

Reality

Understanding the Site and its Context

If the vision for the park sets forth how we want Trenton to change and improve through the creation of the park, reality is the situation we are faced with today. This chapter provides an assessment of the existing conditions around the park and the present trends and projects that impact it.

Context Projects: What's Going On in Trenton

There are a number of ongoing projects in the vicinity of the master plan study area that have an impact on Capital Park. A complete list of studies and projects in central Trenton is provided in the Appendix. For analysis purposes, the context area is bounded by the Amtrak railroad line to the south, Route 1 to the east, the Delaware and Raritan Canal to the north, Calhoun Street to the northwest, and the Delaware River to the west. Proposals and studies occurring within this area have been analyzed.

The following is a list of key projects that should be coordinated with park development:

Route 29 Boulevard Project

The New Jersey Department of Transportation is planning to convert Route 29 from a limited access highway to an urban boulevard between Sullivan Way on the north and Cass Street on the south. The proposal is divided into two phases, with Phase I including work north of Calhoun Street and Phase II including work from Calhoun to the south. This is a key project for the park because the expressway currently blocks access to the river. The project is in the feasibility assessment stage. The plan should be coordinated with the park plan because the highway runs directly through the park. The replacement of Route 29 is also critical for redeveloping the Departments of Health and Agriculture site to the

south of the Assunpink Creek.

Key coordination points include the following:

- Develop a shared vision for Route 29 Boulevard in the context of flood control along the Delaware and the Assunpink.
- Establish the design parameters of the road with an emphasis on walkability and accessibility.
- Design early action improvements for park access.
- Coordinate the construction schedule with park development.
- Coordinate environmental impact assessment with related projects.
- Expedite implementation of the Phase II project through the park, because waterfront access requires removal of the expressway.



Route 29 Boulevard Project

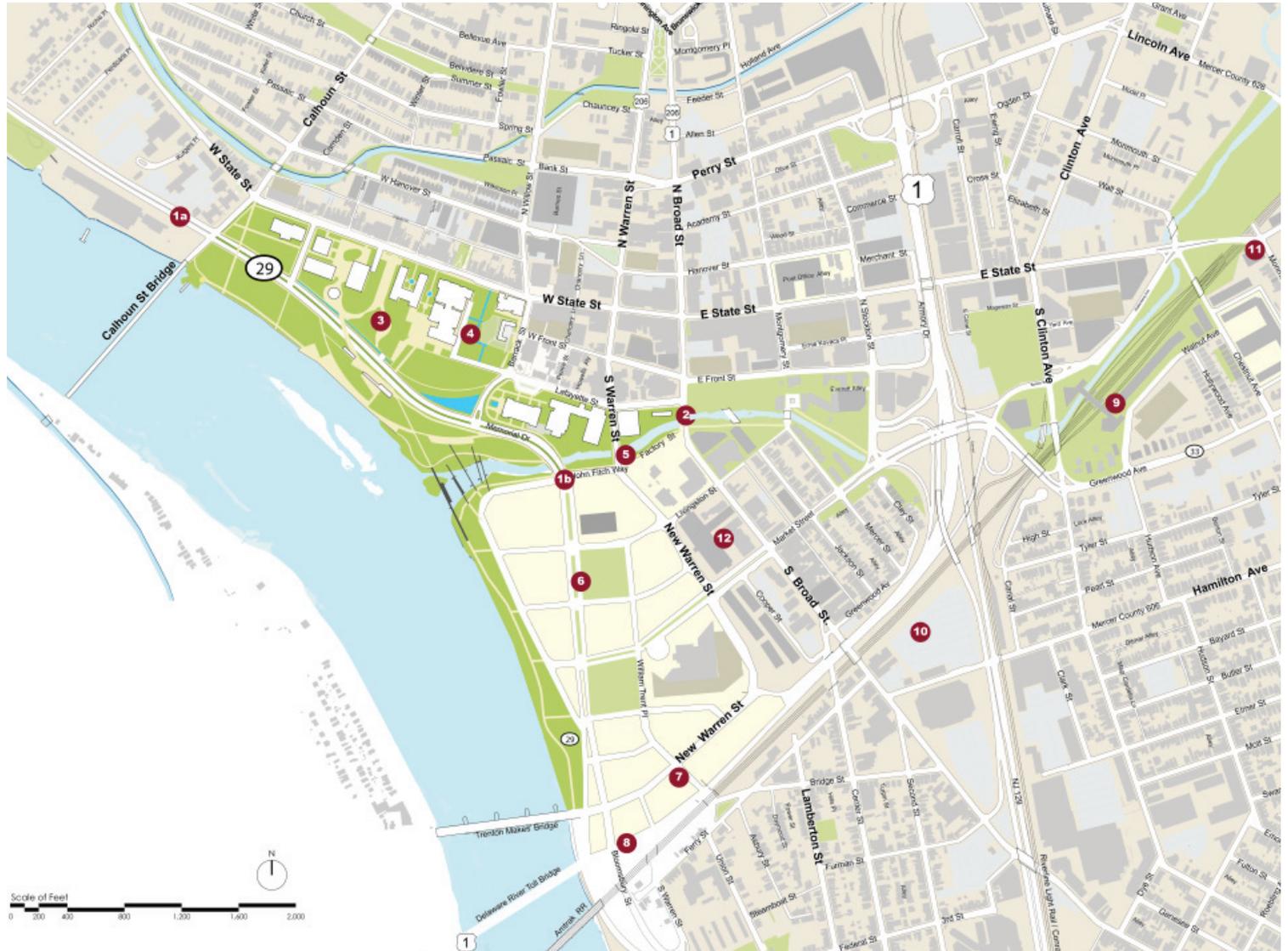
The New Jersey Department of Transportation is proposing to convert Route 29 into an urban boulevard.

Context Area Projects and Plans

This map shows some of the projects underway adjacent to or within the proposed Capital Park. These projects require coordination with park planning.

Legend

- 1 Route 29 Boulevard (NJDOT)
- 1a North of Calhoun Street
- 1b South of Calhoun Street
- 2 South Broad Street Bridge Replacement (NJDOT)
- 3 Parking Garage behind State House Evaluation
- 4 Security Plan – Implementation
- 5 Lower Assunpink Creek Environmental Restoration and Assunpink Greenway.
- 6 Lower Assunpink Riverfront Neighborhood (Dept of Health and Agriculture site)
- 7 Mixed-Use Development
- 8 Route 1 Access Ramp Alignment (NJDOT)
- 9 Trenton Amtrak / NJ Transit Station
- 10 The Foundry on 129 (Retail / Entertainment District)
- 11 Chestnut Avenue and Monmouth Street Bridge Replacement (NJDOT)
- 12 Mercer County Courthouse Extension



Lower Assunpink Riverfront Neighborhood

The State of New Jersey, the City of Trenton, and the Capital City Redevelopment Corporation have proposed to redevelop the Departments of Health and Agriculture site and parking lots along the Delaware River. At the present time, the presumed use of this land is for mixed-use development that will take advantage of its excellent waterfront location. The development proposal will enhance Capital Park by providing users for the park and creating new connections to the waterfront. The major elements requiring coordination are:

- The physical design of site elements such as the Route 29 boulevard and waterfront access.
- Extension of the waterfront park south to the “Trenton Makes” Bridge.
- Floodplain and environmental impact mitigation between the development project and the Capital Park and Route 29 projects.
- Bicycle and pedestrian routes through the site.
- Block structure and neighborhood design for development with private developers.



Aerial Photo of the Riverfront

Redevelopment of state lands on the riverfront requires realignment and downsizing of the Route 29 expressway.



Lower Assunpink Environmental Restoration Project

The U.S. Army Corps of Engineers is studying the daylighting of the Assunpink Creek between South Broad Street and South Warren Street.



Lower Assunpink Environmental Restoration Project

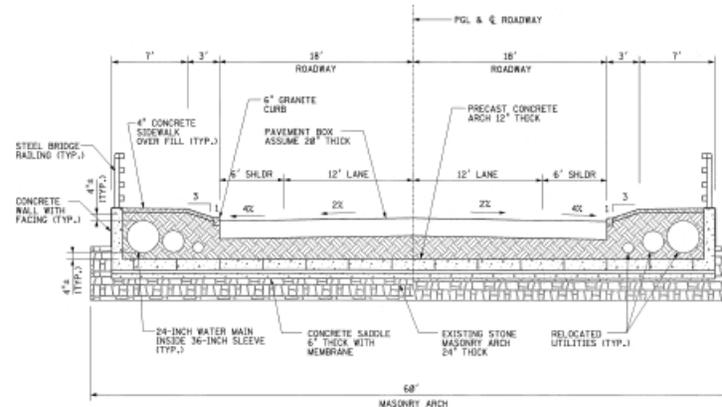
The U.S. Army Corps of Engineers is proposing to restore and improve the riparian habitat along a three mile stretch of the Assunpink Creek in Trenton. The City of Trenton is the local sponsor. The project includes daylighting the Assunpink between South Broad and South Warren Streets, constructing a trail along the creek, cleanup of the creek bed in some areas, and restoring the creek banks. The Assunpink Creek is a central component of the park, so this project should be carefully coordinated with the park design and implementation. Major elements that require coordination include:

- The daylighting project with the park planning and construction.
- The daylighting project with the South Broad Street Bridge rehabilitation.
- The Route 29 Boulevard project, which will include replacement of the Memorial Drive bridge over the Assunpink.
- The construction of the greenway trail with the planned park bicycle and pedestrian system.
- The restoration of the riparian area at the mouth of the Assunpink.
- The extension of the trail and greenway with other Trenton projects.
- The interpretive development of historic and archaeological resources along the south bank of the Assunpink between South Broad and South Warren Streets and at the Trenton Water Power aqueduct location.

The South Broad Street Bridge Rehabilitation Project

The South Broad Street Bridge over the Assumpink is an amalgamation of different structures from different eras. Portions of the bridge, including the arch extension from the mid 19th century, have been deemed structurally deficient. Part of the bridge is closed to traffic, resulting in a narrowing of the traveled way. The New Jersey Department of Transportation is proposing either to build a new parallel bridge downstream or to strengthen the existing bridge. This project requires coordination with the park for several reasons:

- The bridge project offers the chance to dramatically improve awareness of the historical importance of this bridge during the Battles of Trenton and to Trenton's early industrial development, which are themes for expression in Capital Park.
- The Assumpink daylighting project will expose the south face of the bridge which is currently hidden by a culvert, and the trail will allow much greater visibility of this historic stone arch bridge.
- The opportunity exists to expose a buried second arch of the bridge which could potentially allow for the Assumpink Greenway trail to pass under South Broad Street.
- The bridge could be returned to its historic appearance, which could be coordinated with proposed historical interpretation of the site.
- Adjacent archeological resources, such as mill foundations, offer a chance to enhance the bridge project.



South Broad Street Bridge Rehabilitation

The NJDOT is proposing to strengthen the South Broad Street Bridge. This project requires coordination with the park plan and the daylighting of the Assumpink Creek below the bridge.

Mercer County Courthouse Extension

Mercer County is proposing to construct an expansion or annex to the County Courthouse. Potential project coordination topics include:

- Landscape and streetscape improvements.
- Environmental mitigation strategies, such as stormwater runoff management.



Mill Hill Park and the Assunpink Greenway

The Assunpink Greenway will pass through Mill Hill Park.



East Coast Greenway

The East Coast Greenway passes through Trenton, following the Delaware & Raritan Canal to Calhoun Street, then following

Calhoun Street to the bridge across the Delaware River and into Pennsylvania. The proposed alignment passes the northern border of the Capital Park. Coordination with the East Coast Greenway requires the following:

- Improving links to the Greenway from the park.
- Creating a coordinated signage and wayfinding plan.
- Marketing Trenton destinations, including the park, to Greenway users.
- Creating the Greenway through the park and connecting it to the Calhoun Street Bridge.

Capital to the Coast Trail

A 50 mile Capital to the Coast trail is planned by the Friends of the Capital to the Coast Trail. The proposed trail would link the shore communities of NJ to the Capital passing through Monmouth and Mercer Counties and 12 municipalities. The trail will eventually connect the Edgar Felix Bike Trail in Manasquan, Allaire State Park, the Manasquan Reservoir, Turkey Swamp Bank, Howell Recreation Park, The Assunpink Watershed, Mercer County Park, The Assunpink Greenway and the Delaware and Raritan Bike Trail. Capital Park could act as termination of this trail that will require a coordinated signage and wayfinding as well as a marketing program.

