



# Three Rivers Park Design Handbook

**Prepared by the Riverlife Task Force  
October 31, 2002**

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## Introduction

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The Three Rivers Park Design Handbook is offered as a complement to the Riverlife Task Force Vision Plan for Pittsburgh's Riverfronts and provides the design framework and design guidelines for Three Rivers Park. The primary purpose of this Handbook is to support and implement the creation of Pittsburgh's Three Rivers Park—an urban river park unique to Pittsburgh. Secondly, it offers concepts applicable to sites up and down the rivers.

The Handbook provides guidelines for the development of the rivers and land extending from the West End Bridge on the Ohio River to the Sixteenth Street Bridge on the Allegheny River to the Tenth Street Bridge on the Monongahela River. The framework and design guidelines in this Handbook are a resource to be applied to the creation of the Park, and will be used by landowners, developers, public officials and planning staff, the Riverlife Task Force and other organizations involved with revitalization of the riverfronts.

- For landowners and developers, it clarifies the expectations for development along Pittsburgh's riverfronts and especially in and around Three Rivers Park.
- For public officials and planning staff, the guidelines are a tool to evaluate potential projects and direct riverfront development for public, private and public/private joint-venture development.
- For the Park as a whole, the Handbook coordinates the common design elements to create an identifiable environment.

This Handbook does not replace existing zoning, district plans or ordinances, but is intended to establish optimal planning goals and to enhance and coordinate the requirements set forth in the land-use tools already in place:

- Pittsburgh Urban Zoning Code
- The Pittsburgh Downtown Plan
- Riverfront Development Plan
- Vision Plan for Pittsburgh's Riverfronts

The following Design Framework and Guidelines fortify the principles of the accepted Vision Plan for Pittsburgh's Riverfronts by defining preferred development criteria, setting the structure for evaluation and setting the goals for the creation of Three Rivers Park.

Implementation of the Design Framework and Guidelines will occur through:

1. The acceptance of The Three Rivers Design Handbook by the City of Pittsburgh's Planning Commission to:
  - a. Guide the development of public and private projects;

- b. Be applied as the guidelines by which the Department of City Planning staff makes recommendations to the Planning Commission and Design Review Committee for proposed projects;
2. The application of the principles and standards outlined in this handbook in private development projects; and
3. The integration of these standards for publicly-funded development incentives or subsidies.

## Structure of the Three Rivers Park Design Handbook

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The Three Rivers Park Design Handbook is comprised of two main sections: The Design Framework for Three Rivers Park and The Design Guidelines for Three Rivers Park.

Each section of the Handbook is structured according to the five Elements of the Design Framework for Three Rivers Park:

- Waterscape
- Landscape
- Districts
- Connections
- Landings

The Design Framework refines the design concepts and goals for Three Rivers Park and sets the structure of the Design Guidelines and related evaluation criteria. The Design Framework elaborates the Elements of Three Rivers Park and defines the key design concepts for the Park.

In the Design Guidelines, specific review criteria are identified. For each of the five Elements, the following are outlined in detail:

1. **Characteristics** of the Elements describes the envisioned spirit of each Element that comprises Three Rivers Park.
2. **Design Guidelines** establish the fundamental and specific design standards to achieve the desired qualities and character of Three Rivers Park.

In addition to the guidelines that relate to the Elements of Three Rivers Park and included in this document, guidelines for key overarching issues that apply across all of the Elements will be developed in the coming year and will be appended to the Three Rivers Park Design Handbook. These guidelines include the following:

- Lighting Plan for Three Rivers Park
- Signage Plan for Three Rivers Park
- Landscaping Plan for Three Rivers Park
- Sustainability Plan for Three Rivers Park
- Parking and Loading Standards for Three Rivers Park

Part One:

## **A Design Framework for Three Rivers Park**

## Guiding Principals of the Vision Plan for Three Rivers Park

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Released in October 2001 by the Riverlife Task Force, the Vision Plan for Pittsburgh's Riverfronts proposes to create an urban river park in the heart of Pittsburgh, known as Three Rivers Park. The Vision Plan is based on the following principles:

- Principle 1**    **Organize riverfront investment** based on the understanding that the three rivers are Pittsburgh's premier public domain
- Principle 2**    **Reinforce the power of place** by letting Pittsburgh's history and traditions inspire riverfront development
- Principle 3**    **Enhance the shoreline experience** by planning for the ranges of uses the public wants for its riverfronts
- Principle 4**    **Increase the connections** between existing and new neighborhoods and the rivers
- Principle 5**    **Encourage diverse river uses** while addressing potential conflicts
- Principle 6**    **Celebrate the City of Bridges** as an important aspect of Three Rivers Park
- Principle 7**    **Improve regional connections** between public parks and green space to the rivers' edge
- Principle 8**    **Consolidate transportation** and minimize industrial obstacles along the rivers' edge
- Principle 9**    **Embrace sustainable development** in Three Rivers Park

## The Characteristics of Three Rivers Park

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Building from the design ideas embodied in the Vision Plan, Three Rivers Park is intended to create a sense of place with these characteristics:

- A park for people of all ages to experience and enjoy one of Pittsburgh's greatest assets returned to the public domain—its rivers and miles of shoreline;
- A place defined by Pittsburgh's unique landscape—its topography, ecology and habitat of both the natural and built environment;
- A Park connected to the City's neighborhoods with the ability to expand and enhance community connections to the rivers;
- A refreshing green "breath" for the City, expanding its influence into adjacent urban developments, as well as connecting to traditionally green spaces such as parks, streetscapes, wooded hillsides and valleys;
- An environment that is sensitive to and respectful of the ecological fabric of the rivers and land that make up the watersheds of the region;
- A place for both contemplation and activity—relaxation on or near the rivers, fishing, boating, rowing, walking, canoeing, jogging, kayaking or dining;

- A place where unique development and private investment create a special sense of place that is socially, environmentally and economically sustainable;
- A rich sequence of experience and scale, connected by common elements that create a unified place, and a variety of dynamic places within the Park characterized by the juxtaposition of urban and natural environments interwoven with industrial references and authenticity;
- A place that is easily accessible and safe for individuals, families, long-time residents of Pittsburgh and visitors from around the world;
- A park that sets a new standard for design and development of both public and private investment, with a high level of public amenity and inherent quality for generations to come.

