors.

In addition to the environmental and aesthetic quality improvements, trees and lush landscaping have been shown to have positive effects on consumer behavior in business districts. Across multiple studies, consumers are more likely to stay longer, visit more often, and spend more money in business districts that feature high quality streetscapes.

Street trees in particular must be carefully selected and placed within street corridors to coordinate with utility, lighting, and clear zone requirements. Street tree species have been selected that are tolerant of urban environments and have a high canopy that not only provides needed shade and comfort for pedestrians, but also allows for better visibility of storefronts and signage. Careful attention to design must be made to ensure that street trees are planted in appropriate, quality soils with ample volume to improve longevity and health. Following initial planting, they will need to be properly limbed and maintained to ensure they become high canopy trees.

GENERAL SELECTION CRITERIA

- + USDA Plant Hardiness to Zone 5
- + Adaptable to a variety of soil conditions, pH 6.6
- + Native or indigenous, if possible
- + Relatively disease free or resistant cultivar
- + Strong, withstands winds and ice
- + Easy to transplant

SOIL DEPTHS

Trees are recommended based upon their potential size at maturity and the available soil volumes where they are to be planted. Based on best practices, large street tree canopy require 1200-1500 cubic feet (CF) of soil, small street trees 800-1000 CF, and ornamental trees 600-800 CF.

LANDSCAPE MATRIX

The following matrix summarizes the different landscape components' characteristics:

	HEIGHT	WIDTH	SIZE	SPACING	SOIL DEPTH
LARGE STREET TREES	50'-75'	30'-60'	4" caliper minimum	approx. 30-40'	36"
SMALL STREET TREES	25'-45'	15'-35'	4" caliper minimum	approx. 30'	30"
ORNAMENTAL TREES	20'-25'	10'-20'	15' height, multi-stem	-	24" min.
SHRUBS	12"-60"	24"	#5 CONT. or B&B	36"-48" O.C.	18" min.
VINES, & GROUNDCOVERS	6"-18"	NA	#1, #2, #3 CONT.	4"-12" O.C.	12" min.
GRASSES & PERENNIALS	6"-30"	12"-30"	PEAT POT OR #1 CONT.	12"-18" O.C.	18" min.

LARGE STREET TREES

NORTHERN RED OAK



Quercus rubra

Size: 60' Height, 60' Width

Flowers: Inconspicuous

Fall Color: Brilliant Red

Size: 4" Caliper Minimum planted size, 6" recommended. Larger planted size preferred for high visibility areas.

LONDON PLANETREE



Platanus x acerifolia

Size: 60' Height, 40' Width

Flowers: Inconspicuous

Fall Color: Yellow/Brown

Size: 4" Caliper Minimum planted size. Larger planted size preferred for high visibility areas.

TULIP POPLAR



Liriodendron tulipifera L.

Size: 70' Height, 35' Width

Flowers: Yellow, Showy

Fall Color: Orange/Yellow

Size: 4" Caliper Minimum planted size. Larger planted size preferred for high visibility areas.

PIN OAK



Quercus palustris

Size: 60' Height, 30' Width

Flowers: Inconspicuous

Fall Color: Brilliant Red

Size: 4" Caliper Minimum planted size, 6" recommended. Larger planted size preferred for high visibility areas.

PRINCETON ELM



Ulmus americana 'Princeton'

Size: 50' Height, 35' Width

Flowers: Insignificant

Fall Color: Yellow

Size: 4" Caliper Minimum planted size. Larger planted size preferred for high visibility areas.

SMALL STREET TREES

RED RAGE TUPELO



Nyssa sylvatica 'Red Rage'

Size: 35' Height, 20' Width

Flowers: Inconspicuous

Fall Color: Brilliant Red

Size: 4" Caliper Minimum planted size. Larger planted size preferred for high visibility areas.

SKYLINE HONEYLOCUST



Gleditsia triacanthos var. inermis 'Skyline'

Size: 45' Height, 35' Width

Flowers: Yellow, inconspicuous

Fall Color: Golden Yellow

Size: 4" Caliper Minimum planted size. Larger planted size preferred for high visibility areas.

PRINCETON SENTRY GINKGO



Ginkgo biloba 'Princeton Sentry'

Size: 40' Height, 15' Width

Flowers: Green

Fall Color: Yellow

Size: 4" Caliper Minimum planted size. Larger planted size preferred for high visibility areas.