State House Garage Structural Investigation

The State of New Jersey is investigating the structural integrity of the State House Garage. Key coordination points include:

- Investigate the feasibility of wrapping the garage with a visitors center and other active uses.
- Investigate the feasibility of relocating steam facilities from the Power House.
- Consider the implications of public parking in the garage.

Archaeology and Heritage

Sensitivity to and integration of the historic and archaeological resources within the park design are a key part of the Capital Park design vision.

Below are a few highlights of Trenton’s rich historic and archaeological resources that are important in the design of Capital Park.

Interpretive Themes

Interpretive themes provide lenses through which to examine the history and culture of Trenton. The following themes are starting points for understanding the complex history of forces that have shaped the city and its people.

Topography

Trenton’s historical development is framed by the city’s geography; its geography is framed by its waterways. Park design needs wherever possible to respect and highlight the city’s waterways, both stream courses (the Delaware River, the Assunpink Creek, and Petty’s Run) and canals (the Delaware & Raritan Canal and the Trenton Water Power). This includes evaluating the feasibility of re-opening culverted sections of the Assunpink and Petty’s Run.

The city has a unique street pattern defined by its waterways and anchored by key river crossings (the Delaware bridges; the South Broad, and Warren Street bridges over the Assunpink). Park design needs to

respect the early 18th-century historic street grid, most of which remains intact in the downtown.

Trenton as a River City

Trenton’s *raison d’être* is its location and emergence as a transportation nexus at the head of navigation and the furthest downstream fording point on the Delaware. The falls of the Delaware (the fording point) abut the southwestern edge of the park core. The geology and physiography of the falls deserve to be celebrated as providing the underpinning for the city’s transportation

development. Establishing links to the riverbank within the master plan study area across the Route 29 corridor is essential.



Trenton as a River Crossing

Trenton was a primary point to cross the Delaware River, including during the American Revolutionary War.

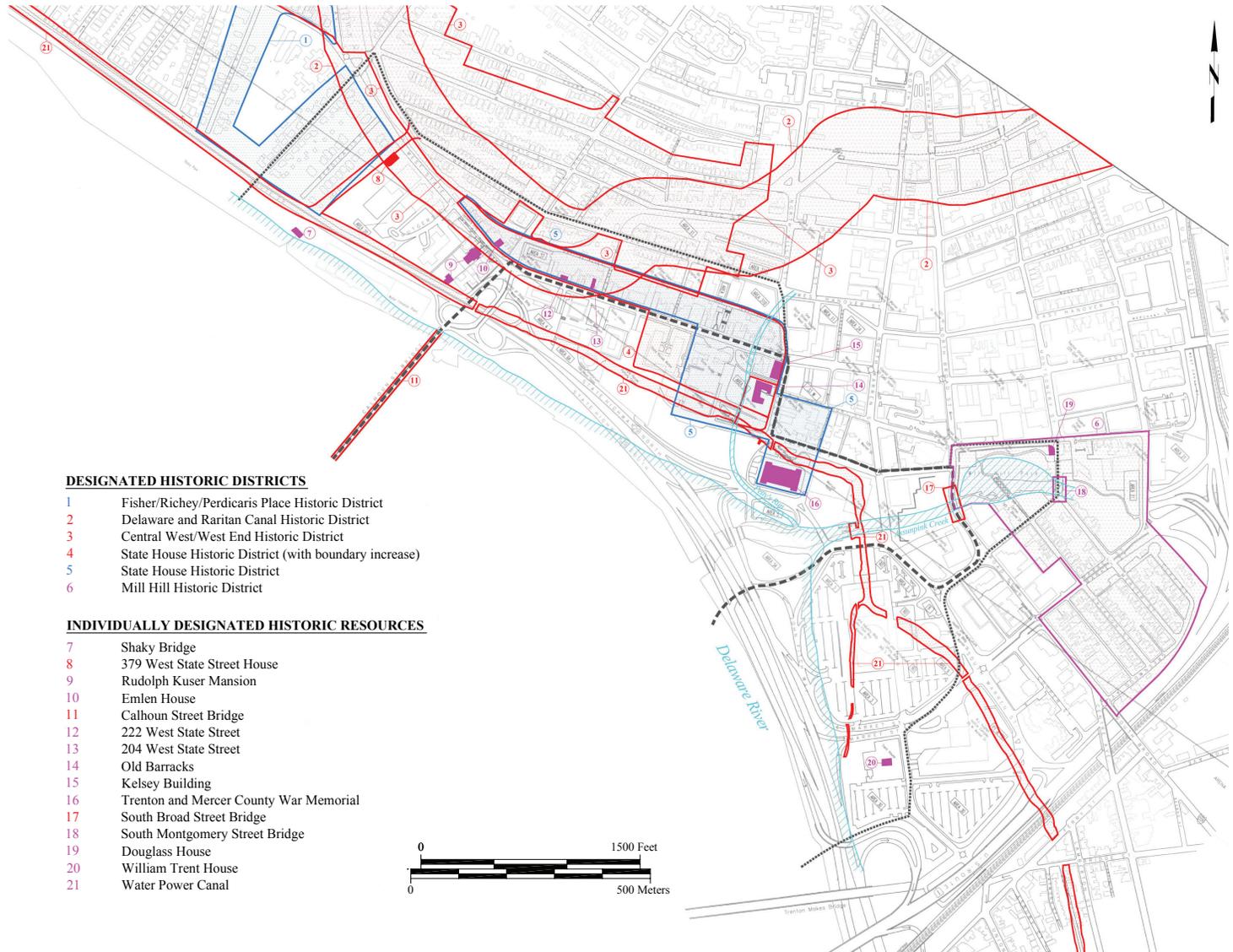
Left: *Trenton sur la Delaware*, Edouard-Charles Victorin Colbert, 1800; Right: *George Washington crossing the Delaware River*, Emanuel Gottlieb Leutze, 1851.

Trenton as a River Crossing Point

The bridges across the Delaware represent a historical continuation of the ford at the falls and have cemented the city’s importance in the regional land-based transportation network. The Calhoun Street bridge and the Northeast Corridor (Pennsylvania Railroad) bridge, both National Register-listed properties, serve as book-ends to the city’s trans-Delaware linkage to Pennsylvania. Both occupy historic ferry locations. The “Trenton Makes” bridge in between is probably the single most visible reference to Trenton’s historic industrial identity. Bridge visibility should have a high priority in Capital Park design schemes.

Designated Historic Resources

The park contains many designated historic resources, and historic districts cover part of the park site.



Legend

- Core Study Area
- Expanded Study Area
- ▤ State and National Register Listed or Eligible District
- State and National Register Listed or Eligible Resource
- ▤ City of Trenton Designated District
- ▤ State and National Register Listed or Eligible District
- City of Trenton and National Register Listed or Eligible Resource
- /// Pre-urban Drainage

DESIGNATED HISTORIC DISTRICTS

- 1 Fisher/Richey/Perdicaris Place Historic District
- 2 Delaware and Raritan Canal Historic District
- 3 Central West/West End Historic District
- 4 State House Historic District (with boundary increase)
- 5 State House Historic District
- 6 Mill Hill Historic District

INDIVIDUALLY DESIGNATED HISTORIC RESOURCES

- 7 Shaky Bridge
- 8 379 West State Street House
- 9 Rudolph Kuser Mansion
- 10 Emlen House
- 11 Calhoun Street Bridge
- 12 222 West State Street
- 13 204 West State Street
- 14 Old Barracks
- 15 Kelsey Building
- 16 Trenton and Mercer County War Memorial
- 17 South Broad Street Bridge
- 18 South Montgomery Street Bridge
- 19 Douglass House
- 20 William Trent House
- 21 Water Power Canal



Trenton as a Port

Trenton, along with its historical port of Lambertson, was a river town, once an official port of entry to the United States. The city's "portly" past is almost entirely forgotten. Although downstream from the core area, the stretch of river frontage from the Northeast Corridor rail crossing to the Trenton Marine Terminal is essential to the telling of the city's history. Historic interpretive schemes in the Capital Park System need to connect to the recently completed South River Walk Park, where historical exhibits focus on the city's river history.

The American Revolution in Trenton

The role of Trenton in the American Revolution is well known, if simplistically so. The master plan study area lies on the southern and western fringes of the first battle of Trenton, although the Old Barracks and nearby industrial sites along Petty's Run figured prominently in this battle and throughout the early years of the Revolution. The main action of the second battle occurred within the eastern portion of the master plan study area on either side of the South Broad Street crossing of the Assunpink. Through linkage to the Battle Monument and Mill Hill Park, Capital Park can more fully embrace the scenes of both battles. Bringing the battles to life within the context of the modern urban streetscape is a challenge that underlies much of the heritage tourism activity in the downtown (e.g., the Old Barracks programs and Patriots Week celebrations). Wayfinding systems, interpretive signage, exhibits, and re-enactments all require cohesive treatment in the master plan study area, in the

extended Capital Park components, and in the intervening portions of the downtown.

Colonial Industry in Trenton

The two main industrial foci of the city in the Colonial period were at the South Broad Street crossing of the Assunpink (the site of the Stacy/Trent gristmill/ Trenton Mills) and along Petty's Run to the rear of the Old Barracks (the Harrow/Yard plating mill and Yard Steel Furnace).

Each relied on the development of water power and contains substantive archaeological remains of considerable interest. The details of these two areas and their archaeological interest to the Capital Park design are described below.



The American Revolution

Important battles of the American Revolution took place within Trenton, including along the Assunpink Creek. Left: Etching of the Second Battle of Trenton by George Bradshaw.

Trenton as an Industrial Center

Trenton's rivers supported several water-powered industrial sites in the colonial period. Right: Diderot's Encyclopedia shows the operation of a water-powered forge like the one at Petty's Run.

The Industrial Revolution in Trenton

Trenton's entry into the Industrial Revolution was initially founded on large-scale hydropower development and the building of the Trenton Water Power and the Delaware & Raritan Canal in the early 1830s. Within a decade, railroad construction further strengthened the city's ability to rise as a regional industrial center. Water power, canals, and railroads combined to support the growth of Trenton as a major center of iron, steel, and pottery manufacture.