## The Underlying Design Concepts of Three Rivers Park

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### **1. The Public Realm is the dominant and defining aspect of Three Rivers Park.**

The Public Realm comprises the outdoor areas experienced by the public. Irrespective of ownership, the Public Realm embodies the character and spirit of Pittsburgh's riverfronts. The Public Realm includes the integral elements of streetscapes, riverfront building facades, privately developed open-air plazas and the various land uses of city life, in addition to the shorelines, trails, public open space and the rivers themselves.

Traditionally, the form of the Public Realm is shaped and defined by buildings and development. Within Three Rivers Park, however, it is the form of the Public Realm that is intended to shape and define the built environment. The Public Realm therefore is the dominant organizing factor of the design guidelines for Three Rivers Park.

### **2. The Park's center is the Confluence.**

At the center of Pittsburgh, two rivers, the Allegheny and the Monongahela, converge to form a third, the Ohio. This merging of rivers has shaped the City and the region both through its geological and social history. It served as a center for Native American commerce, a site of battles, an industrial hub and a place of gathering and celebration. "The Point" has become Pittsburgh's front yard and a symbol of its progress.

Three Rivers Park is centered on the Confluence. From the Confluence, the Park radiates out, up and down three rivers, reaching to the City's boundaries and connecting to places beyond.

### **3. The Park's structure is built upon Pittsburgh's historic patterns of spatial organization.**

The convergence of three rivers and their watersheds gives Pittsburgh its unique landscape. Throughout the City's history, its rivers and topography have shaped the development of neighborhoods, the location of transportation routes and hubs and centers of commerce. The landscape created a city comprised of distinct neighborhoods, connected to each other by land and water, each with its own character.

Three Rivers Park will build upon these patterns and reinforce the profound sense of place that defines Pittsburgh's unique character. Its shape will enhance the image of the Confluence of the three rivers and the vertical form of the Golden Triangle as the icon of Pittsburgh.

### **4. The character of places within the Park is drawn from the uniqueness of Pittsburgh's landscape and communities.**

Three Rivers Park is envisioned as a series of interconnected elements, of varying character and scale, which together comprise a unique and ever-changing experience for visitors and users. These elements, comprised of districts and neighborhoods, landings and connections, will draw their character from their individual locales.

## Elements of the Design Framework

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The successful development of Three Rivers Park will depend upon the interrelationship between five Elements that will shape the overall character of an urban river park.

### **Waterscape — Water's surface, water's edge and water activities**

The Waterscape connects communities across shorelines and up and down the rivers and includes the water's surface, the water's edge and water activities. Boating, rowing, canoeing, kayaking, fishing, water-skiing, commuting, site-seeing or just sitting at the river's edge are all part of the life and energy of the Waterscape. As both a symbolic and dominant regional attraction, the Waterscape is the central Element to the Public Realm of Three Rivers Park.

### **Landscape — The natural and built forms that help define neighborhoods and districts**

With topography that encompasses and helps define neighborhoods—streams, valleys, wooded hillsides and slopes—the Landscape includes both natural and built forms. From riparian zones to landscaped trails and streets to gardens and parks, the Landscape Element has a role in stabilizing riverbanks, providing for wild habitat and creating enhanced open space. The Landscape also forms special places linked to the rivers and the urban network of buildings and streets and provides many of Pittsburgh's defining characteristics. It provides the contrast between the strong forms of the City's building and neighborhoods and the natural character of its setting that are characteristic of Pittsburgh.

### **Districts — Areas with clear identity where people enjoy living, working or visiting**

Containing the major land uses within and along Three Rivers Park, Districts are comprised of both public and private components. The Golden Triangle is recognized as the most dominant of Districts; others include Station Square, the North Shore and the Strip District. At the individual neighborhood scale, Districts are places with the potential for clear identity and with unique characteristics—places where people enjoy living, working or visiting. They are bounded on all sides by natural barriers, such as hills and rivers, and by barriers that are man-made, such as roadways and changes in built form.

### **Connections — Access to, along, over and down to the rivers**

In providing access to, along, over and down to the rivers, Connections include: perpendicular streets and sidewalks leading to the rivers from neighborhoods; the spans and bases of bridges; riverfront esplanades; the inclines; the Light Rail Transit lines; and biking and walking trails. Whether they are routes traveled by car, by bike, by foot, or by watercraft, Connections lead to the rivers, along the rivers and connect the rivers back to the neighborhoods. Connections are not just about moving from one point to another, but also about enjoying the experience of the passage.

### **Landings — Places where people find distinctive experiences along Pittsburgh's rivers**

Landings occur where two or more of the above Elements come together and provide focal points for activity and connection at the water's edge. Landings can be the public places that people are drawn to for special events or activities and serve as destinations and landmarks. They can bring together transit systems and activity centers. They are places where people find

distinctive experiences along the river's edge. Landings provide opportunities for design and physical intervention.

## **Establishing the Relationships within Three Rivers Park**

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The Design Framework establishes the criteria for the specific guidelines that will define Three Rivers Park. The Elements of the Framework Plan — Waterscape, Landscape, Districts, Connections and Landings — create a hierarchy for the Park. This hierarchy moves from the broad, shaping forces of the Waterscape and Landscape to the Districts that are formed between these forces—both natural and man-made— to the interventions that are developed as Landings and Connections.