FRONTIER ELM



Ulmus (carpinifolia x parvifolia)
'Frontier'

Size: 30' Height, 20' Width

Flowers: Inconspicuous

Fall Color: purple-red

Size: 4" Caliper Minimum planted size. Larger planted size preferred for high visibility areas.

SUN VALLEY RED MAPLE



Acer rubrum 'Sun Valley'

Size: 30' Height, 20' Width

Flowers: Inconspicuous

Fall Color: Brilliant Red

Size: 4" Caliper Minimum planted size. Larger planted size preferred for high visibility areas.

LANDSCAPE TREES

WHITESPIRE BIRCH



Betula populifolia 'Whitespire'

Size: 30' Height, 20' Width

Flowers: Yellow (male), Green (female)

Fall Color: Yellow

Size: 15' height single or multi-stem. Larger planted size preferred for high visibility areas.

Note: For use in high visibility landscape areas or large planters

AUTUMN BRILLIANCE SERVICEBERRY



Amelanchier x grandifolia

Size: 20' Height, 15' Width

Flowers: White

Fall Color: Bright Red

Size: 15' height single or multi-stem. Larger planted size preferred for high visibility areas.

Note: For use in high visibility landscape areas or large planters

EASTERN REDBUD



Cercis canadensis

Size: 20' Height, 25' Width

Flowers: Purple

Fall Color: Bright Red

Size: 15' height single or multi-stem. Larger planted size preferred for high visibility areas.

Note: For use in high visibility landscape areas or large planters

SHRUBS

GROW LOW SUMAC



Rhus aromatica 'Gro-Low'

Size: #3 CONT, 24" Height, 24" Width

Flowers: Insignificant

Fall Color: Red

Spacing: 30" O.C.

EVERLOW YEW



Taxus x media 'Everlow'

Size: 18" Height, 24" Width

Flowers: Insignificant

Fall Color: Green

Spacing: 24" O.C.

DWARF KOREAN LILAC



Syringa meyeri 'Palibin'

Size: #5 CONT, 5' Height, 5' Width

Flowers: Insignificant

Fall Color: Pink

Spacing: 36" O.C.

SHRUBS

PRAGUE VIBURNUM



Viburnum x pragense

Size: B&B, 12" Height,

Flowers: White

Fall Color: NA

Spacing: 36" O.C.

OAKLEAF HYDRANGEA



Hydrangea quercifolia 'sikes dwarf'

Size: B&B, 36" Height

Flowers: White

Fall Color: Red

Spacing: 30" O.C.

GRASSES, VINES, & GROUNDCOVERS

BIG BLUE LILYTURF



Liriope muscari 'Big Blue'

Size: #1 CONT, 18" Height

Flowers: Blue

Fall Color: Green

Spacing: 15" O.C.

GREEN SHEEN PACHYSANDRA



Pachysandra terminalis 'green sheen'

Size: #1 CONT, 10" Height

Flowers: Light Purple

Fall Color: Green

Spacing: 15" O.C.

LITTLE KITTEN DWARF MAIDEN GRASS



Miscanthus sinensis 'Little Kitten'

Size: #2 CONT, 3' Height,
24"-30" Width

Flowers: Tan

Fall Color: Bronze

Spacing: 18" O.C.

GRASSES, VINES, & GROUNDCOVERS

KARLEY ROSE FOUNTAIN GRASS



Pennisetum orientale
'Karley Rose'

Size: #3 CONT, 24" Height

Flowers: Pink

Fall Color: Bronze

Spacing: 18" O.C.

SHENANDOAH RED SWITCH GRASS



Panicum virgatum
'Shenandoah'

Size: #2 CONT, 3' Height

Flowers: Pink

Fall Color: Burgundy

Spacing: 24" O.C.

PRAIRIE DROPSEED



Sporobolus heterolepis

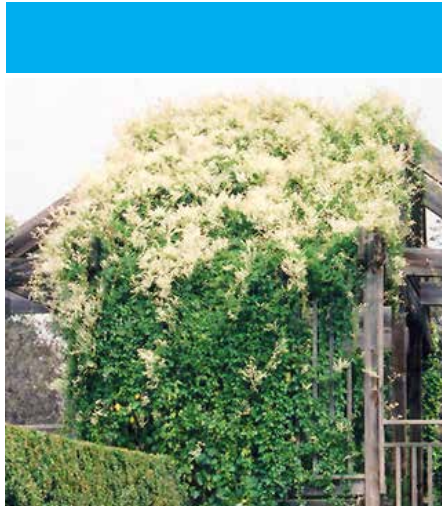
Size: #2 CONT, 15" Height

Flowers: Tan

Fall Color: Orange

Spacing: 15" O.C.

