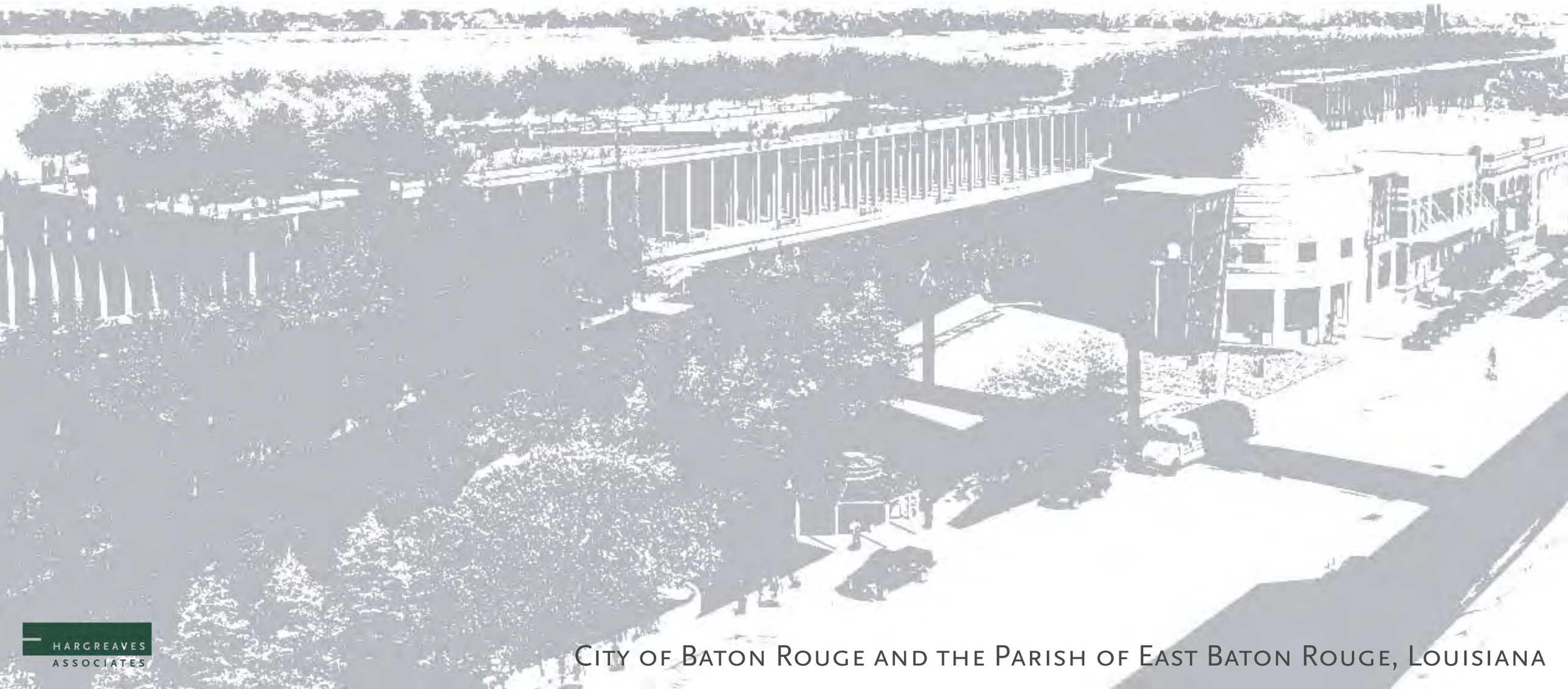
Reconnecting to the River

Baton Rouge Riverfront

2006 Master Plan Concept



HARGREAVES ASSOCIATES

City of Baton Rouge and the Parish of East Baton Rouge, Louisiana

Will O'Halloran

MAYOR MELVIN L. "KIP" HOLDEN

Dear Baton Rouge,

It is with great pleasure that we present the Master Plan for the New Baton Rouge Riverfront Project. For nearly a year, we have been working with architects and planners to create a unique design for a dynamic riverfront to serve as an economic engine for downtown development and for the economy of our entire parish. The Mississippi River is the front door to Baton Rouge, and we sought to create a design that would bring all of you back to see and experience the beauty and power of this great river in a setting alive with public activity.

In order to design a plan that will redefine what Baton Rouge is and envision what Baton Rouge will be, we hosted a number of public forums to afford opportunities for citizen input to the riverfront design process. Through these meetings, we were able to gather that although our citizens believe the Mississippi River is a defining landscape for our city and parish, they feel that it is not really visible from within the city and it is not being utilized as it should be. Through the Design and Planning Selection Board process, the design team of Hargreaves Associates was chosen to develop a concept which would provide the groundwork for extensive revitalization of our riverfront and reconnect our city with the river, making it attractive to citizens and visitors alike.

The new riverfront plan incorporates a series of terraces that would be built out over the Mississippi River, affording areas for hosting outdoor activities such as concerts, sporting events and art shows. The design additionally incorporates functionality and ease of use for daily jogging, eating lunch in the park or a place to take our children and grandchildren to play. With the revitalization of the riverfront in both the public and private sectors, the plan will incorporate flow of people in, through and around the downtown area to create connectivity.

As Mayor, I encourage each of you to take ownership in this project and claim it as your own. The incorporation of this project along with the explosion of development and redevelopment in the downtown area is sure to continue the path to making Baton Rouge America's next Great City.

Sincerely,

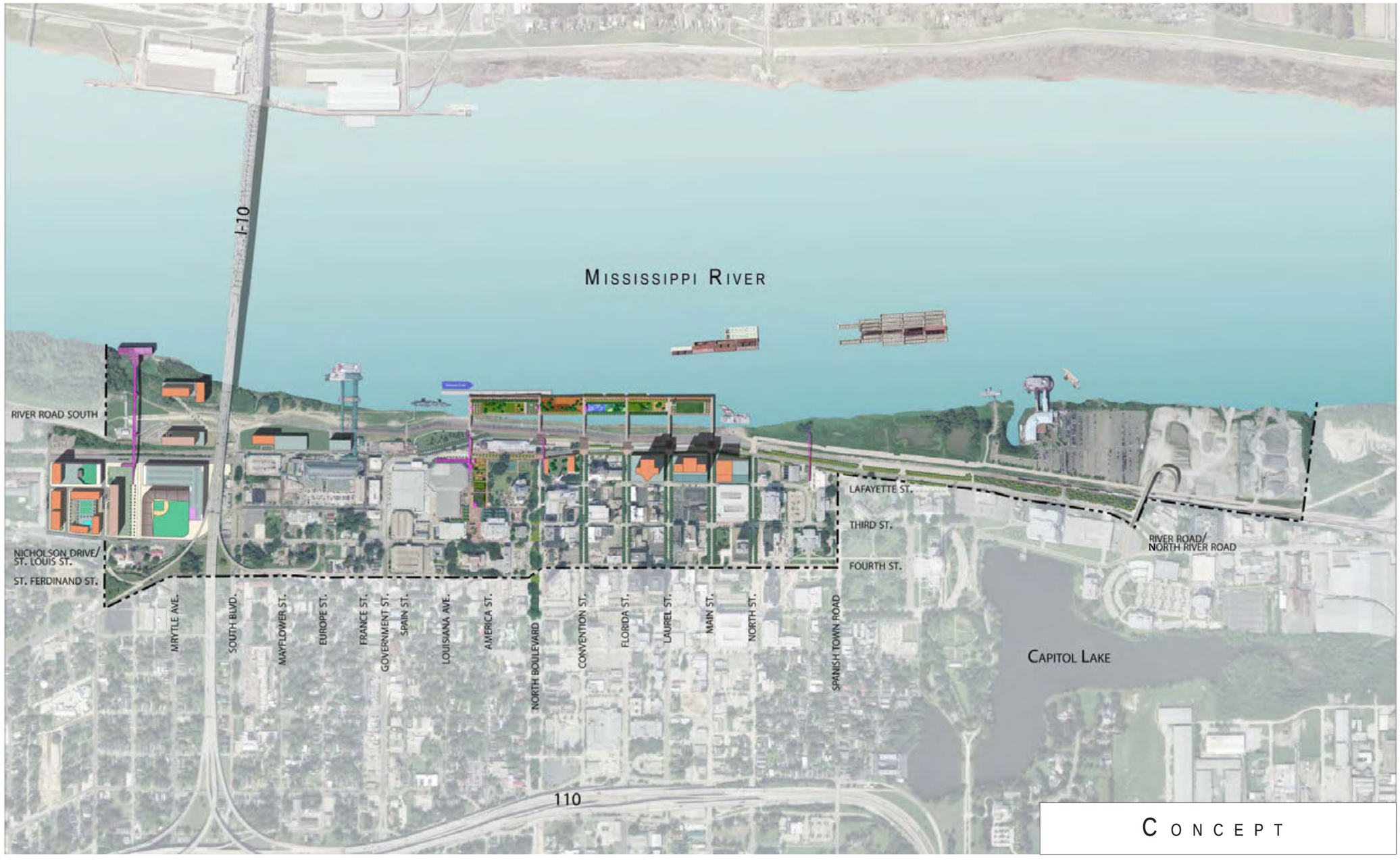
Melvin L. "Kip" Holden
Mayor-President

executive summary

The Baton Rouge Riverfront Master Plan Concept identifies opportunities and constraints for public improvements. Potential private development opportunities were explored in concert with configuring public components, both institutional and open space. The overarching approach of the collective client and consultant team is that private development activates public open space, and public open space makes private development more valuable in a mutually reinforcing relationship. As with any chicken and egg scenario, the early initiatives are often tentative from either starting point. The post-Katrina market climate has provided a significant jump start to development proposals across the parish and the region, further underscoring the need to increase activity, attractiveness and improvement of the downtown riverfront.