The Design Framework, in conjunction with the guiding principles of the Vision Plan, acknowledges that the Public Realm is the defining aspect of Three Rivers Park—a place that is accessible for all. With the Park radiating from the Confluence of the three rivers, the guidelines in this Handbook relate to the development patterns of Pittsburgh, shaped by water and topography and embodied in neighborhood identity and connections.

Part Two:

## **Design Guidelines for Three Rivers Park**



## Waterscape

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*The Waterscape connects communities across shorelines and up and down the rivers and includes the water's surface, the water's edge and water activities. Boating, rowing, canoeing, kayaking, fishing, water-skiing, commuting, site-seeing or just sitting at the river's edge are all part of the life and energy of the Waterscape. As both a symbolic and dominant regional attraction, the Waterscape is the central Element to the Public Realm of Three Rivers Park.*

### Characteristics of Waterscape

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- The Waterscape will be animated and lively with group and individual activities and an energetic variety of uses that celebrate the dynamic and ever-changing nature of the rivers.
- The Waterscape will include a variety of shared uses and users, from industrial and transport uses to recreation.
- The Waterscape will be accessible at a variety of scales, from large boat landings and marinas to individual access points for fishing and launches for non-motorized watercraft.
- With renewed biological diversity for both plant and wildlife habitat in and along the rivers, the Waterscape will have a green edge that is in contrast to the historical images of Pittsburgh as a smoky industrial city.
- The Waterscape of Three Rivers Park will reclaim the rivers as a safe and healthy destination for Pittsburgh's residents and its visitors, providing a new Public Realm used as commonly as neighborhood parks or city streets.
- As a kinetic piece of the City's infrastructure, the Waterscape runs through Downtown, much like an urban boulevard, and links the shorelines of Pittsburgh. As a new boulevard for the City, the Waterscape will be redefined as part of the Public Realm.
- The Waterscape will provide a nighttime place for personal reflection and the pleasure of the reflective images of Pittsburgh's urban landscape on the water.

## Landscape

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*With topography that encompasses and helps define neighborhoods—streams, valleys, wooded hillsides and slopes—the Landscape includes both natural and built forms. From riparian zones to landscaped trails and streets to gardens and parks, the Landscape Element has a role in stabilizing riverbanks, providing for wild habitat and creating enhanced open space. The Landscape also forms special places linked to the rivers and the urban network of buildings and streets and provides many of Pittsburgh’s defining characteristics. It provides the contrast between the strong forms of the City’s building and neighborhoods and the natural character of its setting that are characteristic of Pittsburgh.*

## Characteristics of Landscape

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- The new Pittsburgh identity will be highlighted by the extensive richness of green space down to the rivers and opportunities for continuity between Three Rivers Park and regional parks, neighborhood parks and open-space corridors. This Landscape is shaped by the topography that historically defined the urban form of the City and continues to form the experience of Three Rivers Park.
- The Landscape of Three Rivers Park will contribute to a biologically diverse network of open-space corridors to support and enhance the wildlife habitat and plant communities of Western Pennsylvania.
- The Landscape will provide a special and comfortable sense of place at the rivers’ edge, bringing further definition to Three Rivers Park and its adjoining Districts.
- The Landscape will be comprised of a juxtaposition of the natural elements and built environment, each made more interesting because of their contrasting features.
- Developed to provide erosion control, riverbank stabilization, storm water management and relief from urban heat islands, the Landscape will further the goals of creating an ecologically sustainable city.

## Districts

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*Containing the major land uses within and along Three Rivers Park, Districts are comprised of both public and private components. The Golden Triangle is recognized as the most dominant of Districts; others include Station Square, the North Shore and the Strip District. At the individual neighborhood scale, Districts are places with the potential for clear identity and with unique characteristics—places where people enjoy living, working or visiting. They are bounded on all sides by natural barriers, such as hills and rivers, and by barriers that are man-made, such as roadways and changes in built form.*

## Characteristics of Districts

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- The Districts of Three Rivers Park will provide opportunities to support and enhance the activities of the Park and create destinations for visitors from across the City and region.
- Three Rivers Park will serve as the front yard for riverfront Districts, much like an urban boulevard comprised of linear green space, pedestrian walkways and parks. When developed at an urban pedestrian scale, the relationship of the Park to its Districts will produce livelier street edges for people of all ages to enjoy and a high level of both real and perceived safety.
- Each riverfront District will be physically and functionally unique in character and sense of place, yet all distinctly Pittsburgh.
- The riverfront Districts will offer the greatest opportunity for private investment to renew and reinforce the quality of places to live, work and play in Pittsburgh because of the added value of being adjacent to Three Rivers Park.
- Districts are comprised of buildings and man-made structures, surrounded and permeated by the Landscape. The relationship of the Landscape to the Districts will promote relationships and connections to the surrounding neighborhoods and reflect the time-honored urban patterns of Pittsburgh.

## Design Guidelines for Districts

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### District Planning and Design

The development of the Districts of Three Rivers Park will include both the construction of individual buildings and the creation of large-scale developments that encompass several blocks.

#### *District Street and Grid Patterns*

In many places in the City, streets that once extended to the rivers have been vacated for industrial uses. In other areas, industrial uses located along the rivers before streets were even constructed. Today, it is rare to find streets that extend fully to the rivers' edge. As industrial uses have shifted away from our riverfronts and new patterns of development emerge in the City, there are

opportunities to not only re-establish abandoned street grids, but to create new ones that connect landlocked neighborhoods to the rivers.