SILVER LACE VINE



Polygonum aubertii

Size: #2 CONT, 6" Height

Flowers: White

Fall Color: N/A, Semi-Evergreen

Spacing: 24" O.C.

Note: Aggressive Vine for Vertical Surfaces, will grow to 25-30'.
Drought tolerant

BOSTON IVY



Parthenocissus tricuspidata
'Veitchii'

Size: #2 CONT, 6" Height

Flowers: Inconspicuous

Fall Color: Deep Red

Spacing: 24" O.C.

Note: Aggressive Vine for Vertical Surfaces, will grow to 25-40'.
Drought tolerant

BALTIC IVY



Hedera helix 'Baltica'

Size: Peat pots, 6" length

Flowers: Inconspicuous

Fall Color: Evergreen/bronze

Spacing: 4" O.C.

Note: Aggressive Vine for Vertical Surfaces, will grow to 25-40'.
Drought tolerant

PERENNIALS

GOLDSTURM RUDBECKIA



Rudbeckia fulgida 'Goldsturm'

Size: #2 CONT, 30" Height

Flowers: Yellow

Fall Color: N/A

Spacing: 15" O.C.

Note:

LITTLE SPIRE RUSSIAN SAGE



Perovskia atriplicifolia 'Little Spire'

Size: #2 CONT, 18" Height

Flowers: Purple

Fall Color: N/A

Spacing: 18" O.C.

Note:

WHITE SWAN PURPLE CONEFLOWER



Echinacea purpurea 'White Swan'

Size: #2 CONT, 18" Height

Flowers: Salmon, White

Fall Color: N/A

Spacing: 18" O.C.

Note:

DRAGON'S BLOOD STONECROP



Sedum spurium
'Dragon's Blood'

Size: #2 CONT, 6" Height

Flowers: Red

Fall Color: Burgundy

Spacing: 12" O.C.

Note:

WINEBERRY CANDY DAYLILY



Hemerocallis
'Wineberry Candy'

Size: #2 CONT, 18" Height

Flowers: Red/Yellow

Fall Color: None

Spacing: 16" O.C.

Note:

SIGNAGE

SIGNAGE OVERVIEW

Because the Uptown Innovation District will be a transformed area with new development and places, it is important to develop and incorporate a signage and wayfinding system that both represents the new district and is part of an overall Uptown wayfinding system. The creation of the Uptown Innovation District presents an opportunity to tell the district's story, stimulate economic development, and create community pride and identity. Place branding is about discovering what makes a place unique and then sharing that story with residents, businesses, and visitors in interesting ways. Often, place branding manifests in signage and environmental graphics, both of which contribute to a unified brand for a community.

Within the Innovation District there are numerous locations that would be well-suited for different types and scales of environmental graphics. District gateways are major points

WAYFINDING CORRIDORS HIERARCHY



FAMILY OF SIGNS

A - GATEWAY

Signs welcoming and directing travelers as they enter the district

B - TRAFFIC SIGN

Traffic signs or road signs are signs erected at the side of or above roads to give instructions or provide information to road users.

C - CYCLE SIGN

On-street and off-street bike wayfinding

D - GROUND SIGN

Intended primarily for buildings with greater front and corner side required build zones or setbacks.

E - DIRECTORY SIGN

Directory signs are intended to provide identification for upper story tenants and/or tenants that are otherwise not permitted an individual sign. Directory signs may also be used for restaurant menus and other similar uses.

FAMILY OF SIGNS

of entry into the Innovation District, like at the intersection of MLK Boulevard and Reading Road. Placemaking strategies like signature architecture, art installations, super graphics, and large signage would be most appropriate in these locations. Likewise, district thresholds are the points that signify the start or termination of the Innovation District. Here, signature streetscape gestures or public art works could be installed that relate to the district's identity. These thresholds should also help direct vehicular traffic towards the core of the Innovation District through wayfinding signage.

Within the Innovation District blocks, pedestrian-scale signage and graphics would be most

appropriate. The addition of artistic crosswalks, pedestrian wayfinding signage, parking identification, and branded banners could contribute to the District's distinctive identity and create a more interesting pedestrian environment.

This system needs to be designed for the Uptown Innovation District. Examples of other district branding and wayfinding are below. Some topics to consider when branding the Innovation District include the appropriate symbolism that represents the entire district experience; the mediums through which the identity will be shared; the creation of an identity for the Innovation District as part of the larger Uptown area; and how to direct people here.