The concept plan balances the addition of public open space with development by encouraging development of privately held property. Under-utilized properties, vacant structures, and surface parking lots, particularly those along River Road, were thoroughly discussed with their respective owners in terms of their plans and their attitude regarding adjacent public open space programming. The product of this coordination effort is recognition that specific existing landscapes, such as the Old State Capitol Grounds, merit renovation or comprehensive reconfiguration, such as Repentance Park, to maximize their utility in channeling visitors and residents between downtown and the river. The plan differentiates between public and private development, assigning a $245 million dollar estimate (in 2010 dollars) for total project costs associated with the public improvements.

The US Army Corps of Engineers participation in the study provided immediate feedback to conceptual strategies as well as invaluable assistance with regard to interpreting governing regulations pertinent to the Baton Rouge riverfront. To significantly expand the programmable public open space of Baton Rouge's downtown riverfront, new land must be made, over the river rather than filling into the river. This strategy minimizes land and access issues with the existing rail corridor and levee, in proposing the River Terraces, shown at left.



BATON ROUGE RIVERFRONT
Baton Rouge, Louisiana

"RECONNECTING TO THE RIVER"

Eskew+Dumez+Ripple
Remson - Haley - Herpin
Robert Thomas

Economics Research Associates
CSRS
Huffan & Nichol

LEGEND

CONCEPT

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project background

Goal
Mayor Melvin "Kip" Holden and his administration conceived of The Baton Rouge Riverfront Master Plan and Conceptual Design effort to give focus to a vision for the riverfront. The over-arching charge of the effort was to develop the riverfront into a "world-class amenity," drawing both resident and visitor alike to a significantly improved urban waterfront befitting a state capital.

Objective
Building on recent positive downtown improvements, the opening of the Shaw Center for the Arts and the renovation of the Hilton Baton Rouge Capitol Center Hotel, to name but two of many notable efforts, this visioning effort would guide public and private initiatives to further improve both the image and vitality of downtown Baton Rouge. The vision would be unique and reflective of the history and culture of the City of Baton Rouge and Parish of East Baton Rouge, and above all, embrace the Mississippi River. The vision would inspire pride in the citizens of Baton Rouge as well as encourage long term private sector investment and economic development, further reinforcing the rediscovery of downtown as both a destination and residential center. The plan identifies and gives visible focus to physical public infrastructure investments which in turn help define the public landscape into which private investment will be developed.

Client
The City of Baton Rouge of East Baton Rouge Parish Administration (Administration) identified the Baton Rouge Downtown Development District (DDD) as the user-agency for the project. The DDD, in concert with the City Department of Public Works (DPW), coordinated the design consultant's work along with a parallel supporting role by the US Army Corps of Engineers (USACE) who provided partial funding for the contract. The Administration selected a Management Committee to define the scope and goals of the project:

Downtown Development District
Davis S. Rhorer, Executive Director
Brace B. Godfrey, Chairman
Derrell Cohoon, Vice Chairman
Cheri Ausberry, Treasurer
Van R. Mayhall, Jr., Secretary
Norman Chenevert
Bridger Eglin
Christine Nichols

Riverfront Management Committee
Mayor Melvin L. "Kip" Holden
Walter Monsour (Mayor's Office CAO)
Irma Plummer (Mayor's Office Assistant CAO)
Peter Newkirk (DPW Director)
Bryan Harmon (DPW Chief Engineer)
Dwight Brashear (CATS CEO)
Crystal Russell (CATS CFO)
Davis Rhorer (DDD Director)
Jeff Fluhr (DDD Assistant Director)

The mayor's administration also appointed a Steering Committee to provide feedback and direction with regard to the focus and detail of the evolving plan:

Riverfront Steering Committee
Mayor Melvin L. "Kip" Holden
Walter Monsour (Mayor's Office CAO)
Lorri Burgess (Council Representative - Downtown)
Irma Plummer (Mayor's Office Assistant CAO)
Davis Rhorer (DDD Director)
Jeff Fluhr (DDD Assistant Director)
Brace Godfrey (DDD Chair)
Dwight Brashear (CATS CEO)
Peter Newkirk (DPW Director)
Troy Bunch (Planning Commission Director)
Marsha Hanlon (Finance Assistant Director)
Bryan Harmon (DPW Deputy Director)
Crystal Russell (CATS CFO)
Boo Thomas (Center for Planning Excellence Director)
Stephen Moret (Chamber of Commerce CEO)
Paul Arrigo (Convention & Visitor's Bureau Director)
Renee Bouttee Myer (Louisiana State University)
Preston DeJean Esq (Southern University)
Dr. Bradley Ebersole (Baton Rouge Community College)

Regional Context
The landfall of Hurricane Katrina on 29 August 2005 and the long term effects of a Category 3 hurricane striking southeast Louisiana and the entire Gulf Coast region dramatically kick-started the change of perception of Baton Rouge. The influx of displaced persons due to the catastrophic flooding of New Orleans and the surrounding region catapulted the population of Baton Rouge from second to first in Louisiana in a matter of weeks. Baton Rouge became the de facto largest city in Louisiana. The massive population shift triggered rising real estate values, demand for development, and additional funding for public infrastructure. In this context, the Baton Rouge Riverfront concept essentially faced a real rather than projected demand for an updated vision for the downtown riverfront.

Project Area
The project area comprises 325 acres, stretching two miles along the east bank of the Mississippi River, with a primary focus on the area immediately adjacent to the existing River Center. From the derelict Municipal Dock to the south, to the current Aggregate Construction parcel to the north, the study area extends east to Fourth Street, and jogs irregularly across the downtown street grid. Analysis and concept evolution took into consideration preceding and continuing parallel planning efforts and proposals in overlapping areas with downtown, including proposed improvements described in the following documents:

New River District (2003)
Downtown Visitors' Amenity Plan (2003)
Plan Baton Rouge (1998)
Riverfront Master Plan (1990)

Assets
The concept plan focused on improving pedestrian connectivity between existing and anticipated riverfront assets, particularly those clustered around the Baton Rouge River Center. The 2005 opening of the Shaw Center for the Arts joined the Old State Capitol, the Louisiana Art and Science Museum/Planetarium and Plaza (LASM), and USS Kidd Nautical Museum in a loose constellation of cultural institutions immediately adjacent to the River Center. While the existing pedestrian bridge from the River Center connects to the existing levee bike path and Riverfront Plaza fountain, there is a prevailing attitude that these institutions are generally viewed independently and largely segregated by dangerous roadways or non-inviting streetscapes.

The renovated Hilton is anticipated to bring an influx of visitors to this area in late summer 2006, further ratcheting up the need for improving the public environment. The Capitol Park Visitors' Center further north is complete, but not yet open, though integrating access beyond to the full riverfront and downtown will be necessary to maximize its contribution to Baton Rouge. Construction is slated to begin in the short on the 19th District Judicial Courthouse on North Boulevard, which will daily generate significant foot traffic once completed. Other anticipated downtown assets still in search of an address include a flagship downtown Library, a prominent new Chamber of Commerce, and a Riverfront Transit Center. The long dormant Municipal Dock, and as yet under-utilized Baton Rouge Water Works, are two particular downtown development parcels at key locations, among many other private sector parcels, in need of push to move forward as part of larger vision for Baton Rouge.

Potential Amenities
The Management Committee anticipated that a number of potential private sector development opportunities would include additional restaurants, residential units and commercial ventures. The planning effort would look for other potential opportunities to locate singular riverfront or downtown amenities, including a Children's Museum, a AA or AAA minor league baseball stadium, and a 3,000 to 3,500 seat covered amphitheater. The concept would address standard pedestrian and landscape components, particularly water features, as well as a broader analysis of the riverfront landscape ecology. The concept would need to address an improvement in transportation, both along River Road and along the river itself. The removal of some existing riverfront amenities, or their reconfiguration, was anticipated for the Municipal Pier, the Riverfront Plaza and stage, Repentance Park, and potentially for aspects of the current levee improvements.

Destination
The riverfront is viewed as an appropriate destination for major civic events, and has the potential to be utilized by the various institutions, such as the River Center, as an extension of their respective venue for expanded public gatherings. In such instances, accommodations for increased pedestrian access across River Road to the river, event infrastructure and restroom facilities are needed.

North Boulevard Town Square Design
The design consultant was charged with evaluating the current concept for North Boulevard Town Square, described in the preceding Downtown Visitors' Amenity Plan, in the context of the Shaw Center and impending new Courthouse project. Adjustment to the concept would take into consideration pedestrian connections between the Third Street 'entertainment district' and the Baton Rouge River Center, and on to the riverfront itself.

Considerations
The Baton Rouge Riverfront Master Plan and Conceptual Design would assign a phasing strategy or package sequence for construction, along with master plan-level cost estimates for each package. The aforementioned Katrina event has caused construction unit costs to skyrocket across the country, but particular so in southeast Louisiana due to scarcity of labor and materials. Assignment of a watertight cost estimate for a master plan vision is difficult at best in this context, given great variability in terms of when particular packages may be built and wild unpredictability of construction costs across the region.

The Mississippi River rises and falls according to a reasonably predictable seasonal pattern, between an average of elevation 6 and elevation 36 each year. This thirty foot fluctuation in river height necessarily impacts the construction of any permanent structures in the floodway.

Getting to the river, by either foot or car, is critical to experiencing the reconfigured riverfront. The study must focus on improving the circulation of pedestrians and vehicles to enhance the physical and perceptual experience of accessing the new riverfront.

The Management Committee set an aggressive project schedule of five months from authorization to complete the scope of work, with an additional time span for drafting and producing the final concept document. The timeline for the study has followed the following milestones:

RFQ published	**5 August 2005**
Interviews	**4 October 2005**
Selection Notice	**5 October 2005**
Proposal submitted	**17 January 2006**
Authorized	**31 January 2006**
Management Kickoff	**2 February 2006**
Analysis Public Presentation	**22 March 2006**
Approach Public Presentation	**25-26 April 2006**
Concept Public Presentation	**7-8 June 2006**
Document Delivery	**31 August 2006**

In addition to the public presentations, the DDD configured an interactive project website to solicit public comments and suggestions regarding the direction of the project. The website input is available for review at the DDD office. The DDD also orchestrated a series of small focus group meetings with a number of institutional and private sector stakeholders to glean greater detail on specific aspects of their respective projects.