Archaeological Resources Map

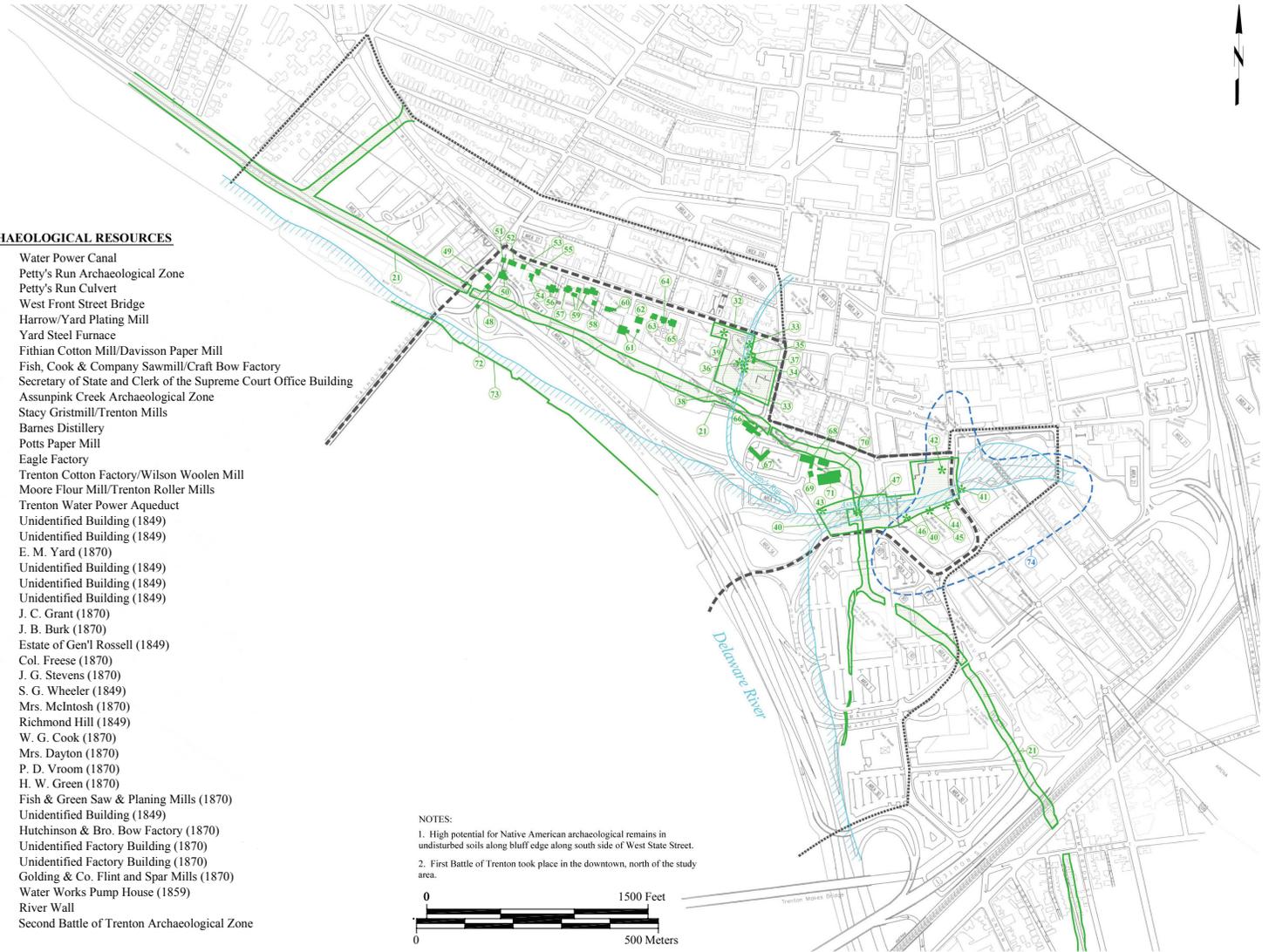
The park contains archaeological resources that can inform the park design and interpret the history of the city.

ARCHAEOLOGICAL RESOURCES

- 21 Water Power Canal
- 32 Petty's Run Archaeological Zone
- 33 Petty's Run Culvert
- 34 West Front Street Bridge
- 35 Harrow/Yard Plating Mill
- 36 Yard Steel Furnace
- 37 Fithian Cotton Mill/Davisson Paper Mill
- 38 Fish, Cook & Company Sawmill/Craft Bow Factory
- 39 Secretary of State and Clerk of the Supreme Court Office Building
- 40 Assumpink Creek Archaeological Zone
- 41 Stacy Gristmill/Trenton Mills
- 42 Barnes Distillery
- 43 Potts Paper Mill
- 44 Eagle Factory
- 45 Trenton Cotton Factory/Wilson Woolen Mill
- 46 Moore Flour Mill/Trenton Roller Mills
- 47 Trenton Water Power Aqueduct
- 48 Unidentified Building (1849)
- 49 Unidentified Building (1849)
- 50 E. M. Yard (1870)
- 51 Unidentified Building (1849)
- 52 Unidentified Building (1849)
- 53 Unidentified Building (1849)
- 54 J. C. Grant (1870)
- 55 J. B. Burk (1870)
- 56 Estate of Gen'l Rossell (1849)
- 57 Col. Freese (1870)
- 58 J. G. Stevens (1870)
- 59 S. G. Wheeler (1849)
- 60 Mrs. McIntosh (1870)
- 61 Richmond Hill (1849)
- 62 W. G. Cook (1870)
- 63 Mrs. Dayton (1870)
- 64 P. D. Vroom (1870)
- 65 H. W. Green (1870)
- 66 Fish & Green Saw & Planing Mills (1870)
- 67 Unidentified Building (1849)
- 68 Hutchinson & Bro. Bow Factory (1870)
- 69 Unidentified Factory Building (1870)
- 70 Unidentified Factory Building (1870)
- 71 Golding & Co. Flint and Spar Mills (1870)
- 72 Water Works Pump House (1859)
- 73 River Wall
- 74 Second Battle of Trenton Archaeological Zone

Legend

- Core Study Area
- Expanded Study Area
- * Archaeological Resources
- Second Battle of Trenton
- Pre-urban Drainage

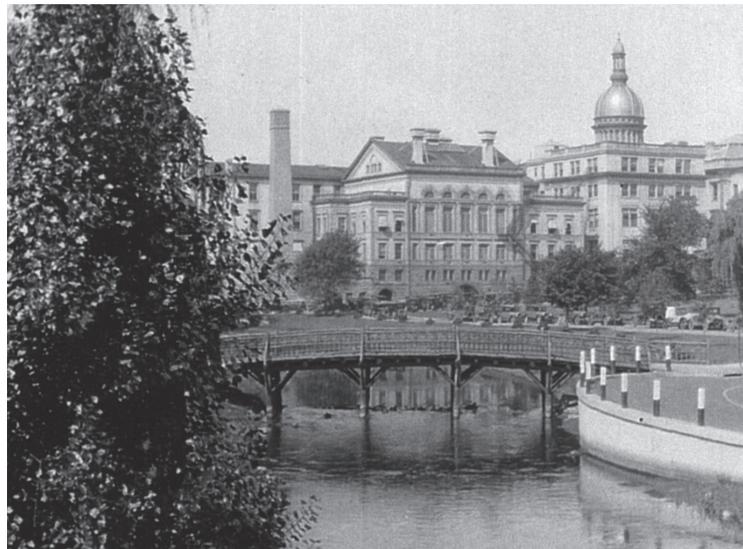


NOTES:
 1. High potential for Native American archaeological remains in undisturbed soils along bluff edge along south side of West State Street.
 2. First Battle of Trenton took place in the downtown, north of the study area.

0 1500 Feet
 0 500 Meters

Water-powered industrial development was centered on two clusters of mills along the power canal of the Trenton Water Power Company, a seven-mile long waterway that mostly followed the alignment of modern Route 29, passing behind the State House and through the site of the Marriott Hotel. One industrial cluster was located around the power canal's crossing of the Assunpink, where a series of textile and other mills lined the canal and the Assunpink. The second mill cluster along the Trenton Water Power lay in the vicinity of the Waterfront Park baseball stadium and is extensively referenced in South River Walk Park.

The main line of the Delaware & Raritan Canal passes north and east of the downtown: The Feeder Canal passes just north of the core area, close to the Battle Monument, joining the main line to the north of Perry Street close to Route 1. Most of the main line of the canal within the city lies beneath Route 1 and Route 129 and is physically irrecoverable. Tying the canal to the Capital Park System can be achieved most effectively along the Feeder between Calhoun Street and main line junction, and in the area of the Bordentown Outlet into the Delaware River (in Hamilton Township). Historic interpretive signage along the canal corridor (a task whose scope extends well beyond Trenton) and pedestrian linkages from the master plan study area, as well as other components of the Capital Park System, should be sought in the park design.



Trenton Water Power

Water power provided Trenton with a key advantage in developing industry. The canal, known as the Trenton Water Power, ran directly behind the New Jersey State House.

Petty's Run and State House Common Historical and Archaeological Analysis

Petty's Run and the State House Common contain a trove of archaeological resources buried below the surface. The process of creating the park will include an archaeological component, and resources can become a theme of park design. In the State House Common/Petty's Run area, the following archaeological resources exist:

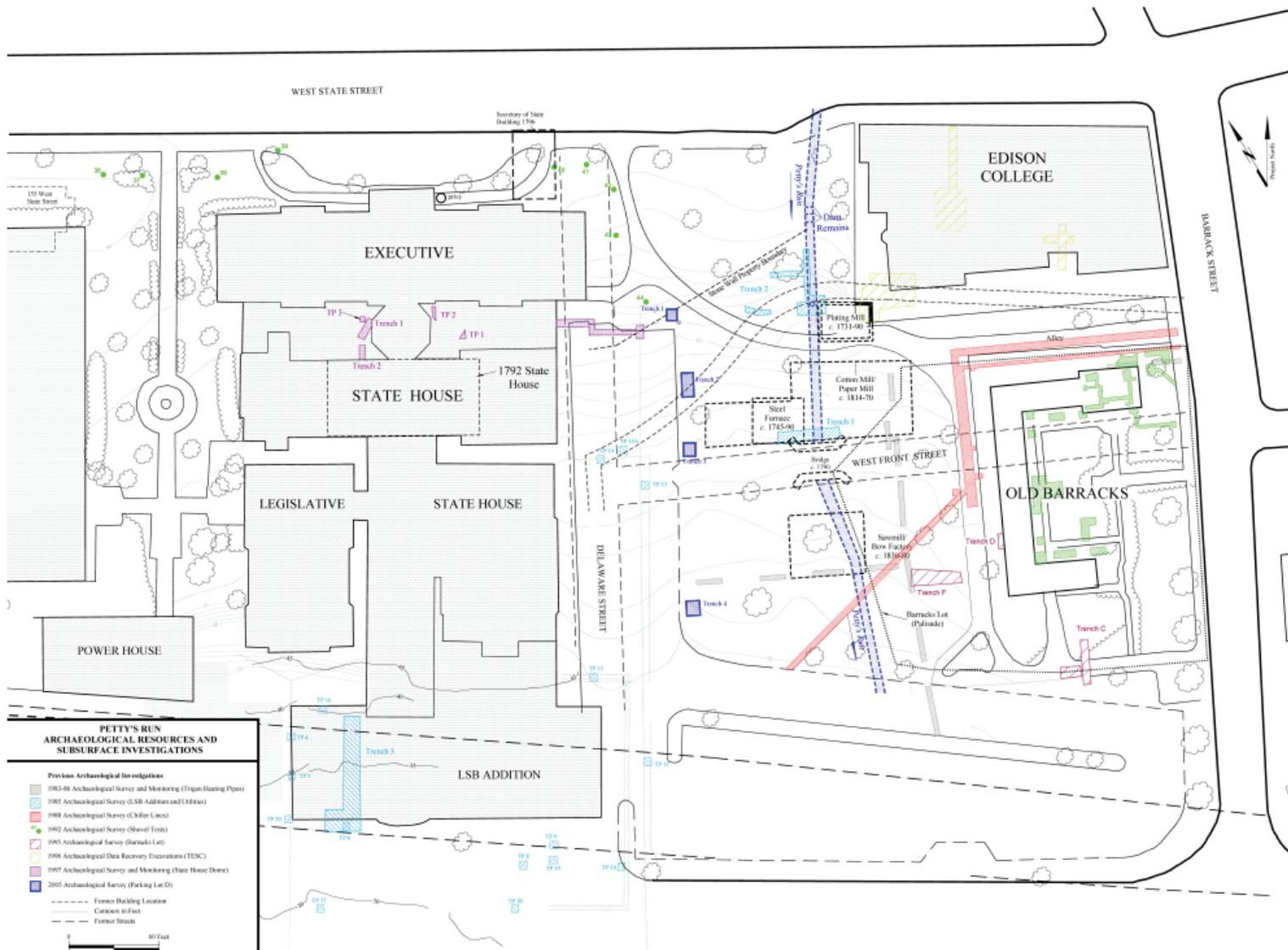
- **Petty's Run** is a buried stream that provided water power to Colonial-era Trenton and was placed in a stone channel that is intact.
- **West Front Street Bridge** spanned Petty's Run and is currently at least partly intact and buried. It was erected in 1792 to improve access to the newly built State House.
- **Harrow/Yard Plating Mill** manufactured plate metal goods and edge tools beginning in the 1730s. Munitions were made here in the Revolutionary War era. Substantial remains of this structure are known to survive below ground.
- **Yard Steel Furnace** was one of only five documented steel furnaces in the American colonies in 1750: substantial foundations of this building are believed to exist below ground.
- **Fithian Cotton Mill/Davisson Paper Mill** was Trenton's first cotton mill and was installed on the site of the Yard Steel Furnace around 1812.
- **Native American artifacts** have been uncovered in previous digs and provide evidence of early human settlement in this area.