- Seek to re-establish historic street grid patterns that once extended to the rivers.
- In Districts where streets did not extend to the rivers, establish new Perpendicular Connections to provide such access, with the scale of the grid pattern responding to adjacent neighborhood patterns. New development patterns may also be integrated with the establishment of the grid. In general, extend Perpendiculars to the rivers at regular intervals of 400' – 600' apart.
- In establishing street grids in Districts, recognize and respond to changing topographic features. Grids should shift where necessary, opening views and changing vantage points for new and existing development and their occupants.
- Perpendicular streets through Districts will serve as Perpendicular Connections. Design these streets according to the standards outlined in the [Guidelines for Perpendicular Connections](#).



### ***Views to and from Districts***

The planning and design for Districts and the buildings that comprise them are to take into consideration creating and maintaining views to and from Three Rivers Park. As building configurations are identified and developed, projects will be reviewed within the context of their impacts on view corridors. Foremost are creating and maintaining views of the Golden Triangle and the rivers.

- Maintain views of the distinctive icon of the Golden Triangle from the Park and from other Districts.
- Maintain views to the rivers along public streets.
- Identify and develop new view corridors to the rivers as District plans move forward and new Districts are developed.
- Where possible, maintain views to the rivers from individual buildings. Locate lower buildings along the rivers, with higher buildings located further back from the rivers. The heights of new buildings and their impact on the buildings located further back from the river will be considered during design review.



### ***Transportation Planning***

As development is located near Three Rivers Park, there will be many opportunities to take advantage of the extensive trail and road system being developed to connect the City and its rivers. Developers and building owners are encouraged to provide amenities accommodating occupants who wish to use alternative transportation resources, including cycling, rollerblading and public transit.

- Maximize on-street parking throughout Districts.
- Locate parking adjacent to the Park below-grade.
- Consider future plans for water transportation as opportunities to make connections to the Waterscape, including water-transit landings.
- Develop shared parking facilities with nearby development, located away from the riverfront. Explore vanpool options and locate parking pools on sites to minimize the impact of parking along the rivers.
- Provide secure bicycle storage, personal lockers, changing rooms and showers to accommodate a minimum of 5% of the building's occupants.
- Locate development within walking distance of Light Rail Transit (LRT) stations and public bus service. Provide information about transit service in the form of informational kiosks and maps of adjacent bus lines on-site.



### ***Site Planning***

- Locate public entrances to retail and commercial uses along the riverfront facade of the building. Create riverfront addresses, particularly with regard to publicly-oriented uses.
- In order to activate open-space Connections, locate pedestrian-oriented uses on the ground floor of buildings and provide pedestrian amenities.
- Utilize landscaping, rather than walls and fences, to create semi-public/private buffers.
- Do not build surface parking lots adjacent to the riverfront.
- To the maximum extent possible, do not locate vehicular entrances to parking garages and building service along primary Perpendicular Connections. Minimize curb-cuts for vehicular access to development sites along primary Perpendicular Connections. Do not locate curb-cuts within 100' of a street corner.
- Maximize the use of pervious materials on the site to reduce storm-water run-off. Explore the use of alternative paving materials, including porous asphalt, unit pavers



and grass-paving systems for parking areas. Incorporate design features such as landscape swales in parking islands to promote the absorption of storm water into the ground.

- Reduce on-site heat gains by minimizing dark-colored surface areas, such as black asphalt. Acceptable alternatives include the use of concrete paving, unit paving systems, light-colored asphalt products using limestone aggregates or colored sealants, and increasing areas of landscape and groundcovers.
- Apply sustainable site planning practices, such as: erosion and sedimentation control; development densities with a floor area ratio of 2.0 or greater; Brownfield redevelopment; Best Management Practices for stormwater management; and providing additional landscaping to reduce heat islands; and light pollution reduction.
- Minimize site lighting pollution by using fixtures that conceal the light source and contain the light to within the property and sidewalk boundaries.
- Bury all utilities in development sites.
- Do not locate transformers and other above-grade utility structures along the Park or Perpendicular Connections to the Park.

### ***Open Space Planning and Design***

- Design new open spaces in conjunction with the plans for Three Rivers Park. Open-space requirements may be met through the creation of riverfront Promenades, additional Perpendicular Connections to the Park and other spaces that complement Three Rivers Park.
- Design new open spaces to occur mid-block, not at corners, and in locations that are adjacent to the riverfront or Perpendicular Connections to the Park.
- Open-space requirements may be aggregated to create additional publicly-oriented Perpendicular Connections to the riverfront. In such cases, the Connection is required to be a minimum of 32 ' wide, with publicly-oriented uses located on the ground floor and directly accessible from the Connection. Sidewalk cafes and similar uses encouraged. The open space is required to be accessible to the public 24 hours a day.
- Activate open spaces by locating publicly-oriented uses in the ground floors of adjacent buildings. Provide pedestrian amenities, including seating.
- Apply the Urban Design Guidelines for Downtown Pittsburgh to open spaces in Districts of Three Rivers Park.

### **Building Design in Districts**

Buildings located in and along Three Rivers Park establish the edge of the Public Realm. Along the riverfront, they create a “face” to the individual Districts in which they are located. Viewed from the Waterscape and other vantage points, they become landmarks that orient visitors and inhabitants. Added together, the buildings that compose a District are intended to create distinctive forms and landmarks, as represented by the familiar images of the Golden Triangle and the South Side Slopes.

In developing individual buildings as well as master plans for new Districts, address the following building design issues:

- Height of the buildings along the edge of the river
- Building setbacks and build-to lines along District edges
- Overall massing strategy for the District
- Location of parking, both surface and structured
- Identification of primary views from the District to the riverfront and from the riverfront to the District

Further, all building and site development within Three Rivers Park and its Districts will be encouraged to incorporate elements of green-building design. Developers and owners are encouraged to utilize the Leadership in Energy and Environmental Design (LEED) standards as established by the U.S. Green Building Council (USGBC).