Consultant Team

The Hargreaves Associates-led team included specialized engineering subconsultants for limited conceptual brainstorming and local knowledge of particular project components.

Hargreaves Associates	**Prime, landscape architecture**	**Cambridge Massachusetts**
Eskew+Dumez+Ripple Architects	**Urban design**	**New Orleans, Louisiana**
Remson Haley Herpin Architects	**Public facilitation**	**Baton Rouge, Louisiana**
Moffatt & Nichol Engineers	**Marine engineering**	**Raleigh, North Carolina**
Economics Research Associates	**Economics**	**Chicago, Illinois**
CSRS	**Civil engineering**	**Baton Rouge, Louisiana**
Robert Thomas	**Ecology**	**New Orleans, Louisiana**

City Provisions

City of Baton Rouge provided site aerials and oblique images of the study area, as well as significant GIS/CAD data sets suitable for planning purposes, including topography, infrastructure, utilities, right of ways, jurisdictions. The US Army Corps of Engineers provided additional data regarding river-related topics including flood data, river traffic and levee constraints

All engineering, preliminary cost estimating services, and economics were provided through a parallel contract, under the direction of the US Army Corps of Engineers by Baton Rouge-based G.E.C., Inc. (GEC).

creative connectivity

passionate about the riverfront

summation of initial public comments

Repentance Park and Old State Capitol grounds as the "front door of downtown"

"Openness"... walking, roaming and open space sightseeing

Bike & pedestrian access TO the riverfront

Restaurant at the Municipal Dock

Lengthen the levee paving for walking-running-cycling along the river

Professional minor league baseball park

Magnificent "water art" fountain

Small trash bins

Public gardens

Unique retail or restaurant @ Municipal Dock

Retail or restaurants @ Maritime I & II

Carousel or Ferris wheel

A good maintenance plan

Amphitheater

Labyrinth

Restaurants

Skate park and concessions

Consistency of design vocabulary
Outdoor theater and concerts

Pedestrian-friendly downtown

Downtown theaters, department stores, supermarket

Save historic structures

Covered performance venue

Secure and clean the batture @ Municipal Dock

A "batture arboretum"

"Pedestrian friendly" routes to the levee

Small ferry between Port Allen and East Baton Rouge

Promote growth toward LSU

Raise and encase the rail tracks along the riverfront

Public boat launch

Happy to see some planning happening

Concessions

Shaded benches along the levee

Parking near the levee

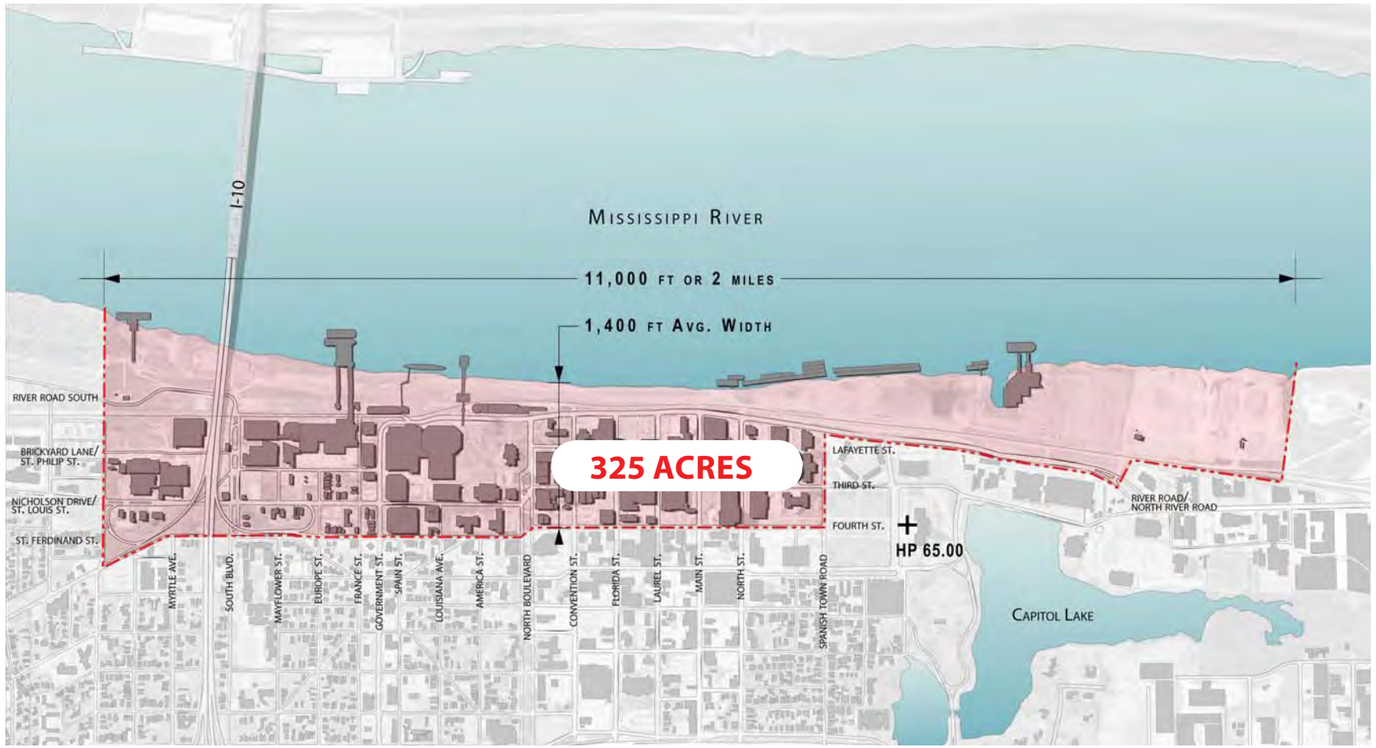
Artist lofts

Light rail trolley

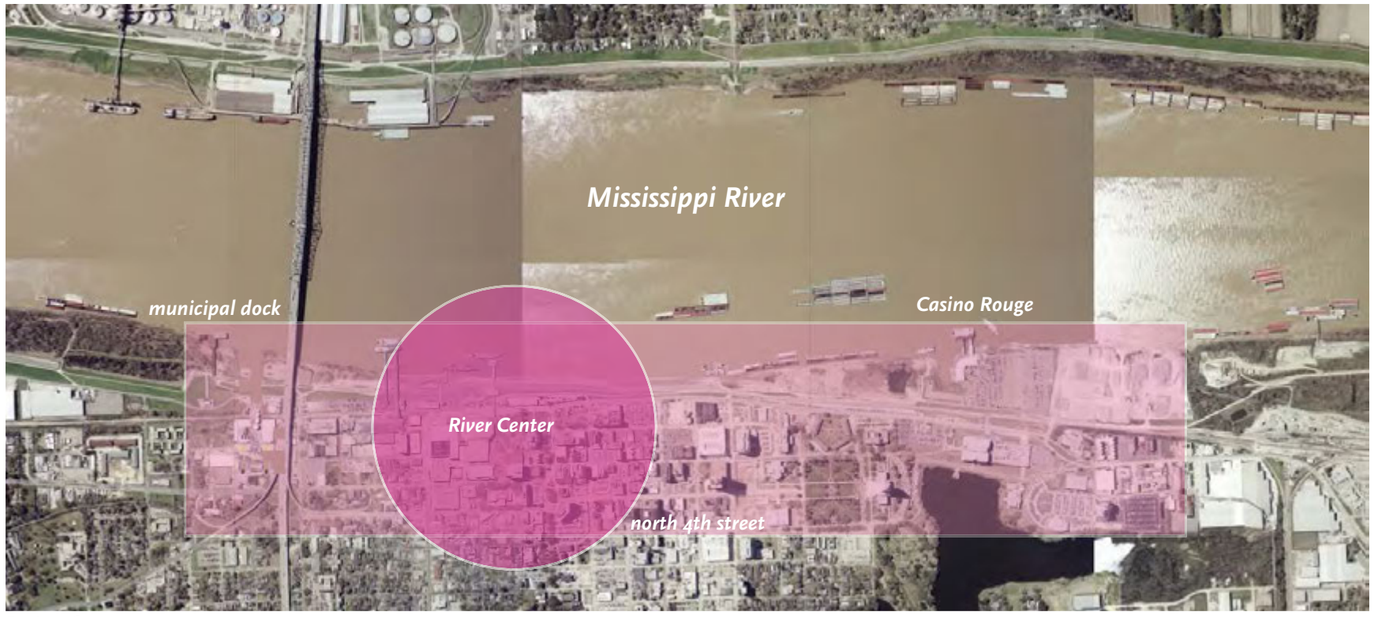
Deck Program:
- Natural turf lawn
- Synthetic grass surfaces
- Gardens
- Courts
- Riverfront promenade
- Park furniture
- Sprayground
- Playground
- Miniature golf
- Volleyball
- Climbing wall
- Concession
- Bike rental
- Dog run
- Skate park
- Fishing
- Running circuit