Mill Ruins Park, Minneapolis, Minnesota

- **Residences** that lined the extension of West Front Street through the late 19th century left foundations and traces that exist below the surface of the ground.
- **Trenton Water Power canal** is currently buried on the site and is an archaeological resource.
- **Offices of the Secretary of State and the Clerk of the Supreme Court**, New Jersey's first office building, lies beneath the sidewalk in front of the State House. The outline of this building will shortly be delineated in the sidewalk and an interpretive sign erected.

The archaeological condition of this area is not completely known. Substantial portions of mill foundations and other features have been found in several locations, but the overall subsurface picture still has many blank areas. A carefully constructed program of archaeological exploration is recommended, keyed to serve park design needs and to answer specific historical and archaeological questions. Because it would take place in such a highly visible section of downtown Trenton, this exploration will inevitably arouse considerable public interest. The necessary archaeological exploration should be treated as a heritage tourism opportunity; visitors and school children should be engaged in the discovery process through public programming that could include viewing platforms, displays, site tours (coordinated with Old Barracks, New Jersey State Museum and State House programs), presentations, and media events. Videotaping of the archaeological work in progress



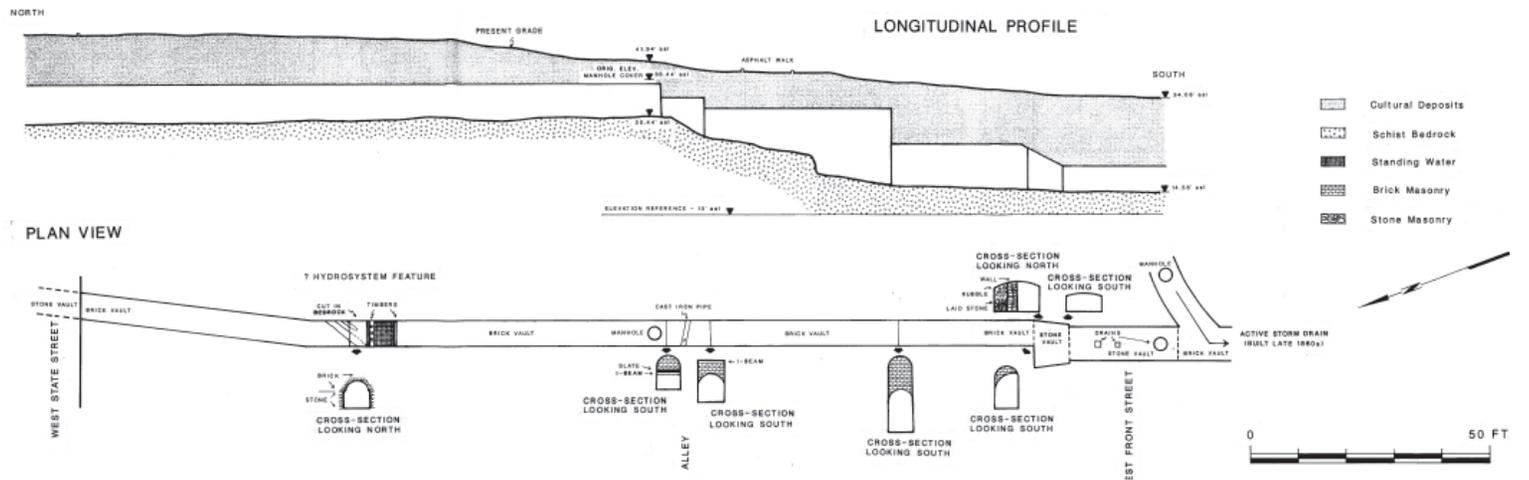
Petty's Run Archaeological Resources and Subsurface Investigations

Several archaeological sites exist along Petty's Run, including the 18th Century remains of a plating mill, steel furnace, and the West Front Street bridge over the creek.



Archaeological Investigation of Petty's Run

In the 1980s and 1990s, during construction activity at the State House and Thomas Edison State College, archaeological excavations were performed along Petty's Run, which uncovered the remains of several historic structures, including the Harrow / Yard plating mill and the Yard Steel Furnace.



may provide raw material for a film about the park and perhaps also serve as a mitigation measure.

Near-term archaeological exploration should focus first on the Petty's Run culvert and West Front Street bridge, then on the plating mill, and finally on the steel furnace. Depending on the park design and its implementation, archaeological exploration and investigation could conceivably be spread over several years and eventually extend into the area west of Petty's Run.

Long-term programming and staffing for the Petty's Run archaeological remains could be provided by the Old Barracks and/or the New Jersey State Museum. Key themes in the historic interpretive development of this area should be:

- Simple and visually appealing explanation of colonial-era water-powered industry and iron and steel making;
- Relationship of the plating mill and steel furnace to the Old Barracks, including the probable production of metal goods for the British Army (c.1758-76) and the Continental Army (c.1776-81); and
- Westward extension of West Front Street through the Barracks and over Petty's Run to provide access to the State House.

This archaeological "node" within the park will provide a compelling counterpoint to the historical attractions of the New Jersey State House and the Old Barracks and offer expanded potential for educational

programming and exhibits. The development of design concepts for the archaeological remains along the Petty's Run corridor can draw on similar displays of foundations and masonry ruins in other cities, such as Minneapolis and Richmond.

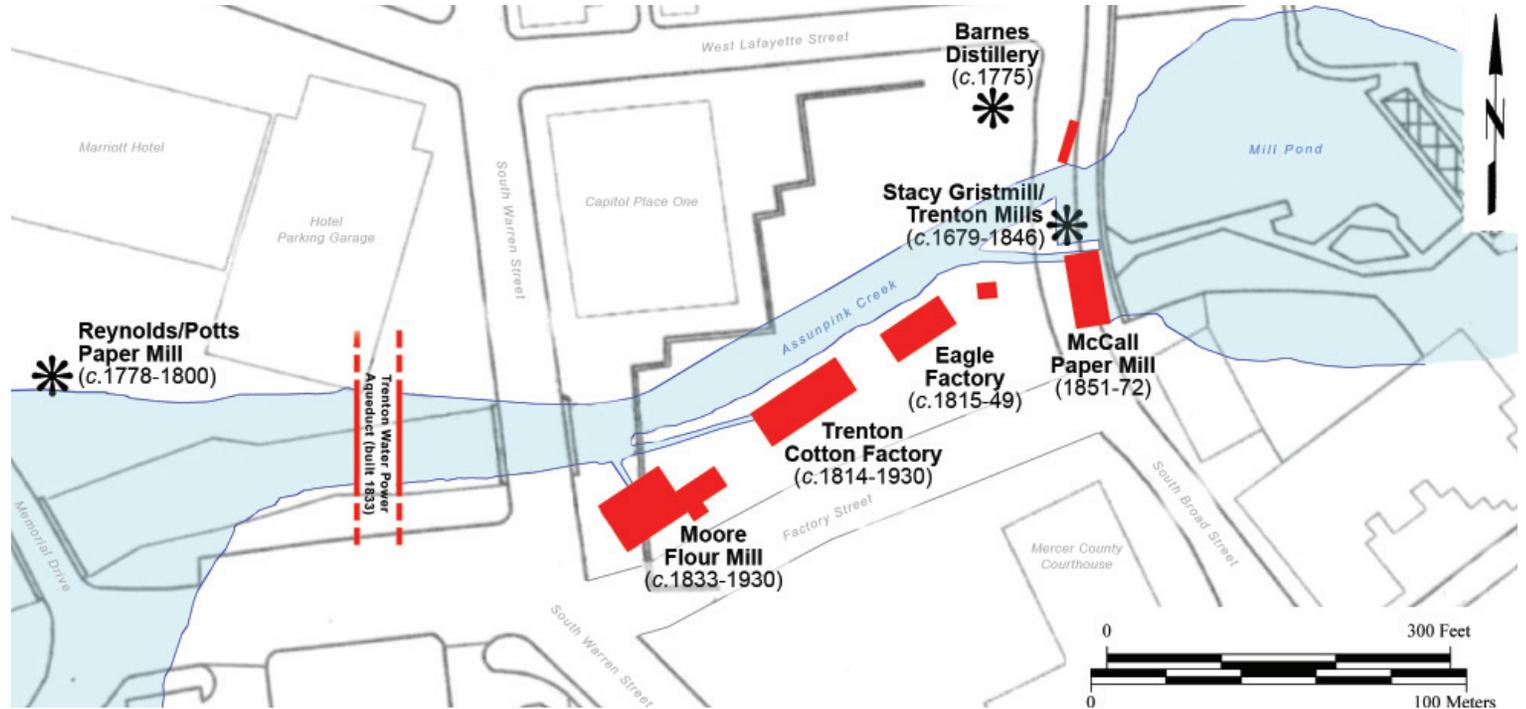
The park design will also seek to preserve, promote, and enhance the historical qualities of the surrounding historic buildings, including the New Jersey State House complex, the Old Barracks, the Thomas Edison State College campus, the Trenton War Memorial, and buildings along the north side of West State Street and the east side of Barrack Street overlooking Mahlon Stacy Park, including the Masonic Temple and Old Masonic Lodge. Many of these are important civic amenities and heritage tourism attractions in their own right.

The archaeological resources of interest are buried at depths of between roughly three and twenty feet below existing grade. The structural stability of the Petty's Run culvert, the West Front Street bridge, and multiple foundations remains in question. Archaeological exploration will need to be combined with engineering studies to ensure the feasibility of exposing and interpreting specific historic masonry features. The feasibility of introducing a controlled flow of water and one or more waterwheels into the daylighted Petty's Run, to bring to life the various water-powered industrial operations that historically occurred along this stretch of the stream, is an option that requires serious consideration. A potential side benefit of daylighting Petty's Run is that this action can



Petty's Run Culvert

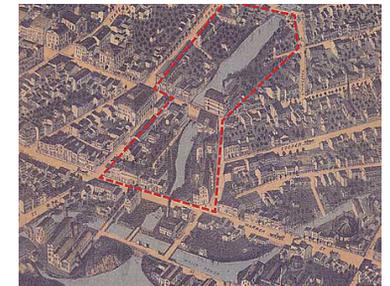
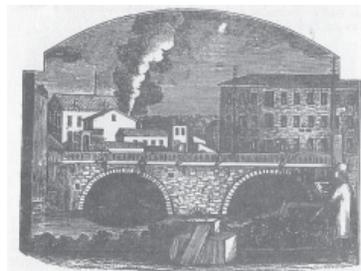
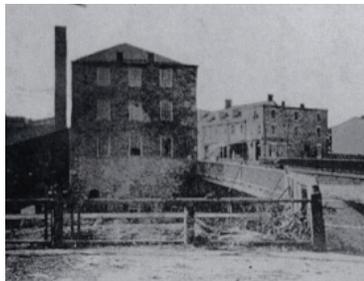
Petty's Run today runs in a stone and brick culvert. The condition of this structure must be evaluated prior to opening the stream to daylight.



Key Archaeological Properties along the Assunpink Creek

Mills and factories once lined the banks of the Assunpink. The remnants of these structures can inform the design of the park.

From left to right: the McCall paper mill, erected on the footings of the Trenton Mills; Illustration of the South Broad Street Bridge with second arch; the Assunpink at the South Broad Street Bridge c. 1870; Bird's Eye View of Trenton in 1874.



improve security along the east side of the State House by inserting a moat-like obstruction in the landscape.

Assunpink Creek Archaeological and Historical Analysis

The City of Trenton originated around the South Broad Street crossing of the Assunpink Creek. Following the course of an Indian trail and known historically by many different names (the Bordentown Road, Queen Street, Greene Street), South Broad Street converged on this key point in the landscape where schist outcropped in the creek bed, providing a spot where the river could be forded and water power could be harnessed for industrial development. Mahlon Stacy's gristmill, erected here in 1679, was the economic underpinning for Trenton's initial growth. A bridge existed here from the late 17th century. The lower Assunpink remained a vital focus of milling activity into the late 19th century. The crossing point was the principal focus of the Second Battle of Trenton, fought on January 2, 1777, the second of three key engagements in turning the tide of the Revolutionary War in the so-called "ten crucial days" (the others being the First Battle of Trenton on December 26, 1776, and the Battle of Princeton on January 3, 1777).