### ***Building Height and Massing***

- In new Districts, the individual district master plan will outline the minimum and maximum requirements for building height and massing.
- In general, construct buildings to a minimum of four stories and 60' high in Districts adjacent to Downtown, with six to eight stories preferred.
- Locate taller buildings further back from the river, allowing views from upper floors out over the first tier of buildings.
- Design building massing to maintain view of rivers, maximize light and air to open spaces and minimize shadows on adjacent properties and open spaces.
- For individual building projects, identify the height patterns that are present in the District in which they are located. Relate the height of the new development to the height of the surrounding District, and reduce negative impacts on adjacent properties, such as blocking views, casting open spaces into shadow for a significant period of the day, etc. Schematic illustrations of the massing of the surrounding District will be required in order to review the proposal's compatibility with the established District and the overall design goals for Three Rivers Park.
- Due to Pittsburgh's varied topography and changing landscape, roofs of buildings in and adjacent to Three Rivers Park are visible from multiple vantage points. Building tops become important landmarks within individual Districts, such as the Golden Triangle. Pay careful attention to the design of building tops and roofs, with a vertical emphasis to those building tops within the Golden Triangle.



### ***Setbacks and Build-To Lines***

- In general, build to the property line for all properties located along both Perpendicular and Parallel Connections, with the intention to develop a consistent and continuous urban fabric within Districts. See also the [Design Guidelines for Perpendicular and Parallel Connections](#).
- “Hold the corner” of buildings at intersections. Do not locate open spaces at intersections.
- Beveled building corners are acceptable in order to open site lines at intersections and encourage pedestrian movement, while maintaining a minimum build-to line of 80% along each street facade. In cases where beveled corners are used, locate primary entrances to the ground floor uses on the corner.
- In new Districts, the individual district master plan will outline the minimum and maximum requirements for building setbacks and build-to lines.
- For individual building projects, identify the setback and build-to patterns that are present in the District in which they are located. The location of structures should work within the established pattern of the District unless this pattern has otherwise been deemed undesirable. Schematic illustrations of the massing of the surrounding District will be required in order to review the proposal’s compatibility with the established District and the overall design goals for Three Rivers Park.
- Where setbacks are necessary to create buffers between the public Connections and private development, employ the standards set out by the Landscaping Standards that will be developed as part of the [Three Rivers Park Handbook](#). Further, development is encouraged to provide outdoor terraces and porches within the setback as a means for providing semi-private spaces for building occupants and encouraging use of the Park.



### ***Ground Floor Design***

Buildings located in Districts along Three Rivers Park will accommodate a variety of different uses, ranging from public to private. While publicly-oriented uses are generally encouraged along all district edges, there are also many opportunities to create residential communities adjacent to the Park.

- Where appropriate, promote mixed-use Districts by providing a minimum first floor height of 18' to accommodate a wide range of ground floor uses.
- In developing ground floor design for district edges and development along Perpendicular Connections, follow



the standards identified for Connections in Three Rivers Park.

- Where buildings are located adjacent to Riverfront Roads, locate primary entrances and addresses on the Riverfront Road.
- Locate service entrances away from Three Rivers Park and primary Connections to the Park.
- Where residential uses are located on the ground floor of a building, use terraces and elevation changes to provide semi-private entrances and outdoor spaces for residents, without impinging on the public nature of the Park.
- Where privacy is required, create screening through changes in floor height, landscaped setbacks or other devices rather than dark or reflective glazing.

### ***Building Materials***

- Compose buildings of materials with an “earth-bound” palette to enhance the quality of Three Rivers Park. These materials include stone, metal, glass, concrete and brick. Other materials may be used for trim but are not encouraged as a primary building material.
- Avoid the use of stucco, EIFS systems, wood and simulated wood products, one-way or mirror glass and spandrel glazing as primary building materials, except when used sparingly or as accent features.
- Encourage the creative uses of materials in order to reflect the overall character of the Park and the District.
- Use transparent glazing with minimal tinting in order to provide views from and into buildings. Make ground floor glazing 100% transparent, allowing clear views into and out of buildings.
- Use green-building products, as defined by the standards of the USGBC and similar rating systems, whenever possible.



### ***Rooftop Design***

- Incorporate roof terraces and balconies overlooking Three Rivers Park, for both public and private uses, in buildings located along the riverfront. Where appropriate, provide publicly-oriented uses, such as restaurants and cafes, in these locations.
- Create rooftop gardens to extend the landscape quality across new and unexpected places in the urban fabric.
- Whenever possible, construct landscaped roofs to reduce stormwater run-off, reduce heat island effects and add to the landscape quality of the Districts of Three Rivers Park.
- Incorporate rooftop mechanical equipment into the building design and shield it from view.