2

analysis



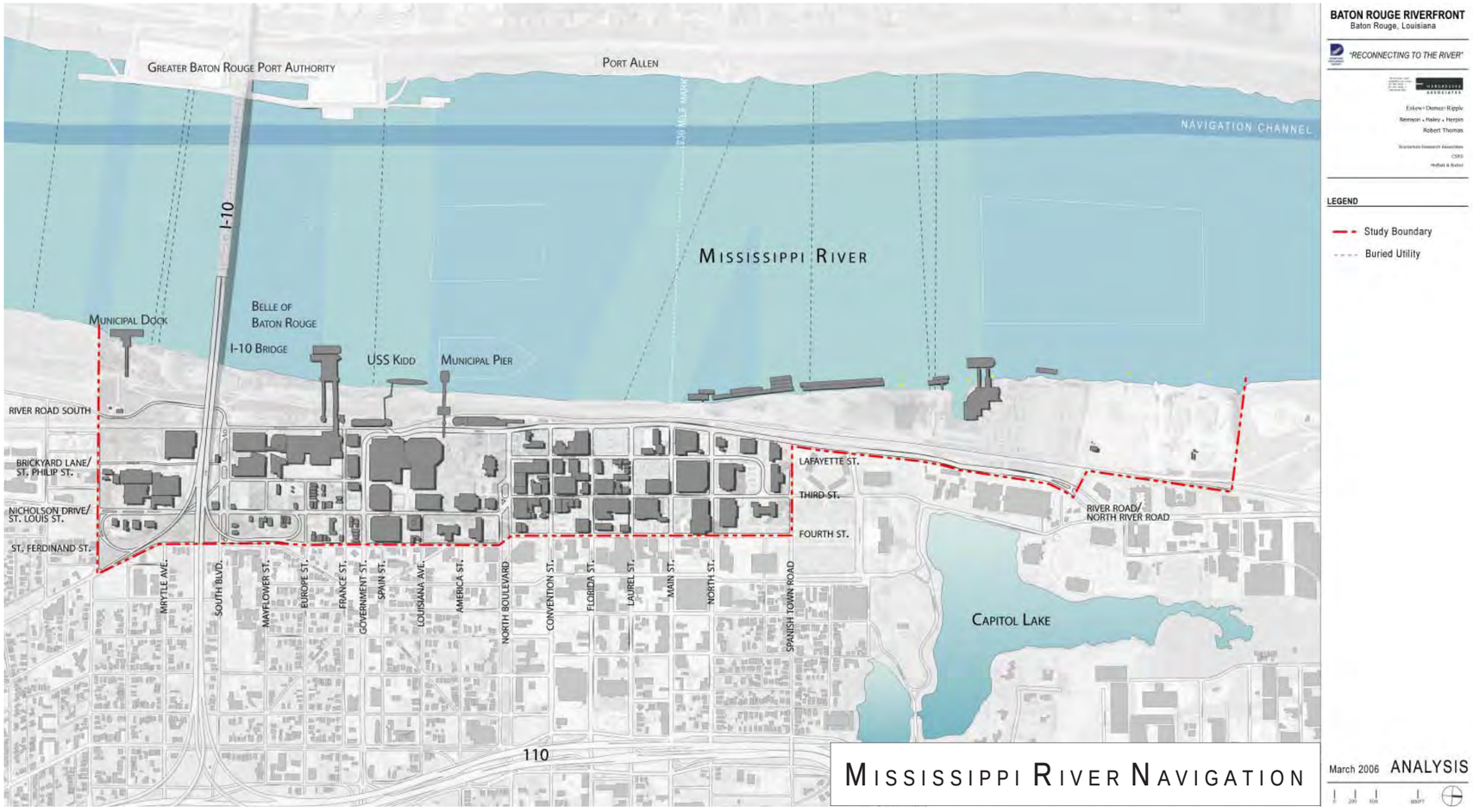
Project boundary

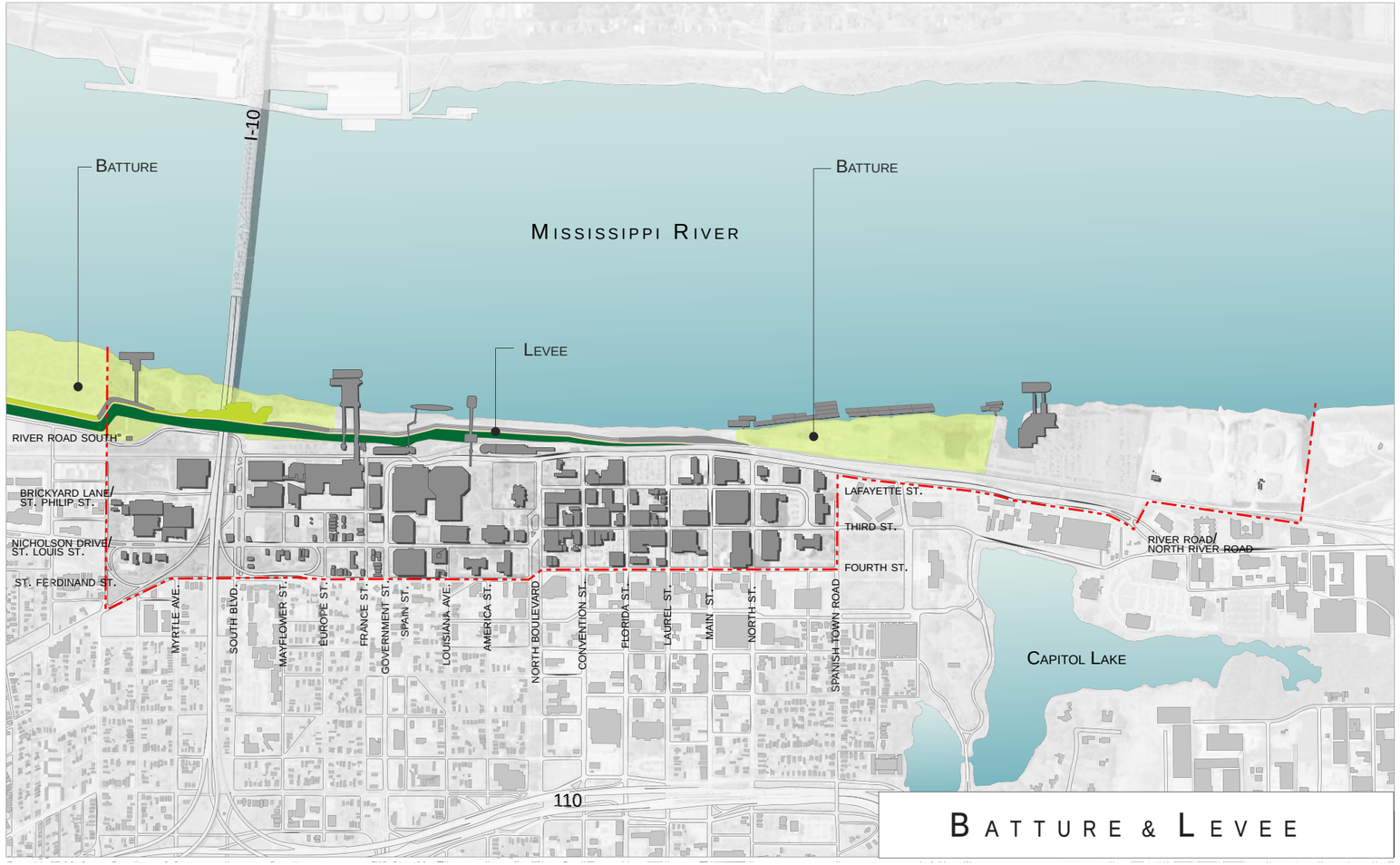


Project focus

Baton Rouge is the state capital of Louisiana, situated on the lower Mississippi River, 231 miles from the Gulf of Mexico. Baton Rouge is the northernmost point on the Mississippi River that ocean-going vessels may access, due to the limiting height of the Huey Long Bridge, just upriver of Baton Rouge. The Port of Greater Baton Rouge, located immediately across the river from the project study area is ranked 15th worldwide in terms of total trade to all world ports, according to a 2005 congressional research report following Hurricane Katrina.

The Mississippi River is just over half a mile wide as it passes Baton Rouge. The 200 foot wide navigation channel is positioned to the west side of the river, approximately 500 feet from the Port Allen batture. The majority of river traffic occurs along the navigation channel, though there is an abundance of river activity toward the Baton Rouge shore. Commercial river boats periodically visit the Municipal Pier, and Capital Fleet Acadian Marine leases a broad swath of the river surface north of Main Street to temporarily moor river barges. The slow chugging of river barges upriver and the rapid passage of river barges downriver visually demonstrates the raw power and high velocity of the Mississippi River.





BATON ROUGE RIVERFRONT
Baton Rouge, Louisiana

"RECONNECTING TO THE RIVER"