Except for the South Broad Street Bridge, there are no above-ground features surviving in today's cultural landscape that reflect the role of the Assunpink in Trenton's rich history. The connections to this heritage can be forged in the park design, however, by reference to the lay of the land

(topography and drainage) and through archaeology that reveals the following resources (listed from upstream to downstream):

- **Stacy Gristmill/Trenton Mills:** This was the site of Mahlon Stacy's first gristmill, erected in 1678-79, soon succeeded by William Trent's mills, the largest merchant mill in all of New Jersey in the early Colonial period. Vestiges of the mill building, probably dating from the 18th century, are visible in the creek's south bank.
- **South Broad Street Bridge:** This historic bridge was the location of fighting during the Second Battle of Trenton and could be a potential setting for reenactments. A second arch for the mill race supplying water power to the Eagle Factory is probably buried in the embankment.
- **Barnes House and Distillery:** The home and distillery of Loyalist John Barnes, located on the north bank of the Assunpink just downstream of the South Broad Street Bridge, may have some archeological expression. George Washington stayed at this house between the First and Second Battles of Trenton.
- **Eagle Factory:** Established in 1814-15, the Eagle Factory was Trenton's first real attempt at large-scale cotton manufacture during the period when the United States sought to develop its own domestic manufacturing base. At its peak, the factory included a large five-



Waterwheel

A reconstructed waterwheel in Cordoba, Spain, demonstrates how the river provided power for early mills..

story main brick factory building, the remodeled gristmill and a number of other structures.

- **Trenton Cotton Factory/Wilson Woolen Mill:** A neighbor and competitor of the Eagle Factory, the Trenton Cotton Factory was located immediately downstream of the latter mill, drawing on essentially the same water power source.
- **Moore Flour Mill/Trenton Roller Mills:** Situated adjacent to and downstream of the Trenton Cotton Factory, it was one of the original mill sites developed following the construction of the Water Power in the early 1830s.
- **Trenton Water Power Aqueduct over the Assunpink:** The abutments of the aqueduct are the only substantive visible remains of the Water Power system in the city, a critical element in the mid-19th-century industrial development of Trenton that continued in use into the early part of the 20th century.
- **Potts Paper Mill:** Situated in the rear yard of the Marriott Hotel and established in 1778 by Stacy Potts and John Reynolds, this was the first paper mill in the city and is notable as a supplier of paper to New Jersey's first newspaper, the New Jersey Gazette, printed in Trenton by Isaac Collins.

Delaware Riverfront Archaeological and Historical Analysis

The Delaware riverfront is comprised mostly of fill on which highways and minimal parkland have been created. A concrete retaining wall along the riverbank dates from the Mahlon Stacy Park period in the early 20th century. The Calhoun Street Bridge dates from the 1880s and is listed on the National Register of Historic Places.

There are no major anticipated archaeological resources in this area and no historic architectural items of concern/interest, aside from the two bridges over the Delaware and the concrete retaining wall. Possible items for interpretation include:

- **The falls of the Delaware:** Geography and geology (for example, discussion of the importance of Wissahickon schist as the basis for the falls and a source of building stone)
- **Fording the river:** The route is still traversable at low water. The ford exists because of the geology of the area
- **Crossing the river by ferry:** Ferries were located above the Calhoun Street Bridge and below the Amtrak rail bridge on either side of the falls.
- **Crossing the river via bridge:** The earliest bridge dates back to 1804-06 on the site of the "Trenton Makes" bridge. This same bridge later became the first rail bridge over the Delaware River (c. 1840).

- **Fishing at the falls:** The island used to be known as Fishing Island (also Lottery Island, Yard's Island, Gravel Island).
- **Trenton's water supply:** This supply was historically dependent on pumping water from the Delaware into reservoirs. The first pump house was just south of the Calhoun Street bridge; its pumps were driven by the Trenton Water Power system. The present-day filtration plant is the culmination of 150+ years of development in the city's water supply system and could be the centerpiece of a fascinating historical narrative about Trenton's relationship with the Delaware River.



Trenton Bridge — From Above.
Robert Montgomery Bird 1826.

Trenton was an important crossing of the Delaware River. The riverfront below the State House was still rural in the early 1800s.



View of the State Capitol

The New Jersey State Capitol could have a grand presence on the riverfront.

Civic Gatherings

The park will provide a place to host civic gatherings, performances, and events.

Photos, from top to bottom: Public Square, Nashville, Tennessee; "Waterfire", Providence, Rhode Island; Bicentennial State Park, Nashville, Tennessee.



Park Programming

New park programs should be designed to attract park visitors on a more frequent basis than special events and at times when the park is not heavily used. In addition, public programs can connect the park to the history of the Capitol Complex and the City of Trenton and the adjacent cultural and civic organizations.

A regular program of frequent events, such as concert, lecture, and film series, could attract a new constituency to the park and better serve the city, county, and state as a whole. New public programs should:

- Be done in partnership or cooperation with an existing cultural, educational or tourist institution.
- Provide information, education, and entertainment.
- Be more than a one-time event.
- Impact the park less than a special event.

A number of smaller parks have developed innovative programs besides large special events that meet the above goals for public programs. Case studies of their programs are included in the Park Management and Operations section of the Appendix.

No active recreation programs (i.e., organized sports) are expected to occur in Capital Park.

Cultural Resources and Needs Analysis

To provide a context and foundation for the development of Capital Park's design vision and collaborative programming likely to be developed by existing organizations, a cultural needs assessment and market analysis was developed. The key findings emerging from project research and interviews follow.

Existing Park Programming

The proposed Capital Park has six existing cultural organizations/sites within its vicinity: the New Jersey State Museum, Old Barracks, State House, State Library, State Archives and War Memorial. Interpretation of Trenton's history is a major theme of these institutions. History will be one of the critical themes of Capital Park. History programming and historic sites interpretation will however need expansion and better coordination for the success of Capital Park. In addition, introduction of a diverse range of additional programs, such as art and environmental science, will also draw an even broader audience to the park.

Demographic Analysis

Given the large regional population and the high levels of education (the best indicator of cultural participation) in the surrounding areas, Capital Park should focus on becoming a regional attraction as well as a resource for city residents. Park programming should appeal to a wide range of ages, groups, and income levels in order to serve the diversity of audiences in the area. School groups are a likely source of visitors.

The extraordinary numbers of tourists that visit New Jersey also present a significant opportunity, provided that amenities such as restaurants, retail, and parking can be provided in the immediate area of the park.

Key Informant Interviews

Interviews with market-knowledgeable individuals provided the following findings:

- Interviewees feel that Trenton has sufficient cultural resources, but they need to be better packaged and marketed. The programmatic activity that existing cultural organizations could bring to the park is perceived as the biggest opportunity.
- There is a fundamental lack of coordination between the cultural institutions in Trenton that could be addressed as part of this park project.
- A wider audience could be attracted, but there are two key barriers: lack of visitor amenities and a largely negative perception of downtown Trenton.
- Cultural leaders know which audiences they want to target but need marketing support to address the lack of awareness.

Needs Analysis Summary

There was no consensus among those interviewed on a specific type of programming or program element that should be introduced, although there was some initial public reaction in favor of addressing environmental education.

Residents and tourists want a lively campus of activities so that they can “make a day of it.” **There must be a critical mass of engaging cultural, recreational, and other activities.** In order to support park improvements and stimulate attendance, Trenton must be perceived as welcoming to visitors and as offering all the necessary visitor amenities, especially **improvements in parking, retail, restaurants, and way finding.**

In order to draw the widest audience possible to the park, it is important to present a diverse park program. It will be necessary to develop cross-cultural links, universal themes, and engaging programming in order to attract a wide diversity of audiences from Trenton and the region. Interpretation that makes sense in the context of the community and the park may be explored so that it may include other histories and perspectives in addition to the current Revolutionary War focus.

A formal organizational structure will be required to plan, coordinate, and execute the dynamic and engaging programs necessary to appeal to diverse audiences and to compete with other leisure attractions in the area. There are a variety of approaches to this issue as existing cultural organizations generally reported a willingness to be involved should their organization be compensated appropriately.

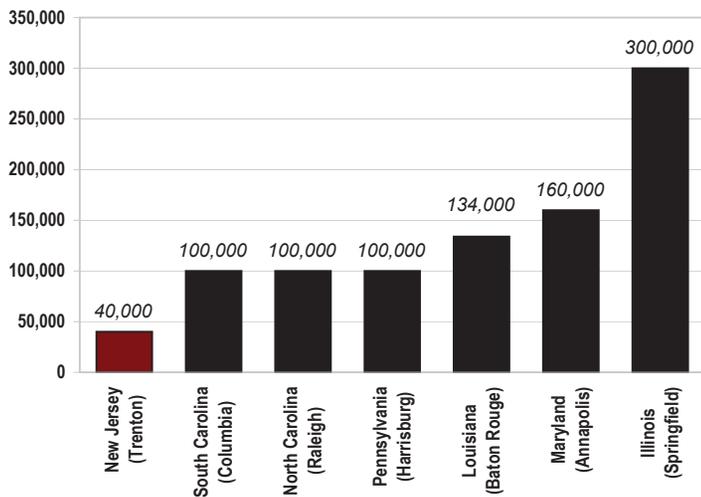
Trenton’s image must be redefined to draw more tourists and visitors. The general public currently does not know what Trenton has to offer nor does it perceive it as a destination of any kind. People believe that Trenton is not safe and do not want to visit because of the perceived threat. The overall image of Trenton and by extension the park must be redefined as a safe and welcoming place in order for the park to have regional appeal.

Financial and programmatic sustainability will be critical to the success of the park. There are numerous organizations in Trenton that are interested in and capable of collaborating to ensure the new park is properly programmed. Funding for this activity will have to be incremental to existing budgets. Income-generating program elements could be developed to support the sustainability of the park in the long term. The socio-economic make-up of the region is such that park activities should be priced to accommodate every price point.

The State House as a Major Attraction

The state capitol is a major resource for Trenton. Visitors from all points make stops at the capitol, but visitation could be even greater than today. For example, the New Jersey State House currently receives approximately 40,000 visitors each year. By comparison, the Pennsylvania State Capitol receives about 100,000. As shown in the accompanying graph, figures from other state capitols suggests that the State House could see dramatically more visitors than it does today. However, such an increase in visitation will only come about with a carefully coordinated marketing program and increased hospitality measures, such as a visitors center.

State Capitol Visitors



Capital Park Precedents

Other state capitol complexes and major urban waterfront projects offer useful benchmarks for Capital Park. Conclusions drawn from this effort are that:

- Trenton’s waterfront setting, while not unique among all capitals, is one of the few settings so close to a major water body.
- Few other capitals have taken advantage of the range of options open to Trenton to include the capitol complex in urban waterfront revitalization.
- The proximity and wealth of natural, historic, and cultural resources distinguishes Trenton.
- Of those capitol complexes studied, Indianapolis, Indiana, is by far the most successful in creating a diverse range of civic tourist attractions and linking the capital complex and those attractions to a river with a coordinated open space plan.
- Although unable to connect to its adjacent Cumberland River, Nashville, Tennessee, has created a major monumental interpretive park focused on state history as a catalyst to revitalize an under-developed former industrial area.



Capitol Visitors Center

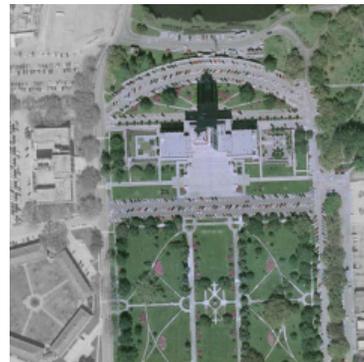
In order to increase visitation to the State House, the existing welcome center (left and center) could be enhanced to become a true visitors center similar to the Texas State Capitol visitors center shown at right..