## Connections

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*In providing access to, along, over and down to the rivers, Connections include: perpendicular streets and sidewalks leading to the rivers from neighborhoods; the spans and bases of bridges; riverfront esplanades; the inclines; the Light Rail Transit lines; and biking and walking trails. Whether they are routes traveled by car, by bike, by foot, or by watercraft, Connections lead to the rivers, along the rivers and connect the rivers back to the neighborhoods. Connections are not just about moving from one point to another, but also about enjoying the experience of the passage.*

### Characteristics of Connections

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- Connections will return the rivers to the Public Realm through increased accessibility.
- Connections will be publicly accessible spaces even where they run along private development.
- Connections will vary in character, providing both quiet reflective threads linking destinations and lively inhabited promenades and vistas along the edges of Districts and through Landings.
- Public activities and events, such as sidewalk cafes, street fairs and vendors, will enliven the Connections, both as temporary and permanent installations.
- Connections will be occupied year-round on a variety of scales and activity levels. In the summer, they will provide tranquil shade along the riverfronts, while in the winter the sun will penetrate to warm the surface of the trails and promenades for recreational users and pedestrians alike.
- Parallel Connections between Landings, including Trails and River Roads, will provide a soft, green foil to the urban density and activity of these nodes.
- Perpendicular Connections will extend the grid of the City into the Park, providing increased public access to the riverfronts and providing contrast between the careful organization of the urban grid and the natural forms of the Waterscape and Landscape.
- Riverfront Trails will be simple and integrated with the Landscape, set within the boundaries of the Park and defined by the vegetation of the Park.
- Colors and materials are to be from an “earth-bound” palette of stone, metal, glass, concrete and brick.

### Design Guidelines for Connections

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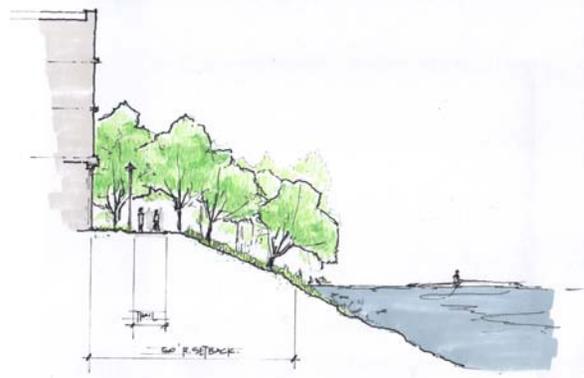
#### **Parallel Connections Along the Rivers**

Parallel Connections will serve many different users and development sites. They provide the linkage of public access and views along the rivers and along private development, re-engaging the rivers as part of the Public Realm. Parallel Connections include Riverfront Trails, Promenades, Roads, and Scenic Roadways, each of which address a key issue of access along our rivers.

### ***Riverfront Trails***

Trails are Riverfront Connections that place emphasis on moving along the river for longer distances as a pedestrian, runner, cyclist or rollerblader. Trails place emphasis on Riverfront Connections for recreational uses, and as such should be designed with those users in mind.

- In general, contain the trail within a canopy of deciduous trees, providing shade in the summers and allowing sunlight to penetrate in cooler months.
- Plant dense trees and other tall landscaping materials continuously along the inboard side of the Trail, creating a background of green that engages the Trail within Three Rivers Park. Green slopes with naturalized plantings to create a sense of enclosure within the Park are an acceptable alternative where tree planting is not possible or desired.
- On the river side of the Trail, design the tree canopy to open and close, creating new views both to and from the Trail. Create views of the Golden Triangle.
- Avoid planting trees in even rhythms such as those typically used in street tree plantings. Plant them in groups with varying densities.
- Avoid railings along Trails wherever possible. Where they are provided for safety, railings should be designed with colors and finishes that relate to the earth-bound palette of materials identified for Three Rivers Park.
- Locate light fixtures, trashcans, signage and other necessities discretely in the landscape of the Trails. Provide drinking fountains, mileage markers, maps and informational signage, integrating them with the landscape. Locate emergency call-boxes at frequent intervals to provide additional safety and security.
- Wherever possible, provide a dual-surface Trail. Provide a crushed limestone surface for pedestrians and runners and a hard surface for bikes and rollerblades.
- Provide a consistent finished edge along the Trail.
- Design Trails to have light-colored and non-glare surfaces, such as limestone, concrete or white asphalt.
- Creative trail design, such as the development of low-impact boardwalks and walkways, are encouraged in appropriate locations. Recommended applications include locations where such designs will minimize the disturbance of habitats.



*The Trail should move in and out of the tree canopy, opening to provide views to the rivers and closing again to provide a sense of intimacy and*



- Consider alternatives to asphalt as a surfacing material for Connections in and to Three Rivers Park. Where the use of asphalt is dictated by the construction of temporary Connections or budgetary constraints, use an asphalt material that will provide a light-colored surface, such as through the addition of limestone to the aggregate. Provide a finished edge along the Connection in order to provide a clean, high-quality boundary to the surface.
- Black asphalt is highly discouraged as a trail surface material. Light-colored asphalt surfaces can be achieved through the use of limestone aggregates or colored sealants and hot mixes. Concrete paving is encouraged for hard-surface Trails in the vicinity of Downtown.

### ***Riverfront Promenades***

Riverfront Promenades, which open up the views of the rivers and integrate the urban character of the City with the pastoral nature of the Park, can occur where Landings intersect Connections along Three Rivers Park and where urban Districts are adjacent to the riverfront. Promenades are generally more pedestrian in character, rather than recreational. Promenades are places to see and to be seen.

- Use higher quality materials, such as stone paving, for Promenades.
- Where the introduction of surfacing materials along a Promenade may interrupt the established path of Riverfront Trails and discourage rollerbladers and cyclists, consider alternative routes for these users. Alternatives include the provision of a “high” Promenade paved with stone, where pedestrians and shoppers might stroll, in conjunction with a “low” Trail along the river, surfaced with concrete or crushed stone. Other recommendations include providing clear routing along adjacent streets, marking access points that will rejoin the Riverfront Trail.