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Robert Thomas

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CSRS
Moffatt & Nichol

LEGEND

- Study Boundary
- Area of Ecological Observation
- Levee and Bike Path

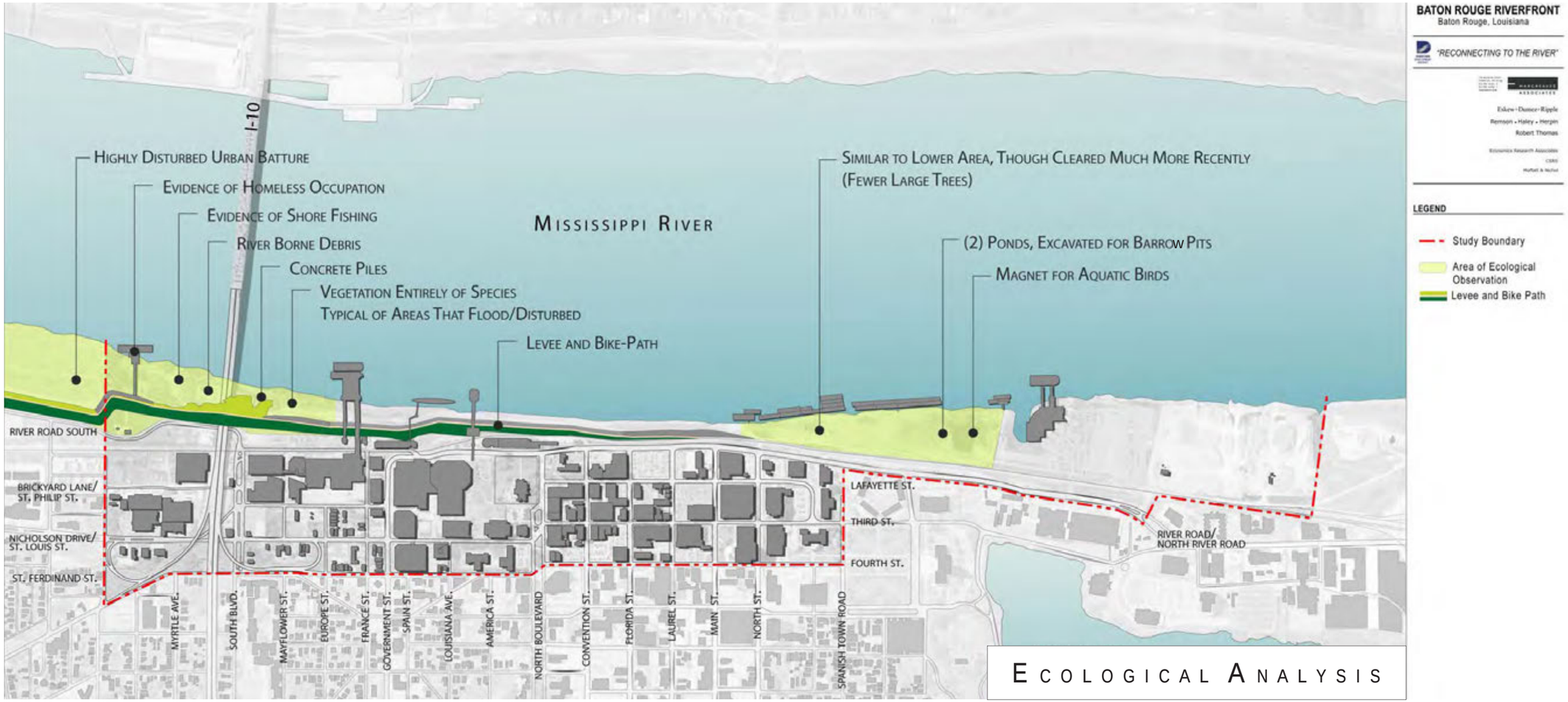
BATTURE & LEVEE

March 2006 ANALYSIS

0 200 400 800FT

As the river inexorably flows swiftly southward, the river elevation or stage, changes slowly though no less dramatically in terms of seasonally exposing and inundating the batture. In Louisiana, the term "batture" is the natural alluvial deposition between levee and river due to seasonal flooding. Batture, a word derived from the French verb "to beat," meaning the land "beaten on by the river," and corruptly pronounced "batch-er." (*Speir and Walker, Mississippi River Batture Study, Tulane Institute for Environmental Law & Policy, 2001, p I-1.*) In Baton Rouge, the batture is the irregular strip of land on the river side of the levee that ranges from exposed sand to thick brush, to tall trees, able to withstand the dramatic spectrum of river forces, from low water to full flood. The batture is essentially exposed river bottom topography, subject to annual flooding and deposition, and therefore is generally free from permanent development.

The batture is a transitional zone, not part of the city, but not always covered by river water either. The batture vegetation was once part of the vast forested alluvial river valley that has largely been cut down. But the re-growth of vegetation is so quick and vigorous that even with batture clearing efforts, such as at the DeSoto Park site in Baton Rouge, vegetation springs back in short order. Therefore, maintenance of the batture is often limited as the results are marginal at best. Improvement can and does occur in the batture, but should arguably be balanced between commercial river-dependent activities and conservation efforts, but above all, improving the visual image of the city. The overriding governing constraint is the USACE prohibition on the addition of more than 12 inches of fill to the batture, effectively precluding fill operations. Jurisdictional conflict between which agencies, commissions and boards at federal, state and city levels control the batture complicates efforts to systematically govern batture activities. A return to the unexamined and unregulated activities that have historically plagued many river cities would be a step in the wrong direction. The width of the batture has a dimensional relationship to the river bottom topography, which in turn restricts how close watercraft can get to the Baton Rouge riverfront. For instance, both casino riverboats are approximately 100 feet beyond the batture because they were once required to disembark from their moorings daily, and therefore had to be floating at all time regardless of the river elevation. In contrast, the USS Kidd is permanently moored much closer to shore between structural dolphins. The USS Kidd can float up and down, but is often resting on the batture fully exposed. This explains in part why the Municipal Dock, on the south side of the I-10 Bridge, is no longer operational as the accumulation of alluvial deposits has over time made the depth of water immediately adjacent to this structure largely un-navigable.



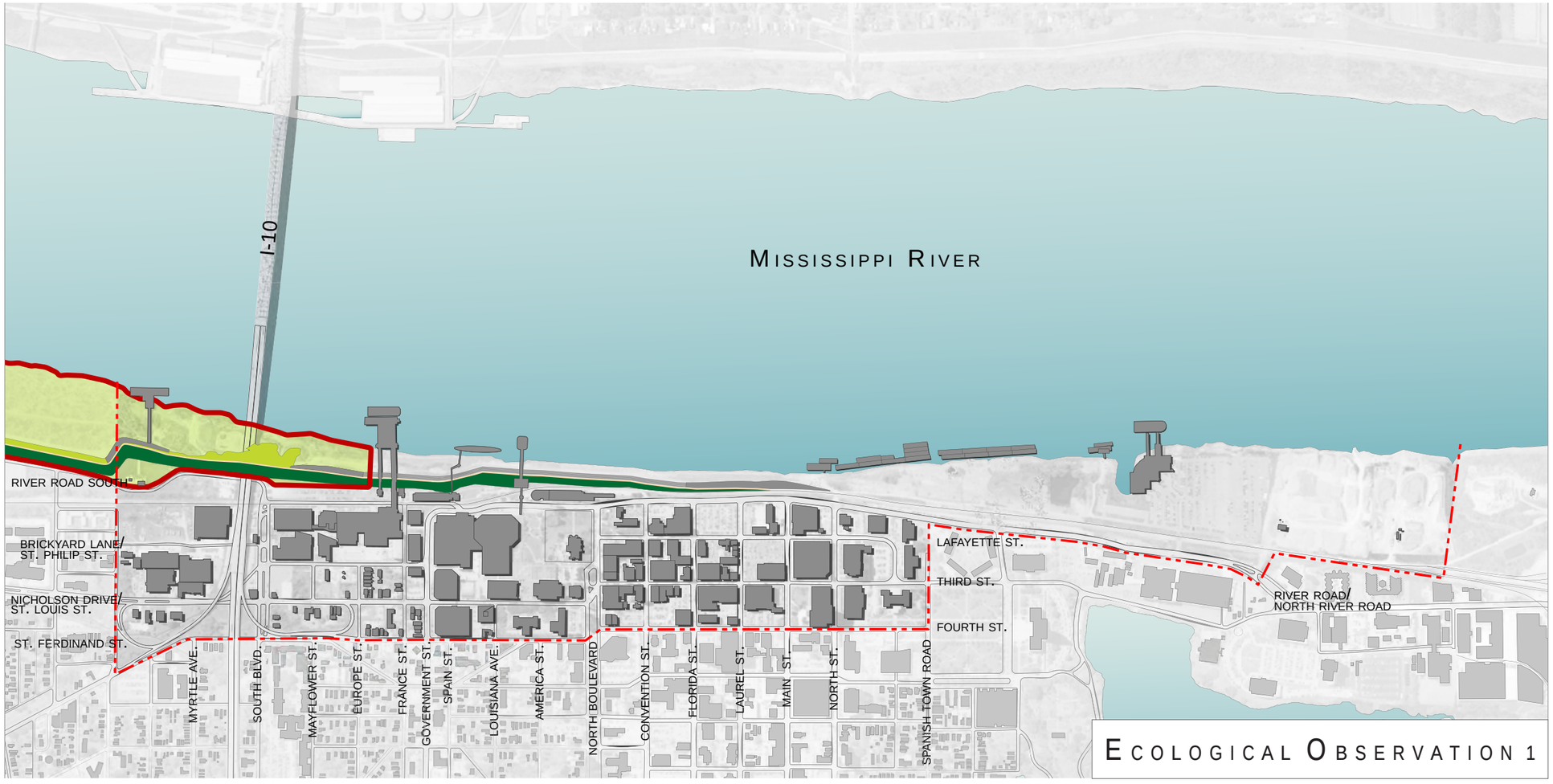
ECOLOGICAL ANALYSIS

The batture in general performs a valuable ecological habitat for a variety of plants and animals. Along the Baton Rouge riverfront, this resource is highly disturbed following decades of commercial and industrial activity and as an unsanctioned dumping ground. From the Belle of Baton Rouge to the south, the existing vegetation consists entirely of species typical of areas subject to flooding and is otherwise disturbed. These species are fast growing and self reseeding. There is ample evidence of shore fishing by residents, and homeless activity amongst the denser vegetation.

Between Casino Rouge and the Belle of Baton Rouge, the batture has many of the similarities as listed above, though there are minor differences in the vegetation species. The batture area recently cleared for what was to be construction of DeSoto Park now has significantly fewer large trees due to their removal. Two ponds in this area were obviously excavated as barrow pits and now serve as aquatic bird destinations. A nutria was observed swimming in the northern pond.

Preliminarily, there is little evidence within the confines of the project study area of ecological significant species, thus opening the door for unencumbered design consideration. There is nothing unique or ecologically important about either stretch of batture with the study area. Nevertheless, there is little doubt that despite the visually ragged appearance of the vegetation, the woody areas serve an important function for resting during the spring neo-tropical bird migration. Retaining all of or replacing future removals with similar species, though especially berry-producing species, in a more organized array will maintain the continuity of this resting habitat. Similarly, maintaining an open field and ponds, though not necessarily the existing ones, serves to attract aquatic birds for resting, nesting and feeding.

The Lower Mississippi River, particularly in the Baton Rouge region, is a robust commercial and industrial corridor and as such, is subject to industrial pollutants which directly influence all vegetation and habitat along the Baton Rouge batture. There are obvious opportunities to interpret the intersection of the state capital riverfront, a nationally significant industrial corridor, and migratory route in the context of the dynamic river processes.