Capital Park Precedents (Same Scale)

1	2	3	4
5	6	7	8
9	10	11	12



- 1/2. New Jersey State House
- 3/4. Harrisburg, Pennsylvania
- 5/6. Columbia, South Carolina
- 7/8. Baton Rouge, Louisiana
- 9/10. Raleigh, North Carolina
- 11/12. Springfield, Illinois



- Providence, Rhode Island, has linked its capitol complex to a highly successful riverfront revitalization project.
- Annapolis, Maryland, benefits from its seafaring heritage, location on the Chesapeake Bay waterfront, and the close proximity of high quality urban neighborhoods.
- Richmond, Virginia, has recently developed a major visitors center, and has relied upon a civic open space approach as a defining framework for new development within the Capitol Square.
- Harrisburg, Pennsylvania; Sacramento, California; St. Paul, Minnesota; and Albany, New York, are all examples of capitol complexes set too far from their nearby water courses to have a strong, useful connection.
- Boston, Massachusetts' state house is defined by its location next to major civic open space on Boston Common, and adjacent to the renowned Beacon Hill and downtown.
- Washington, D.C., is an example of a capitol setting that serves the larger symbolic purpose very well, but not the municipal and neighborhood level.

In summary, the Capitol Complex in Trenton appears to have a significant opportunity to take advantage of its riverfront setting. Having done so, the catalytic effect should position the city as one of the top state capitals in terms of its livability and tourist attraction capability.



State Capitol Visitation

Statistics from other state capitols suggest that potential exists to increase visitation to the New Jersey State House..

New Jersey State House

The State House creates a dramatic profile when seen from the proposed State House Common..

Mobility and Access

Access to Capital Park is critical to its success. This section presents the existing conditions and analysis of the transportation infrastructure that supports Capital Park.

Vehicular Circulation

At the present time, a system of one-way streets, expressway ramps, and a lack of through street connections constrain vehicle access to the park, especially for visitors. Traditionally, the State Capitol Complex has been focused on and oriented toward West State Street from the mid-19th century onward; however, from the 1790s through the 1840s, the “front” of the State House was toward the river. The riverfront side is now treated as the back door, providing secondary entrances, services, and parking. The Route 29 expressway has reduced vehicle access to this side of the complex by removing the local access function of the riverfront road. The expressway concentrates traffic at just three interchanges in downtown Trenton, which causes congestion, especially at Calhoun Street. The closing of the Barrack Street connection to Memorial Drive makes circulation in the area of the War Memorial difficult, because going around the block is no longer possible.

Downtown Trenton has a system of one way streets: West Front; North and South Warren; North and South Broad; and West Hanover, among others. This greatly complicates circulation for tourists, who usually navigate with a poor understanding of the downtown street layout, and

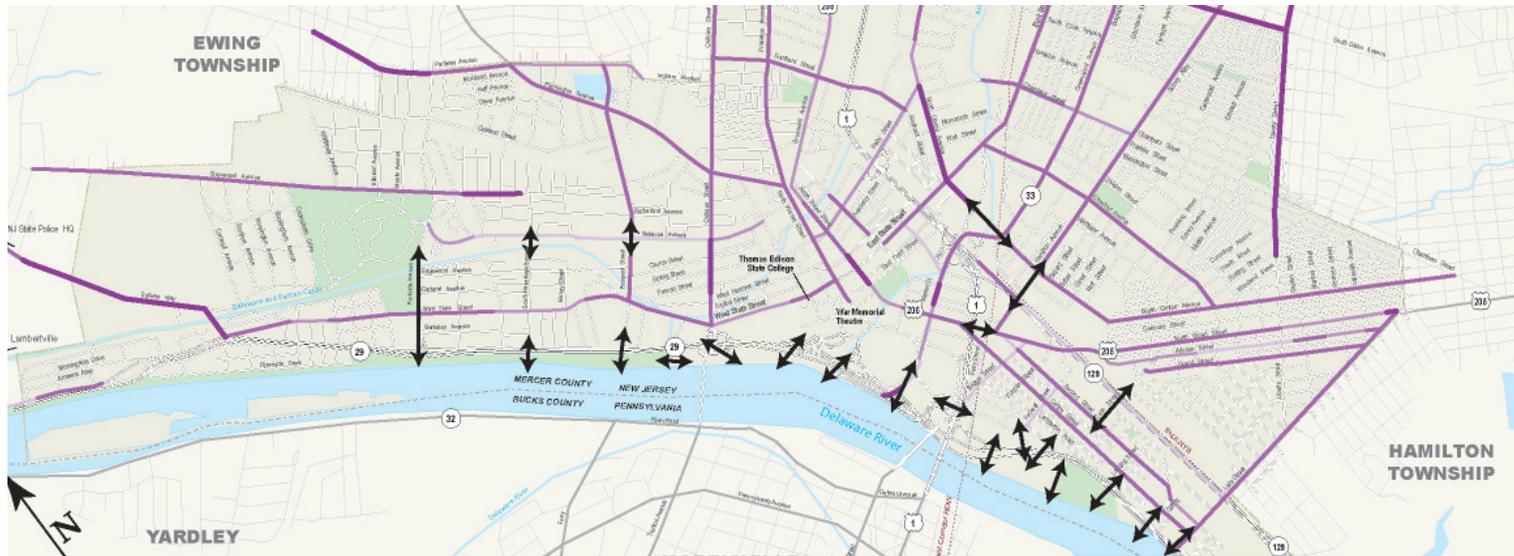
makes on-street parking much more difficult because “going around the block” is often not possible. For example, if a motorist misses the entrance to state Parking Lot 5, just south of the War Memorial, there is no way to go around the block to return to that entrance; it is only accessible from the off ramp from Route 29.

Pedestrians and Bicyclists

At the present time, sidewalks on city streets are the primary pedestrian connections to the Capitol Complex area from the surrounding neighborhoods. The main access streets are Barrack, West Lafayette, South Warren, South Broad, West State, and Calhoun. These streets provide varying levels of pedestrian amenity, with the best pedestrian infrastructure located near Mill Hill Park and along State Street. Further from the civic core, walking conditions tend to deteriorate.

- No bicycle paths, walking trails, or on-street bicycle lanes currently lead to the park.
- The riverfront is almost completely inaccessible to city residents because it is blocked by the Route 29 highway.

The park is near the D&R Canal path, which is closest to the park where it crosses Calhoun Street, approximately a half block north of West State Street. There is no formal connection, however, from the canal to the Capitol Complex other than the sidewalk of Calhoun Street.



Existing Bicycle Level of Service and Missing/Weak Pedestrian and Bicycle Links

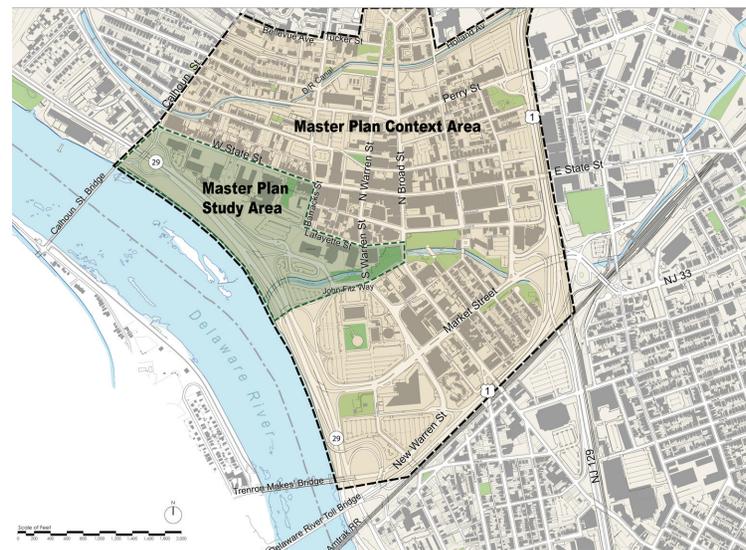
The waterfront is mostly inaccessible, so new connections are needed. Source: Trenton Transportation Master Plan, 2004.

Legend

- Bike Routes (Level of Service)
- D
- C
- B
- A
- Missing Bike and Pedestrian Linkages

The Assunpink Creek flows through the park area in either a steep and mostly inaccessible channel or an underground culvert. There is no trail along the creek within the Capital Park area, although Factory Street/ John Fitch Plaza provide a sidewalk roughly parallel to the water for part of its length.

The Delaware and Lehigh (D&L) Canal path across the river in Pennsylvania can be reached via the Calhoun Street Bridge or the “Trenton Makes” Bridge, but the connection is currently very tenuous because of the configuration of the Calhoun Street interchange. The bridge over the river is reachable via a narrow sidewalk that follows Calhoun Street over Route 29, but the walking conditions are not pleasant or safe because of heavy traffic and vehicular crossings.



The “Trenton Makes” Bridge also offers a sidewalk connection over the river to Morrisville. Connections to this bridge will be improved as part of the realignment and reconstruction of the bridge approach that is being undertaken by the Delaware River Joint Toll Bridge Commission to

facilitate redevelopment of land owned by the City of Trenton at the foot of the bridge.



Bus Stop

Bus stops are located within walking distance of the park. Stops could be upgraded with additional route and schedule information.

A portion of the original Stacy Park remains in place north of the water treatment plant (outside of the Capital Park study area). This remaining park offers some access to the Delaware waterfront via an inconvenient pedestrian bridge over Route 29, but despite close physical proximity, this park cannot be reached from the Capitol Complex at the present time

because Route 29 does not offer any pedestrian or bicycle connections. The planned reconstruction of Route 29 will add a shared use path that makes this connection.

To the south, the Delaware River waterfront cannot be reached from the park by following the river. The only route currently available is via city streets to Waterfront Park, the baseball stadium, and South River Walk Park.

Many historical sites in Trenton are reachable from the park via city local streets. Markers and signs do exist to locate and describe some historical sites and attractions; however, there is not a coordinated system for tourist wayfinding. A walking route connecting the train station to

East State Street through Mercer Cemetery could be a potential tourist attraction.

Transit

Currently there are 11 bus lines that run through or within a few blocks of the park site. The following issues impact transit service to the park:

- Present service is geared toward weekday, commuter service. Operating frequencies would need to be increased during evenings, weekends, and times when events take place to support expanded attractions.
- Successful pedestrian realms greatly increase the effectiveness of transit.
- The origins of potential park users will need to be analyzed and routes adjusted to ensure successful transit service.
- While current routes are near the proposed park, service directly adjacent to or through the park would be a significant improvement.

River Line Proposed Extension

The long range transportation plan of the Delaware Valley Regional Planning Commission lists the extension of the River Line from the train station to the state capitol as a transit project. New Jersey Transit completed an environmental assessment for this project in 2001. The proposed route would connect the train station to the State House via South Clinton Avenue and East and West State Street. At the present time there is no funding identified to complete the project. The park planning process considered other River Line extension routes.

State Street Transit Routes

The frequency of buses on State Street offers significant transit access between the train station and within two blocks of the proposed park. New Jersey Transit routes 601, 606, 608, and 609 have been branded “The Capital Connection” and serve as an interim River Line extension. These routes operate seven days per week, starting between 6:00 and 7:00 am. These four routes provide access between the Trenton Rail Station, New Jersey Department of Environmental Protection, Trenton City Hall, New Jersey State House, and the New Jersey State Museum between every two minutes and every fourteen minutes on weekdays until 10:00 PM, with additional sporadic service until 1:30 am. Saturday service operates approximately every ten to fifteen minutes until 6:00 PM, with service continuing until approximately 1:00 am. Sunday service operates approximately every fifteen minutes until 12:30 PM, with continuing service until 12:30 am.

While it would be possible for some routes to be diverted from State Street to pass by the War Memorial, this would increase overall travel times and remove service from the commercial corridor. This is especially true for westbound service, which would have to make a series of left turns. Instead of modifying routes, pedestrian infrastructure between the park and State Street could be upgraded and wayfinding signs increased. In addition, the uphill route from the park to State Street suggests amenities such as benches and trees.



Existing Transit Routes

Existing transit routes serve the park on West State Street, South Warren Street, and South Broad Street.



River Line Extension Options

The River Line light rail line could be extended to Capital Park and beyond. The preferred route follows State Street, but alternatives might exist as shown on this diagram. Right of way would need to be reserved to allow for these alternatives.

Broad/Warren Streets Transit Routes

NJ Transit routes 409, 602, 603, 604, 607, and 611 operate on Broad and Warren Streets (which are one-way as they pass through the proposed park). These routes would not be diverted easily given existing and proposed street grids. As such, they should probably remain as they are with additional weekend and evening service provided. Route 604 and 611 travel on Market Street, so they would need to be rerouted as that area redevelops.