*Promenades occur at the intersection of different riverfront activities. They provide opportunities to experience the river from a different vantage point.*

- Promenades along Three Rivers Park are considered to be located within the Park. Plant trees within 15' of the river edge of the Promenade.
- Where required, provide railings along Promenades with colors and finishes that relate to the earth-bound palette of materials identified for Three Rivers Park.
- Plant dense landscaping below the front edge of Promenades in order to frame views and give the user the sense of vantage point that comes from sitting above the trees.
- For buildings located along Promenades, provide ground floor uses that are public in nature, including civic, cultural, retail, entertainment, restaurants and public lobbies.
- Consider the issue of color for Promenade surfaces. Warm-colored paving will seem warmer in the gray winters, while cool colors will seem cooler in the summers. Use

light-colored, but non-glare, walking surfaces at Landings or other points of interest where more focus is intended.

### ***Riverfront Roads***

Riverfront Roads have the potential to be an exciting and different experience of Three Rivers Park, and to create new opportunities for development adjacent to them. They can create access to areas of the Park that would otherwise be difficult for persons with limited mobility to reach. At the same time, care must be taken in designing and locating Riverfront Roads to ensure that access to the Riverfront is not restricted by the presence of vehicular streets, and with pedestrians as a primary consideration. Riverfront Roads should be perceived as an extension of Three Rivers Park.

- Limit Riverfront Road width to no more than two lanes of traffic and one lane of on-street parking. The maximum width for Riverfront Roads is 34', including two lanes of traffic and one lane of on-street parking on the land side of the Road. The preferred width is 30'.
- The 50' minimum for the riverfront setback and Trail applies along all Riverfront Roads.
- Provide 12' for sidewalk with street trees on the river side of the Riverfront Road. Where space is limited, the Trail may substitute for the river side sidewalk.
- Provide 8' minimum to 12' maximum for an inboard sidewalk with street trees on the land side of the Riverfront Road.
- Orient Riverfront Roads to pedestrians and light traffic. Truck and delivery traffic are not appropriate on Riverfront Roads.
- Post maximum speeds of 25 miles per hour on Riverfront Roads, with traffic calming measures integrated in pedestrian districts at intervals no more than 400' – 600'.
- Provide pedestrian crossings not less than 600' apart. Provide a change of street paving at pedestrian crossings that provides a variation in texture and color.
- Plant Riverfront Roads with dense tree canopies and views to the rivers provided below the canopies.
- Locate primary addresses and entrances to buildings on the Riverfront Road.
- Encourage residential uses along Riverfront Roads.

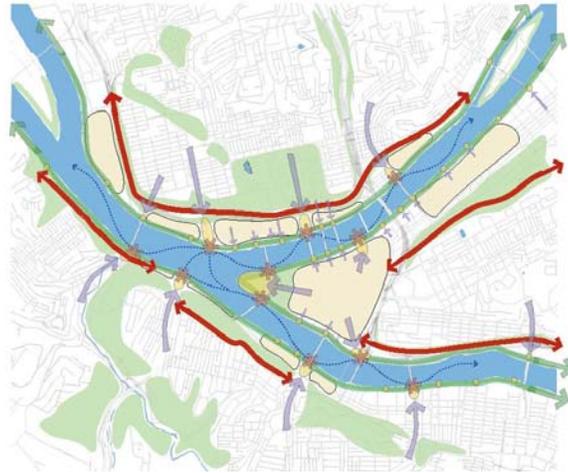


*Riverfront Roads will provide new addresses along the rivers and ensure public access to the water's edge. They will be low-scale and oriented to the pedestrian.*

### ***Scenic Roadways***

Scenic Roadways are those roads and highways located away from the rivers, which, due to topographical conditions, provide scenic views into Three Rivers Park and the river valleys of Pittsburgh. Many of the premier views of the City and its rivers are seen from roadways and it is important to continue to preserve and enhance these views as part of Three Rivers Park. Scenic Roadways for Three Rivers Park include: Grandview Avenue, Bigelow Boulevard, Boulevard of the Allies, Ohio River Boulevard/ Route 28 and West Carson Street.

- Maintain views from Scenic Roadways into Three Rivers Park and the river valleys through the careful selection of structural elements including barriers, during road design and construction.
- Provide landscaping and street trees for Scenic Roadways in order to enhance the roads as green boulevards through the City.
- Utilize high-quality materials for the reconstruction of Scenic Roadways, including concrete sidewalks.
- Maintain landscaping on and adjacent to Scenic Roadways in accordance with the maintenance for Three Rivers Park.
- Consider the impact of reconstruction on views to and from the Scenic Roadways. Considerations include the use of appropriately-designed barriers, the selection of streetlights, location of billboards and the design of retaining walls and other structural elements.



*Scenic Roadways trace the contours of the river valleys, providing exciting views up and along the rivers. They are also highly visible from the*

### **Perpendicular Connections to the Rivers**

Perpendicular Connections are generally pedestrian connections to Three Rivers Park that extend the City to the rivers. They provide the transition from the urban scale of Districts and neighborhoods to the intimate scale of Three Rivers Park. Perpendicular Connections are public streets and easements across development sites.

#### ***Major Perpendicular Connections***

Major Perpendicular Connections are those that provide connection between the City and Landings. They are public streets, providing both pedestrian and vehicular access to the Park. They provide connections to public transit, major attractions and other publicly-oriented uses. One of the key considerations for buildings located along Major

Perpendicular Connections is the perception of the street as a continuous place, from building face to building face. The design of the building wall and landscaping along the Connection will have a great impact on the character of the street.

- Locate publicly-oriented uses in ground floors along Major Perpendicular Connections, including retail shops and restaurants.
- Maintain established build-to lines along Major Perpendicular Connections. Where retail and restaurant uses will be located, provide for sidewalk café seating and arcaded ground floors where appropriate.
- Maintain a ground floor height of 18' minimum along Major Perpendicular Connections, in order to accommodate retail, restaurant and other public uses.
- Minimize curb-cuts along Major Perpendicular Connections. Do not locate service entrances along major Perpendicular Connections.
- At a minimum, meet the City's standards for street trees, lighting, sidewalks and curbs for Downtown Pittsburgh along Major Perpendicular Connections.
- Major Perpendicular Connections will have sidewalks that are wider than those on secondary streets with the added intent to create opportunities for special spaces.