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LEGEND

- Study Boundary
- Area of Ecological Observation
- Levee and Bike Path

PLANT & ANIMAL SPECIES OBSERVED: SOUTH BATTURE

Plants

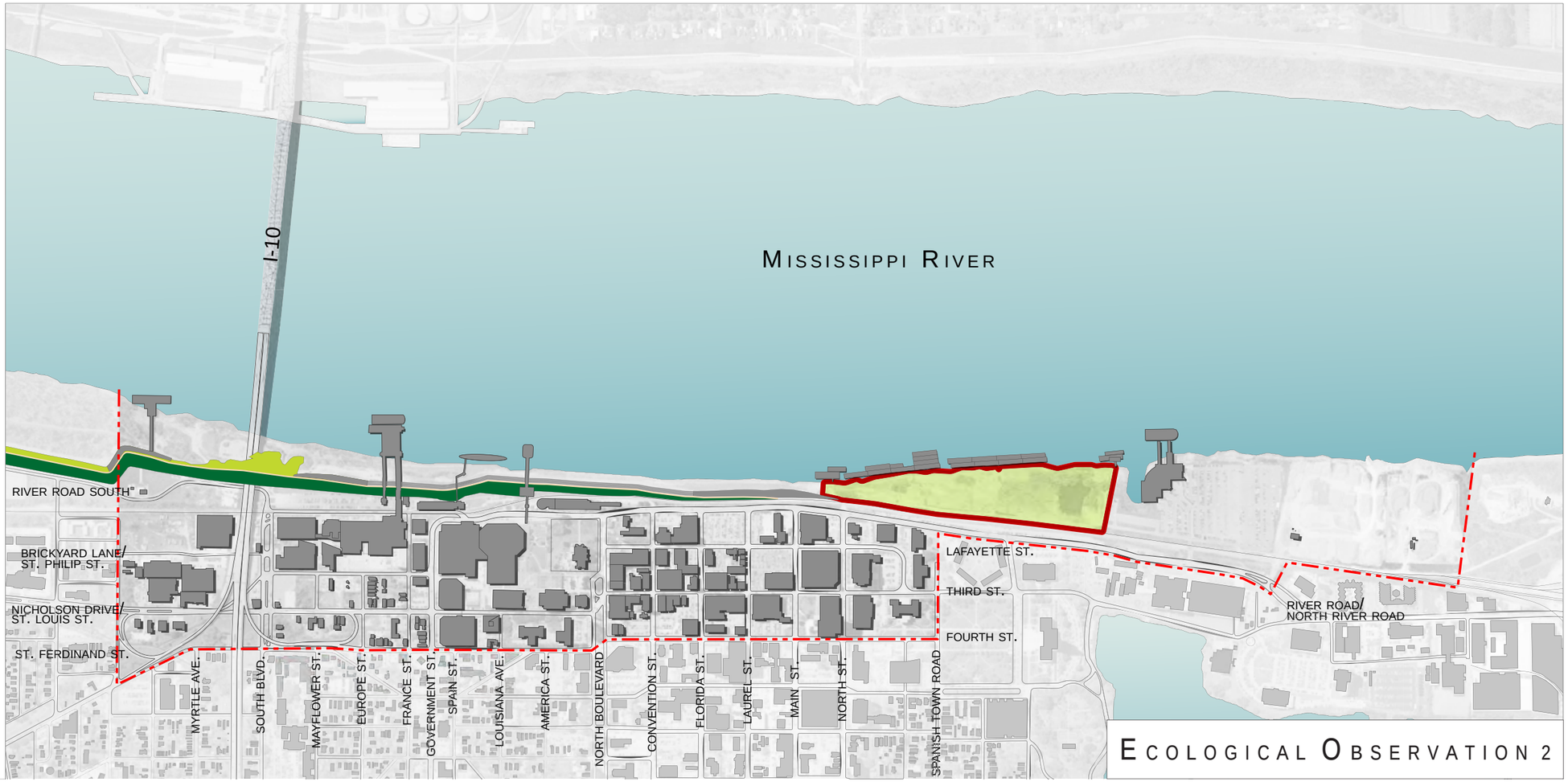
Black Willow, *Salix nigra*
Cottonwood, *Populus deltoids*
Sycamore, *Platanus occidentalis*
Boxelder, *Acer negundo*
Chinese Tallow, *Sapium sebiferum*
Hackberry, *Celtis laevigata*
Red Mulberry, *Morus rubra*
Elderberry, *Sambucus canadensis*
Wild Geranium, *Geranium carolinianum*
Wild Petunia, *Ruella sp.*
Vetch, *Vicia angustifolia*
Peppervine, *Ampelopsis arborea*
Poison Ivy, *Rhus radicans*
Rattan, *Berchemia scandens*
Muscadine Grape, *Vitis rotundifolia*
Giant Ragweed, *Ambrosia trifida*
Kudzu, *Pueraria lobata*
Common Cocklebur, *Xanthium strumarium*
Dewberry, *Rubus trivialis*
Yellow Top, *Senecio glabellus*
Johnsongrass, *Sorghum halepense*
Giant Reed, *Arundo donax*
Sow-thistle, *Sonchus asper*
Spiny Thistle, *Cirsium horridulum*
White Dutch Clover, *Trifolium repens*
Yellow Sour Clover, *Melilotus indica*
Carolina Mallow, *Modiola caroliniana*
Many other species of ground cover

Birds

Mockingbird
Red-winged Blackbird
Northern cardinal
White-Throated Sparrow

Lizard

Anole, *Anolis carolinensis*



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LEGEND

- Study Boundary
- Area of Ecological Observation
- Levee and Bike Path

PLANT & ANIMAL SPECIES OBSERVED: NORTH BATTURE

Plants

Black Willow, *Salix nigra*
Cottonwood, *Populus deltoids*
Sycamore, *Platanus occidentalis*
Boxelder, *Acer negundo*
Chinese Tallow, *Sapium sebiferum*
Rough-leaf Dogwood, *Cornus drummondi*
Red Mulberry, *Morus rubra*
Elderberry, *Sambucus Canadensis*
Jerusalem Thorn, *Parkinsonia aculeata*
Groundsel, *Baccharis halimifolia*
Wild Geranium, *Geranium carolinianum*
Wild Petunia, *Ruella sp.*
Vetch, *Vicia angustifolia*

Peppervine, *Ampelopsis arborea*
Poison Ivy, *Rhus radicans*
Japanese Honeysuckle, *Lonicera japonica*
Rattan, *Berchemia scandens*
Muscadine Grape, *Vitis rotundifolia*
Giant Ragweed, *Ambrosia trifida*
Common Cocklebur, *Xanthium strumarium*
Dewberry, *Rubus trivialis*
Yellow Top, *Senecio glabellus*
Goldenrod, *Solidago sp.*
Rattlebox, *Sesbania drummondii*
Johnsongrass, *Sorghum halepense*
Broom Sedge, *Andropogon virginicus*

Sow-thistle, *Sonchus asper*
White Dutch Clover, *Trifolium repens*
Yellow Sour Clover, *Melilotus indica*
Carolina Mallow, *Modiola caroliniana*
Smell Melon, *Cucumis melo*
Passion Flower, *Passiflora incarnata*
Sensitive-plant, *Mimosa strigillosa*
Many other species of ground cover

Birds

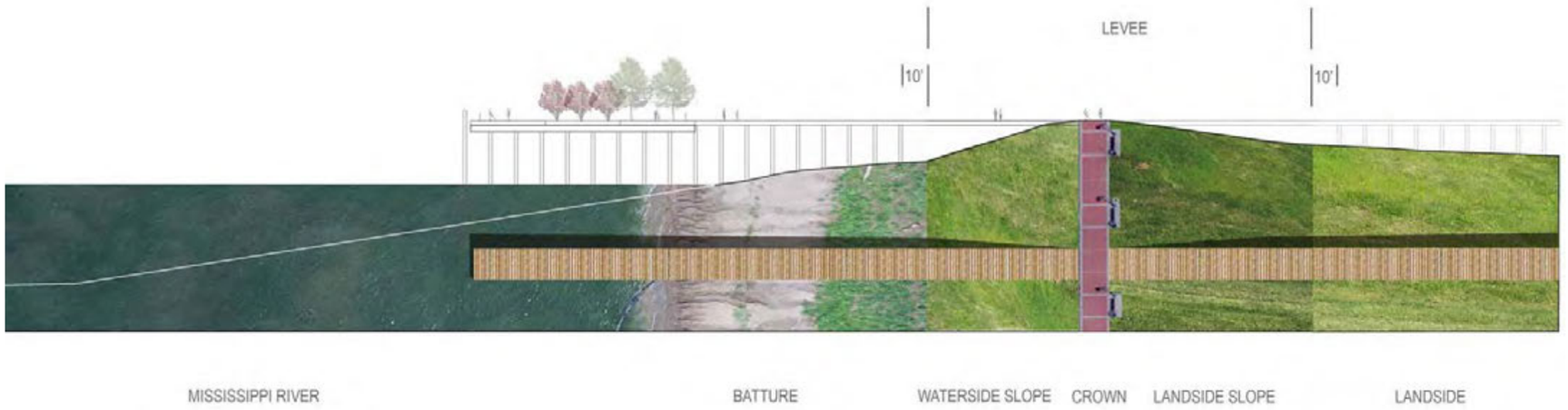
Cormorant
Killdeer
Mockingbird
Morning Dove
Red-winged Blackbird
Northern cardinal
White-Throated Sparrow
Common Starling