Light Rail

The River Line terminates at the Trenton train station, but could be extended into the city.

Route 29 Transit Routes

Presently there is no bus service on Route 29, but possibilities will emerge in the future when the road becomes an urban boulevard.

Parking

Parking provides accessibility to visitors, residents, and commuters using the park and the state Capitol Complex. This section analyzes the existing parking supply and identifies the key issues to be considered.



Market Street Transit Routes

NJ Transit routes 604 and 611 and SEPTA route 127 operate on Market Street in the proposed riverfront development area.

Downtown Parking Context

The following information on the current parking context within Trenton's downtown district is taken from the ongoing analysis being conducted for the City of Trenton by DMJM Harris.

Parking Inventory

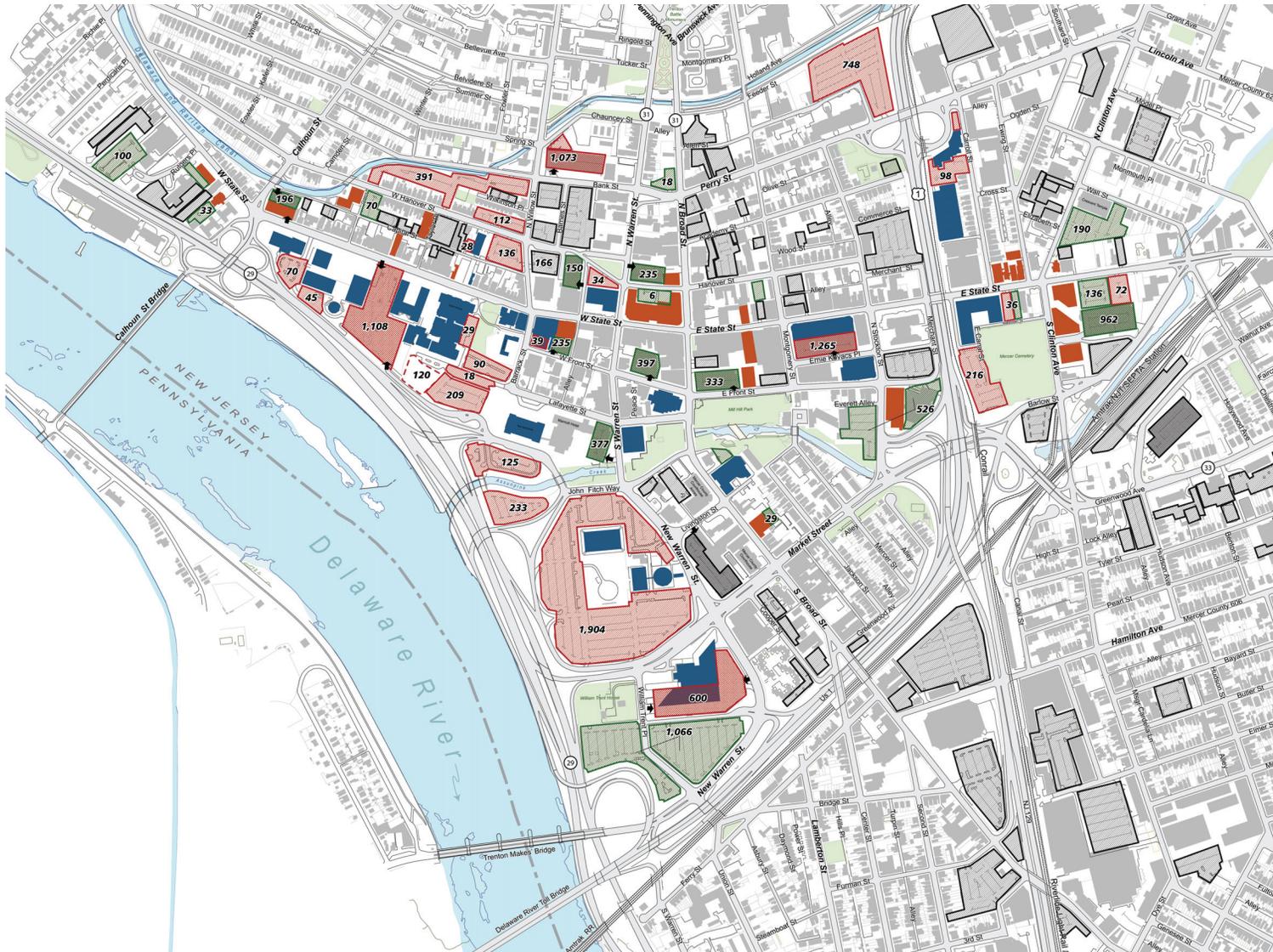
The downtown area contains more than 20,000 off-street parking spaces. This total includes approximately 11,500 structured parking spaces, many of which are owned by the State of New Jersey and the Trenton Parking Authority (TPA). Surface parking lots occupy a substantial amount of land downtown, comprising a large swath of land roughly surrounding the proposed Capital Park.

State Parking Usage

The State of New Jersey is by far the largest user of off-street parking in the downtown area. According to the Downtown Trenton Parking and Sidewalk Study, authorized state parking takes up more than 70 percent of structured spaces and more than 80 percent of surface lot spaces.

State Employee Parking Policy and Practice

Current state policy provides parking permits to no more than 62 percent of total employees at any agency. In theory, such a standard should limit the amount of required parking inventory and encourage alternative commuting modes. In practice, however, many state workers simply park on-street, taking up spots meant for business and recreational users. This spillover pattern is exacerbated by a lack of state employee commuter



Parking Map

Much of central and downtown Trenton is used for parking. Most of the parking is used by the State.

Legend

-  State owned surface parking
-  State owned parking garage
-  State leased surface parking
-  State leased parking garage
-  Other surface parking
-  Other garage parking
- 1,904** # of State parking spaces
-  State owned building
-  State leased building

benefits programs, as well as limited on-street parking enforcement in the downtown area.

Individual state agencies are allowed to rent additional parking spaces for their employees. Several agencies have been doing so in recent years, particularly as an incentive for new employee recruitment. As a result, the overall percentage of downtown state employees who have permit parking has risen to more than 80 percent.



On-Street Parking

Because of weak enforcement and low prices, on-street parking is difficult to find. Much of the on-street parking is used by commuters and is therefore not available for visitors.

State Lot Occupancy

Some parking capacity may be available in the State leased and owned parking inventory on a daily basis, not including estimated vacancies in the State House

Garage. This situation suggests the opportunity for shared parking.

The State House Garage occupancy varies by time of day, with excess capacity on evenings and weekends, suggesting the opportunity to use this garage for parking for War Memorial events or civic functions held in the park.

State Transportation Demand Management Policy and Practice

The State provides no centralized ride-matching, vanpooling, or transit subsidies for its employees. This lack of travel demand management efforts increases the level of employee parking demand.

On-Street Parking

Overall, the availability of on-street parking appears very limited. Study surveys found a relatively high incidence of excessive long-term parking at several on-street parking locations in the downtown area. Other key survey observations include:

- 90 percent of all legal on-street spaces were occupied.
- Over 90 percent of metered spaces were occupied.
- Over 80 percent of occupied spaces had expired meters.
- About 50 percent of vehicles at meters were displaying handicapped placards.
- 75-80 percent of vehicles had not moved after two hours, despite time limits of two hours or less.

Key Parking Study Conclusions

- Existing state-controlled surface lots comprise much of the land available for development in the downtown area.
- Some off-street facilities have excess capacity, but available information is inadequate to fully assess that capacity.
- Downtown contains insufficient short-term public parking.
- Enforcement of on-street parking regulations is inconsistent.
- Existing on-street parking is not market-priced, resulting in long-term parkers making the spaces inaccessible for short-term users.

- The current lack of enforcement of downtown parking regulations suggests an opportunity to dramatically increase the availability of street parking for visitors, given new priorities.

Current Parking Supply in the Capital Park

The Capitol Complex includes the following parking facilities within the Capital Park master plan study area:

Lot	# of Spaces
State House surface parking lots (Areas 1 and 1A)	317
Executive Parking Area	29
Grass Parking Area	120
War Memorial – (Area 5 - North of Assunpink)	125
War Memorial – (Area 5A -South of Assunpink)	233
State Museum (Area 6A)	45
Department of State (Area 4)	70
State House Garage	1,108
Total Parking Spaces	2,047

Some of this surface parking will be removed in phases as the park is constructed. The park plan includes strategies for accommodating parking demand in existing and new facilities, as discussed in the following chapter.

A Riverfront for Cars

Parking and highways are the principal land use between the State House and the Delaware River.



The State House Garage

The State House Garage has 1,108 spaces. According to the original bonds used to construct the garage, it was intended to be fully open to the public but has rarely been available for this purpose. Some state employees who have assigned parking within the garage park outside on the surface lots. The garage occupancy varies by time of day, with excess capacity on evenings and weekends. It has two entrances, one facing West State Street and one facing the Delaware River. There is concern about providing adequate security for the garage, including the provision of check points during periods of heightened security.

War Memorial Parking

The War Memorial is an important destination in Trenton. Currently, War Memorial visitors can use state parking lots during evenings and weekends. The park plan addresses accommodation of these visitors when existing parking lots are removed.

Tour Bus Loading and Parking

Many visitors to the Capitol Complex arrive by tour bus. There is a need to provide bus drop-off areas convenient to attractions and the proposed Visitors Center, as well as a place for buses to park for the day. The bus staging area should provide amenities for bus drivers.



The State House Garage

The State House Garage holds over 1,100 cars but is not open to the public currently. It presents a grim wall over 500 feet long facing the riverfront.

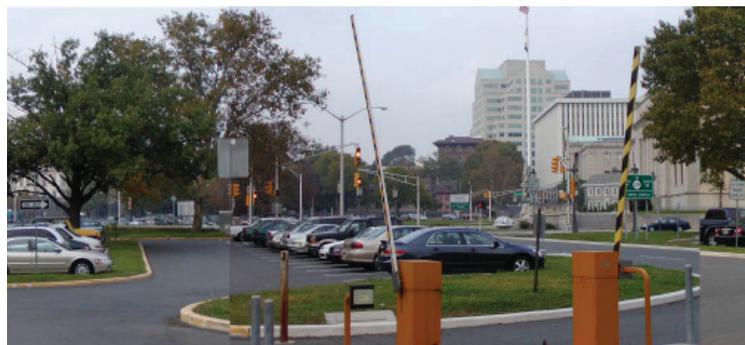
Bus Loading

Tour groups arrive at the park on buses which must have a place to load and park.



Surface Parking

Surface parking has replaced Mahlon Stacy Park adjacent to the New Jersey State House. This parking is used by state employees, visitors, and for events at the Trenton War Memorial.



The Regulatory Process

The consultant team analyzed the regulatory environment of the master plan and identified opportunities to streamline permitting and funding. Many projects in downtown Trenton proposed by state, county, local, and federal entities are proceeding on parallel, but not necessarily connected, tracks. In the absence of a convening entity such as NJDEP intervening to change the current process, the projects within the master plan context area will proceed through their environmental approval processes independently and in isolation. If the environmental review procedures of these projects are not coordinated, federal funding opportunities will be reduced, planning efforts will be duplicated, regulatory hurdles will be higher, and opportunities for shared mitigation will be lost. An alternative approach with coordinated planning and environmental approvals is discussed in the next chapter.

Route 29 Boulevard Project

This New Jersey Department of Transportation (NJDOT) project will realign Route 29 inland and convert it from a freeway to an urban boulevard. Moving Route 29 inland is the key to the entire redevelopment of downtown Trenton as currently envisioned. Mostly funded by Federal Highway Administration (FHWA) funds, the boulevard project will follow a process compliant with the National Environmental Policy Act (NEPA). NJDOT is currently working on a feasibility assessment for this project. Early discussion with the NJDOT indicates that a Categorical Exclusion (CE) process can be used to complete the NEPA requirements.

Because this project is so critical to the development of Capital Park and related projects, it is important to provide support for the boulevard project and to provide recommendations for design, alignment, mitigation, and related matters during the planning process.