*The view down Allegheny Avenue illustrates the potential of the road to be developed as a passageway to Three Rivers Park.*

### ***Perpendicular Connections Along Private Uses***

In many cases, Connections to Three Rivers Park will be provided along the edges or through private development that is not generally open to the public, such as residential and private office development. In these cases, it is important to clearly define the Connection as a public space. In addition, it is important to stress that the Connection does not “belong” to the development but is a part of Three Rivers Park.

- Provide a minimum walkway width of 12' for Perpendicular Connections to be maintained as an easement or public right-of-way. Provide a minimum setback for all structures, including fences, of 10' on either side of the Connection. Landscape the setback in accordance with the Three Rivers Park Landscaping Standards (forthcoming).
- Provide a dense tree canopy to define the edges of the passageway, while focusing attention to the view to the rivers. The Three Rivers Park Landscaping standards will provide additional recommendations on tree selection and spacing.
- Fences along private spaces that border Connections should have a maximum opacity of 50% and a maximum height of 48". Additional screening and enclosure is to be achieved through the use of landscaping materials and changes in elevation.

- In general, for private uses located along Connections, elevate the first level of the building several feet above grade through the use of terraces and porches. This will provide some visual privacy between the private use and the Public Realm, as well as create new opportunities for “semi-public” spaces where the occupants of the building may enjoy living or working adjacent to Three Rivers Park.
- Provide a finished edge to the Connection.
- Design the surface of the Connection to be consistent with the materials of the Trail or Promenade to which it connects. At minimum, provide a crushed limestone surface.
- Provide pedestrian-scaled lights in keeping with the Three Rivers Park lighting standards.
- Provide pedestrian crosswalks where Perpendicular Connections meet a street.
- If provided, locate public amenities, such as seating, maps, etc., at the ends of the Connection, rather than on the Connection. Such amenities can be used to create a focal point, drawing attention to the intersection of the Perpendicular Connection with the Trail. This can encourage users to move along the Connection, rather than occupying the Connection for long periods, which might create conflicts between private owners on sites immediately adjacent to the Connection. Select amenities that are consistent with the earth-bound palette of materials for Three Rivers Park.



*Perpendicular Connections that are located along private uses ensure public access to the riverfront, while providing buffers to private*

### ***Perpendicular Connections Along Public Uses***

In places where Perpendicular Connections cross development that includes public uses, such as retail, restaurant and entertainment occupancies, the Connections provide opportunities to enhance the development, create additional public open-space and engage those adjacent uses. Perpendicular Connections along public uses can be designed to serve as public plazas and gateways to the riverfront. They are encouraged to be inhabited spaces, providing amenities to both users and business owners. Ground floor uses should be oriented to the Connection and seek to engage the public.



*Perpendicular Connections located along publicly-oriented uses can become public spaces, occupied by sidewalk cafes, seating, and vendors, providing new street life.*

- Provide storefront glazing, extending from the ground to a minimum height of 12'. Wrap the storefront glazing around the corners of the buildings, providing visual connections to the publicly-oriented uses from all approaches.
- Locate public entrances to ground floor uses along the Perpendicular Connection. Sidewalk cafes are encouraged as uses along the Perpendicular Connection.
- Where the Perpendicular Connection intersects a street, maintain wide pedestrian crossings that are on axis with the Connection.
- Provide curb-cuts at these crossings to accommodate people of all levels of mobility, but install removable bollards to control vehicular access.
- Design the pattern of street lights and trees along the road that is intersected by a Perpendicular Connection to relate to the Connection. Maintain views down the Connection towards the rivers from the opposite side of road and keep them uninterrupted by street trees and lights.

***Design Guidelines for Perpendicular Connections Across and Down To the Rivers***

Connections across and down to the rivers are provided primarily at the bridges that span over and touch the banks of the three rivers. Bridges provide one of the most characteristically “Pittsburgh” experiences of Three Rivers Park and also provide many of the key views of the City and Park. It is critical to the success of Three Rivers Park that easily navigable pedestrian connections be made from the ends of the bridges to the Riverfront Trails, Promenades and Roadways. Such access will be made through the development of Vertical Connections, including stairs, ramps and elevators.

- Preserve the architectural character and details of bridges in renovations.
- New bridges should respect views, site lines and form.
- Light bridges and Vertical Connections according to the standards developed as part of the Lighting Plan for Three Rivers Park.
- Accommodate users of different mobility levels on Vertical Connections, including pedestrians, rollerbladers, cyclists and persons with limited mobility in accordance with ADA requirements.
- Clearly mark access points to Vertical Connections from Trails and Promenades.

## Landings

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*Landings occur where two or more of the above Elements come together and provide focal points for activity and connection at the water's edge. Landings can be the public places that people are drawn to for special events or activities and serve as destinations and landmarks. They can bring together transit systems and activity centers. They are places where people find distinctive experiences along Pittsburgh's rivers. Landings provide opportunities for design and physical intervention.*

### Characteristics of Landings

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- Landings will be transition and connective points between Three Rivers Park and the community, with access to the trails, esplanades, promenades and transit connections.
- Landings will be engaging and lively public places, with individual and unique character. Landings will be well-designed to serve as places of activity and offer contrast to the natural elements of Three Rivers Park.
- Occupied by both groups and individuals, Landings will provide opportunities for gathering and meeting spaces for daily use or special events.
- Landings will be comprised of a series of spaces that vary in size and purpose and serve those who use Three Rivers Park daily or for an occasional or one-time visit.