Mammals

Nutria, *Myocaster coypu*
Swamp Rabbit, *Sylvilagus aquatica*

Levee Cross Section

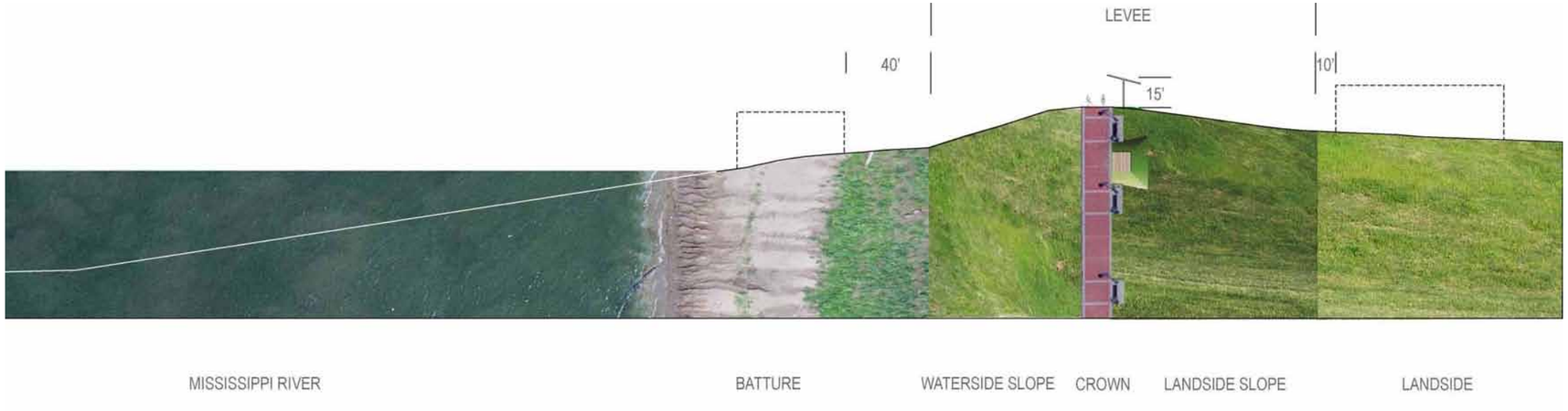
The US Army Corps of Engineers-administrated levee winds its way northward along the Baton Rouge riverfront terminating in the natural bluff or terrace at approximately North Street and River Road. The levee varies in width depending on the adjacent topography. South of the Municipal Pier, the levee varies between 140' and 160' in width, whereas north of the pier, the dimension narrows to 80' before intersecting with the existing bluff near North Street. The design levee cross section at Baton Rouge is set at approximately elevation 50, with a 10' wide crown. The river side slope is 1 vertical to 4 horizontal, and a land side slope of 1 vertical to 5.5 horizontal. The actual constructed levee varies slightly, though all proposed adjacent development must be measured against these parameters.



Levee Penetration

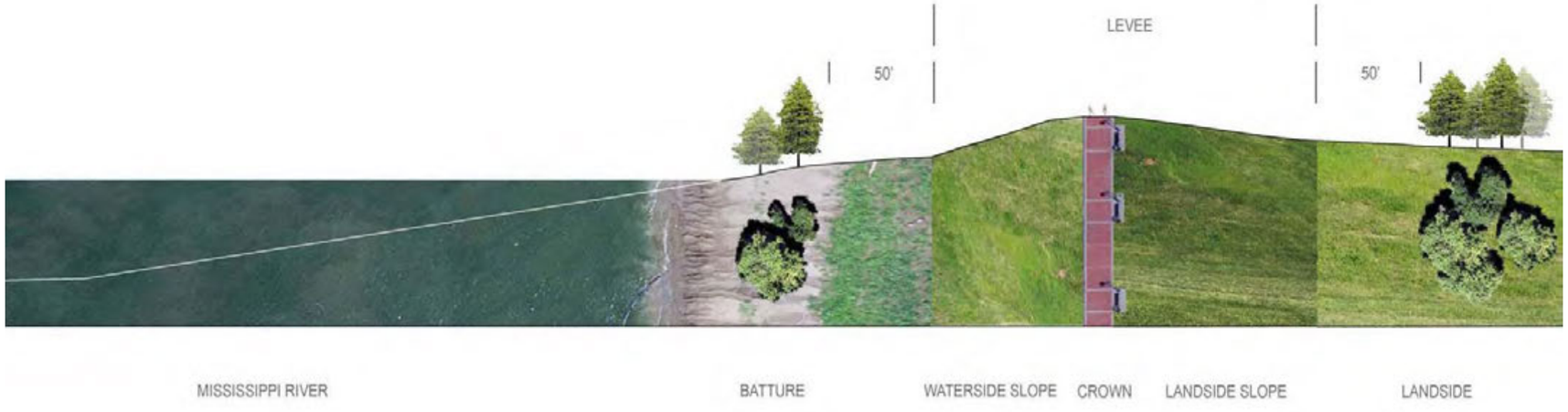
Penetration of the levee section is prohibited. Any structural additions to the levee must be configured as grade beams to rest on and distribute forces and weight across the surface of the levee rather than anchoring into the core of the levee. Penetrations are restricted an additional 10 feet beyond the levee toe of slope on both the land side and the river side of the levee to further ensure structural integrity of the levee.

Proposals for permanent development immediately adjacent to the levee are prohibited within 10 feet from the toe of slope on the land side, and prohibited from within 40 feet from the toe of slope on the river side of the levee. Within these parameters, there is latitude for pedestrian improvements such as pedestrian walkways, site furniture and lighting. Vehicular access up to the crown and down to the batture is strictly governed to ensure USACE maintenance access and evaluation of the levee structure at all times.

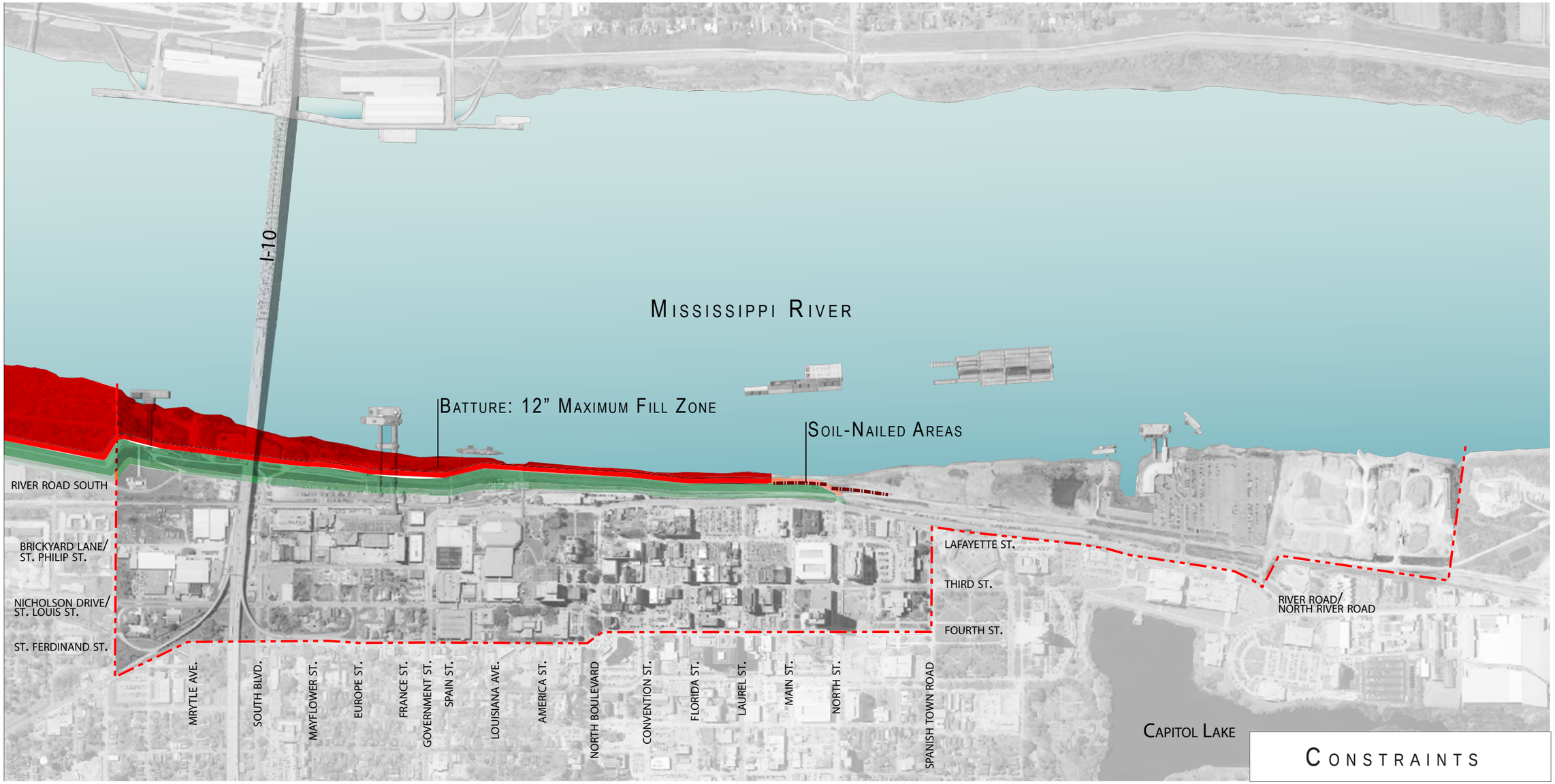


Levee Structures

Regarding vegetation, the USACE engineers mows the grass covered levee to an 8 inch high maximum to ensure easy observation of the levee surface, and speedy recovery of the surface following any maintenance work. Trees, until recently have been allowed to grow no closer than 40 feet from the toe of slope. Post-Katrina activities have caused this zone to be expanded to no closer than 50 feet from the toe of slope. Trees and other vegetation are generally permitted in planters situated on the levee provided they do not penetrate the design section. The integrity of the levee and access along it are the overriding evaluation criteria for proposed improvements. Criteria are described and illustrated in a November 1992 procedural document from the USACE entitled, "Permits for Work on the Mississippi River, New Orleans District."