Lower Assunpink Riverfront Neighborhood

The Renaissance Plan of the Capital City Redevelopment Corporation (CCRC) and the City of Trenton's Redevelopment Plan propose to transform the state office building and parking district south of the Assunpink into a vibrant urban waterfront neighborhood. A new grid pattern of city streets will connect the city to the riverfront park and allow mixed-use development on the land currently occupied by surface parking and roadways.

The use of private funds for development does not trigger an Environmental Impact Assessment except for those studies required by NJDEP permits or City of Trenton land development ordinances. However, much of the site is delineated as in the floodplain, which substantially complicates development as discussed below.

The Renaissance Plan includes an urban code accepted by the City of Trenton. This code could form the basis for continued collaboration and articulation between the State, the City and the CCRC. Creation of new urban design guidelines will enforce the desired building program, form, and character of the district. One approach to aligning the redevelopment with NJDEP's mission is for the state to use these guidelines as the basis for enforcing an environmentally-friendly building program. To provide leverage for negotiations with the developers, the state will need to offer incentives, such as the excellent riverfront location, improved access by road and train, and availability of parks and cultural venues. All of these factors add value to the land and provide the opportunity for a quid pro quo agreement wherein the privilege of developing in this location is paid for by honoring an NJDEP guideline to build green.

This approach has already been advocated by NJDEP in the Trenton Brownfield Development Guidelines. Nationally, Battery Park City's green guidelines and Portland, Oregon's Lloyd Crossing urban district offer examples of ways that other cities have addressed similar opportunities. By providing an accountable and defensible plan for green development, NJDEP can reward new developments with exceptional or at least above standard environmental performance.

Lower Assumpink Creek Environmental Restoration Project

The USACE is currently preparing an Environmental Assessment of the Assumpink Creek day lighting project. The culverted portion of Assumpink Creek has been made a high priority because a portion of the culvert collapsed. A recently completed structural evaluation report concluded that the remainder of the culvert structure has been damaged by corrosion and overstressing and poses a hazard that should be removed. Accordingly, the USACE Philadelphia District is scheduling coordination meetings to support a Draft Environmental Assessment. The Assumpink Creek Greenway project is being driven by EPA and is a brownfield remediation project.



Floodplain Regulations

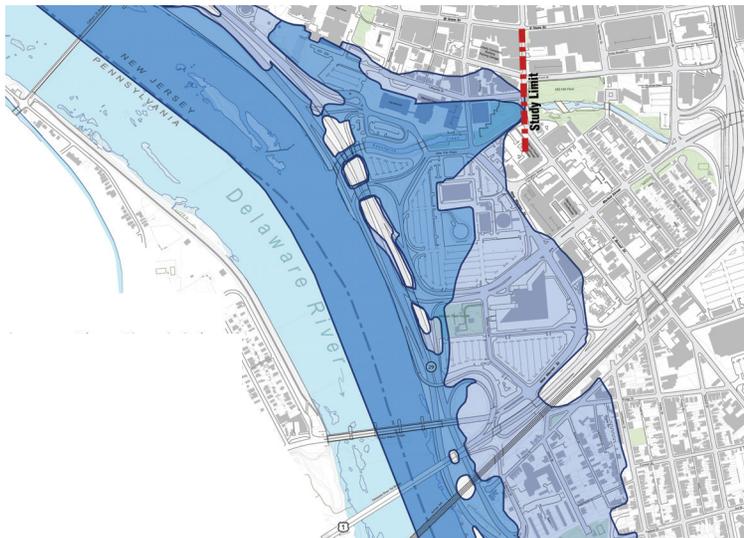
Under the current Flood Hazard Area Rules (NJAC 7:13), placement of fill in the 100-year flood zone is regulated. A portion of the master plan is located within the 100 year flood zone based on available Federal Emergency Management Agency Flood Hazard Area delineation and maps obtained from the NJDEP Bureau of Dam Safety and Flood Control. In the Delaware Basin, applicants for floodplain management permits are allowed up to 20% net fill. In other words, the current volume of flood storage capacity in the flood hazard area cannot be reduced by more than 20 percent through placement of structures or fill.

Assumpink Creek Culvert and Channel

The Assumpink Creek has been much abused in Trenton, running in a concrete culvert next to Capital Place One (left) and between high concrete walls as it passes under Route 29 (right). The U.S. Army Corps of Engineers is proposing to restore portions of the creek.

Floodplains

The Delaware River has overflowed its banks several times in the recent past (right). Much of the park lies within the 100 year floodplain (bottom).



Legend

- 100 Year Floodplain (Zone AE)
- 500 Year Floodplain

Proposed new rules (NJ Register October 3, 2006) involve extensive rethinking of approaches to flood plain management. The new rules take away the provision of 20 percent net fill. The proposed rules also establish a riparian zone (see proposed NJAC 7:13-10-2) and provide guidance within that zone that addresses changes to vegetative cover or placement of minor structures independent of the issue of filling. It would be prudent to use a 150 foot buffer for the Delaware River within the master plan area (since it may be considered an endangered species habitat) and a 50 foot riparian zone for the Assunpink Creek.

The Capital Park design vision provides more green space along the river and the Assunpink Creek that would increase the flood storage capacity and adhere to the current or the proposed rules. It would be beneficial to coordinate the master plan with other projects such as Route 29 realignment and mixed-use riverfront development for permitting purposes. This would provide benefits in terms of floodplain management rules since portions of the project will remove fill and others, such as the riverfront development, may need to add fill to raise the land out of the floodplain to allow for new construction.

Security

Recent world and local events have changed our view of security requirements. Additional security related measures are required to meet the changing threat environment. Security policies and procedures are being redefined to accommodate these new threats. The post 9/11 world has redefined our susceptibilities to acts of terror. The recent tragic events at Virginia Tech and the sniper shootings in Virginia, Maryland, and the District of Columbia emphasize our collective need to reevaluate our approaches to security. These dramatic events are in addition to already documented events such as theft, vandalism, and other malicious acts directed at individuals, groups, and institutions. The process of meeting security requirements, needs to be refined to minimize the potential damage any of these acts may cause to our citizens, representatives, or local treasures without unduly compromising the civic freedoms we enjoy.

In May, 2002, the State of New Jersey retained VITETTA, a multidisciplinary architectural and engineering firm, to conduct a security assessment of the state capitol campus facilities. Completed in December 2003, the comprehensive report identified areas that should be addressed to upgrade the security of the campus. Recommendations include items to enhance security via landscaping, parking, site access, building entrances, interior and exterior enhancements, and security planning. The study utilized existing threat categorization processes and considered the overall threat to the Capitol Complex as medium. This

level was determined based upon the hypothetical catastrophic outcome of an explosive event.

The consultant team reviewed the VITETTA document and conducted a walking tour of the campus. The team also met with representatives of the New Jersey State Police, Homeland Security Branch, and the New Jersey Park Police. Demonstrations and theft are considered the most likely events requiring a security response to occur on and around the Capitol Campus. The VITETTA study provided recommendations which provide safeguards for these events. The overall study recommendations are sound security practices and provide for a more safe and secure work environment. Implementation of the recommendations should be continuous.

There are plans to increase bollards along West State Street and to add security improvements to the existing executive parking. The on-going projects to install bollards along West State Street will maximize stand-off distances from each facility and also protect the facilities from out-of-control (or not) vehicles. Archaeological exploration and interpretation of the Petty's Run area would provide a better aesthetically sensitive option to create a security buffer from the east side of the State House than bollards.

A primary area of concern is the public perception of Trenton as unsafe. Although the study area has infrequent crime, the likelihood of an event just one block to the north is higher. The 2004 crime statistics (based upon 2005 FBI data) rated crime per 100,000 people as greater than

the national average. Other crime statistics show Trenton consistently above the national averages. Money Magazine, however, rated Trenton Metropolitan Statistical Area as a good place to retire. Since the Capital Park study area is safer than other areas of the city, no additional policing activities appear to be warranted. However, if parking is provided remotely from the study area, additional measures may be required to better safeguard visitors to the area.

Security Related Issues and Opportunities

- The visitors' entrance to the existing welcome center has restricted access. The current entrance is via the State House and requires security screening and a long, disorienting walk through subterranean corridors.
- Visitors perceive a security problem in Trenton in general. The perception of Trenton as unsafe is based on real incidents that occur mostly in the neighborhoods surrounding downtown. Researching these areas for additional crime concerns is beyond the scope of this master plan.

Utilities and Structures

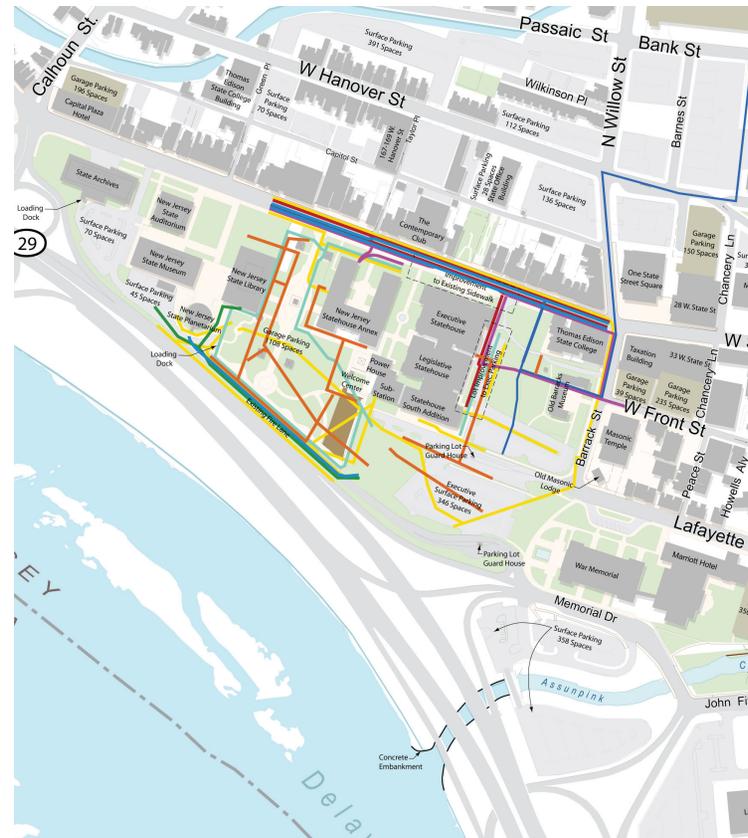
Utility Locations

Known utility locations compiled from maps collected to date by the consultant team are shown on the diagram at right. At the present time, some utility locations remain unknown, especially the locations of sanitary sewers. Utility maps of steam lines, storm drains, and some existing conditions maps of the State House Complex showing the location of utilities were obtained from the Division of Property Management and Construction. A list of these maps is included in the Appendix.

The consultant team was not able to get permission to enter the Petty's Run culvert to ascertain the structural condition of the culvert, its make up, and current status as a storm drain. Confined space training and an entry permit will be required in the future to assess the condition of this culvert. The existing conditions information for the Petty's Run area is based on the previous explorations and research carried out by master plan subconsultants Hunter Research Inc. in the mid-1980s. The exact alignment of the Petty's Run culvert/storm drain north of West State Street is not known because a City of Trenton survey map for this area cannot be located. The approximate location of the storm drain as it proceeds south to the Delaware River is shown on some plans. The location of this outfall as well as its correct alignment below the State House parking lot will need to be verified in future phases of work.

State House Garage Engineering Assessment

The Department of the Treasury and its team of consultants conducted a flood damage assessment and recommended improvements study of the existing State House Garage in November, 2007. Included among the recommendations, is a proposal to the State Capitol Joint Management Commission to relocate the mechanical systems from the old substation (Power House) building to the current location of the Welcome Center, due to subsurface flooding problems (Option 4). This proposal is not finalized. Relocation of the mechanical systems would allow for consideration of demolishing part or all of the Power House to create a connection from West State Street to the State House Common. Findings of engineering assessment will need to be taken into further consideration as they relate to the vision of the Capital Park into the subsequent phases.



Utilities

Underground utilities run through the Capital Park. The locations of some underground utilities remain to be determined.

Legend

- Electric
- Gas
- Storm
- Sanitary
- Storm-Sewer
- Water
- Telecommunications
- Fire Loop