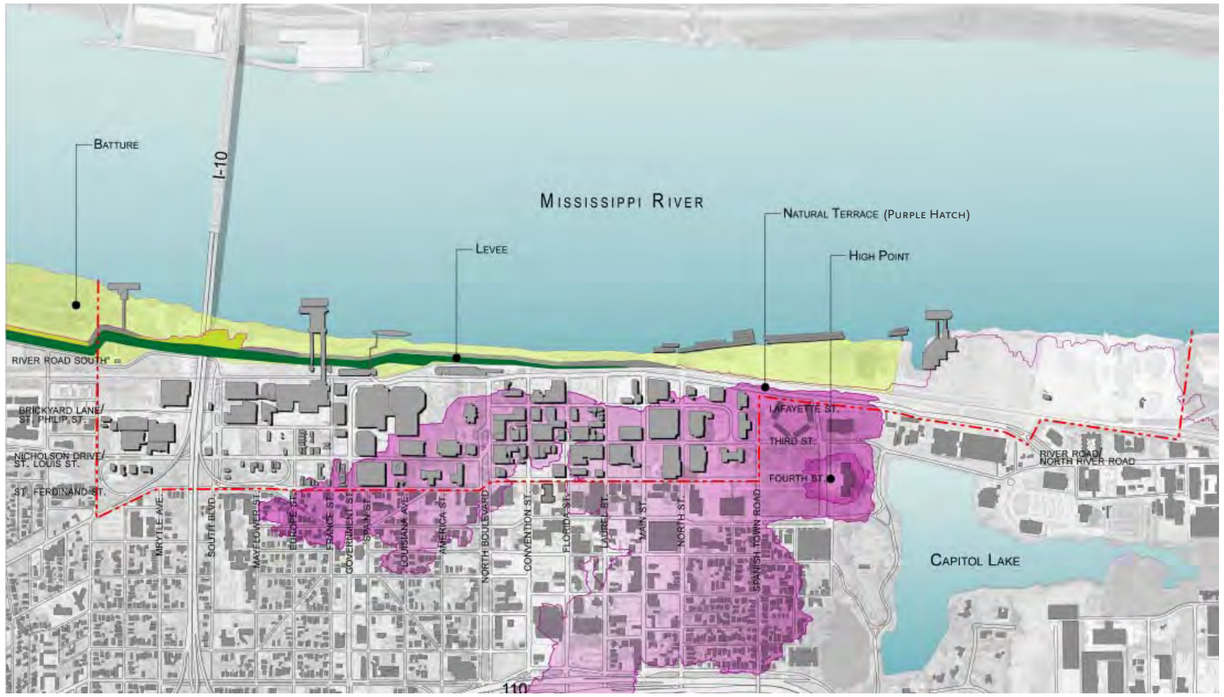
Levee Vegetation

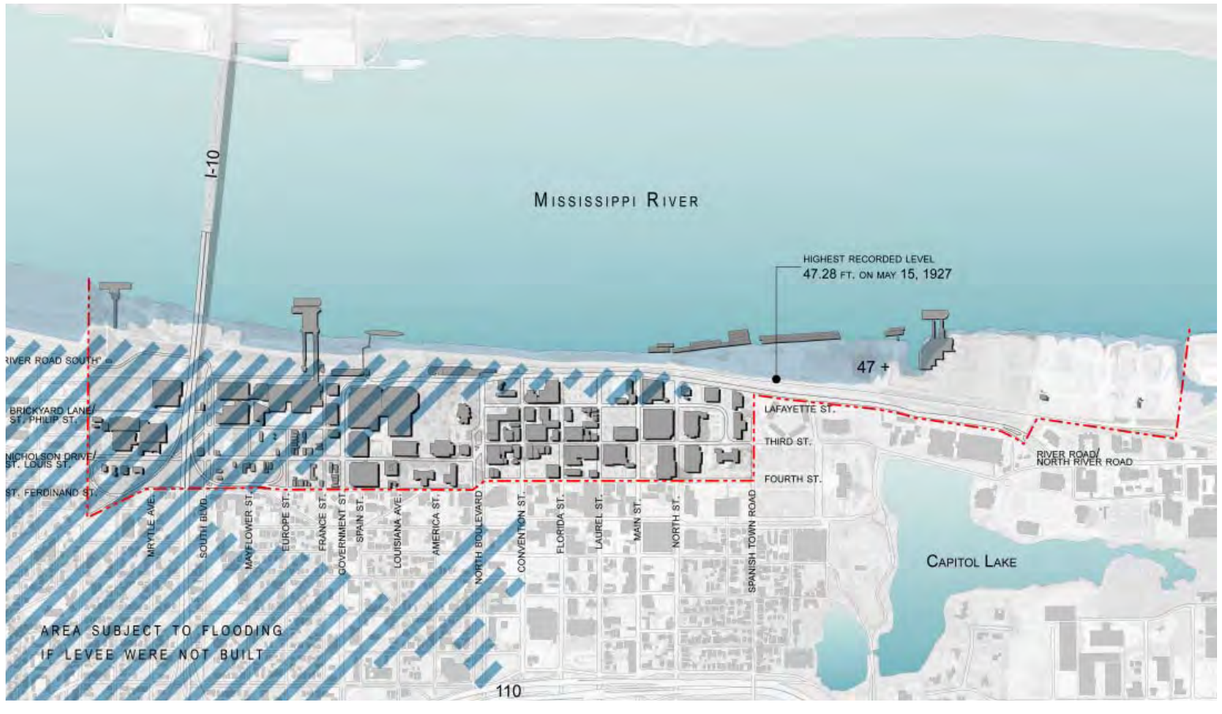


The levee intersects with the natural terrace near North Street and River Road. A “soil nailed area” has been established at this location to combat the slow settlement and adjustment between the man-made levee and the natural terrace. This area is particularly sensitive to disruption and construction activities in this location would attract heightened scrutiny.

At the intersection of levee and bluffs, or terrace, the topography is approximately elevation 47. River Road drops gradually to the south, where historically the road and adjacent properties west of Lafayette Street were subject to significant seasonal floods prior to northward extension of the levee in 1812, to a design height of elevation 50. The new State Capitol is situated at elevation 65 adjacent to the site of the early French fortification of 1718: both enjoying a commanding position overlooking the river. The majority of the current downtown city fabric rests on this natural terrace, including the Old State Capitol of 1859. The lower stretches of River Road, including the train station, are at elevation 30. Historically, structures below the natural terrace were subject to seasonal floods until the levee afforded reliable protection.

The prominence and function of the levee and terrace cannot be overstated in that together they protect more than a third of the riverfront study area from seasonal inundation. Had the levee not been in place, the flood of 1927 would have swept well eastward beyond I-110.





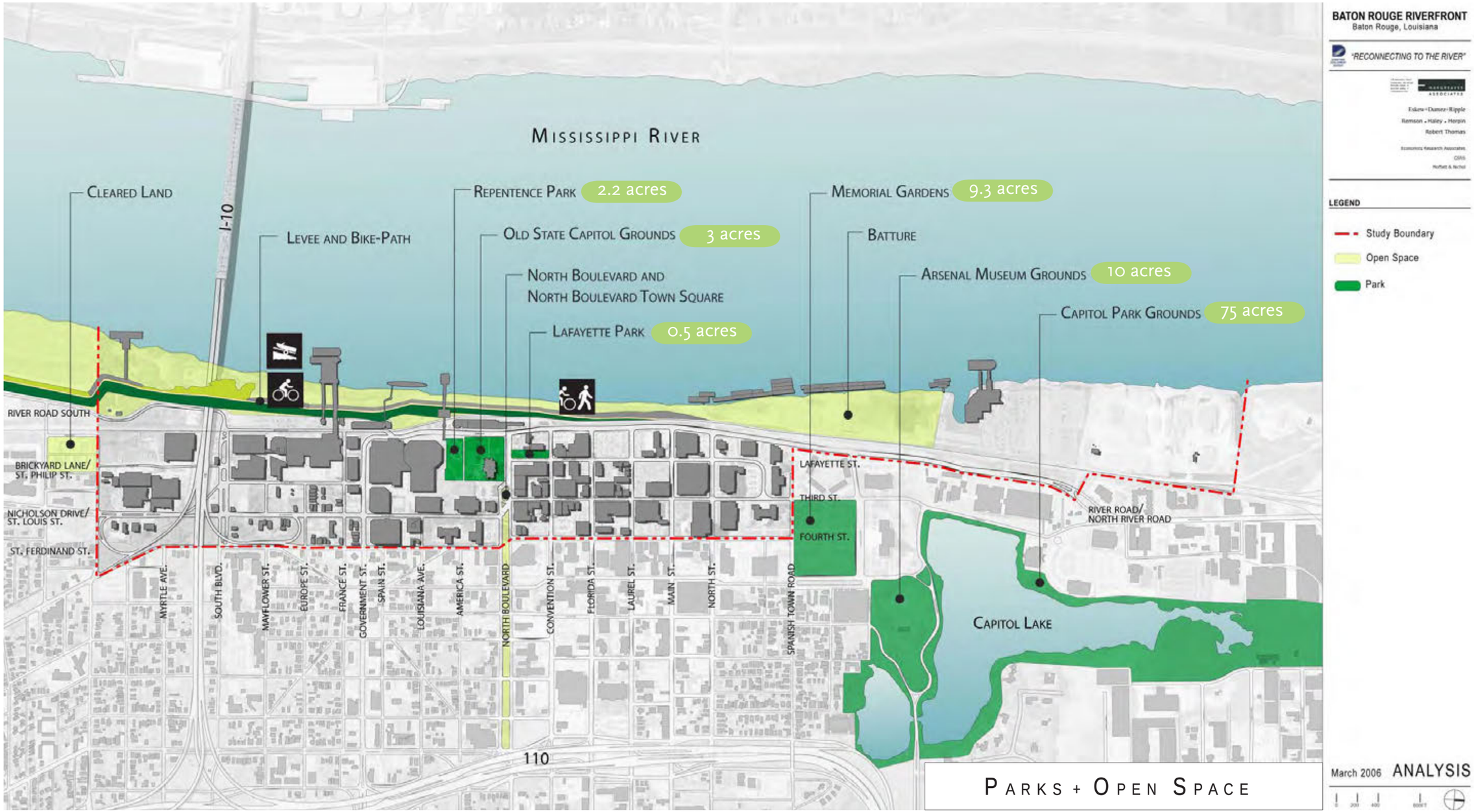
The State Capitol grounds surrounding Capitol Lake, the adjacent Arsenal Museum Grounds, the Memorial Gardens, and the Old State Capitol Grounds, are the largest public green spaces, or 'parks,' in downtown. Repentance Park and the Riverfront Plaza complex are the largest city controlled green parks in downtown. Lafayette Park and the open spaces between the River Center and the River Center Library are public open spaces though largely paved. Each of these parks receives fairly frequent maintenance and upkeep to attract residents and visitors.

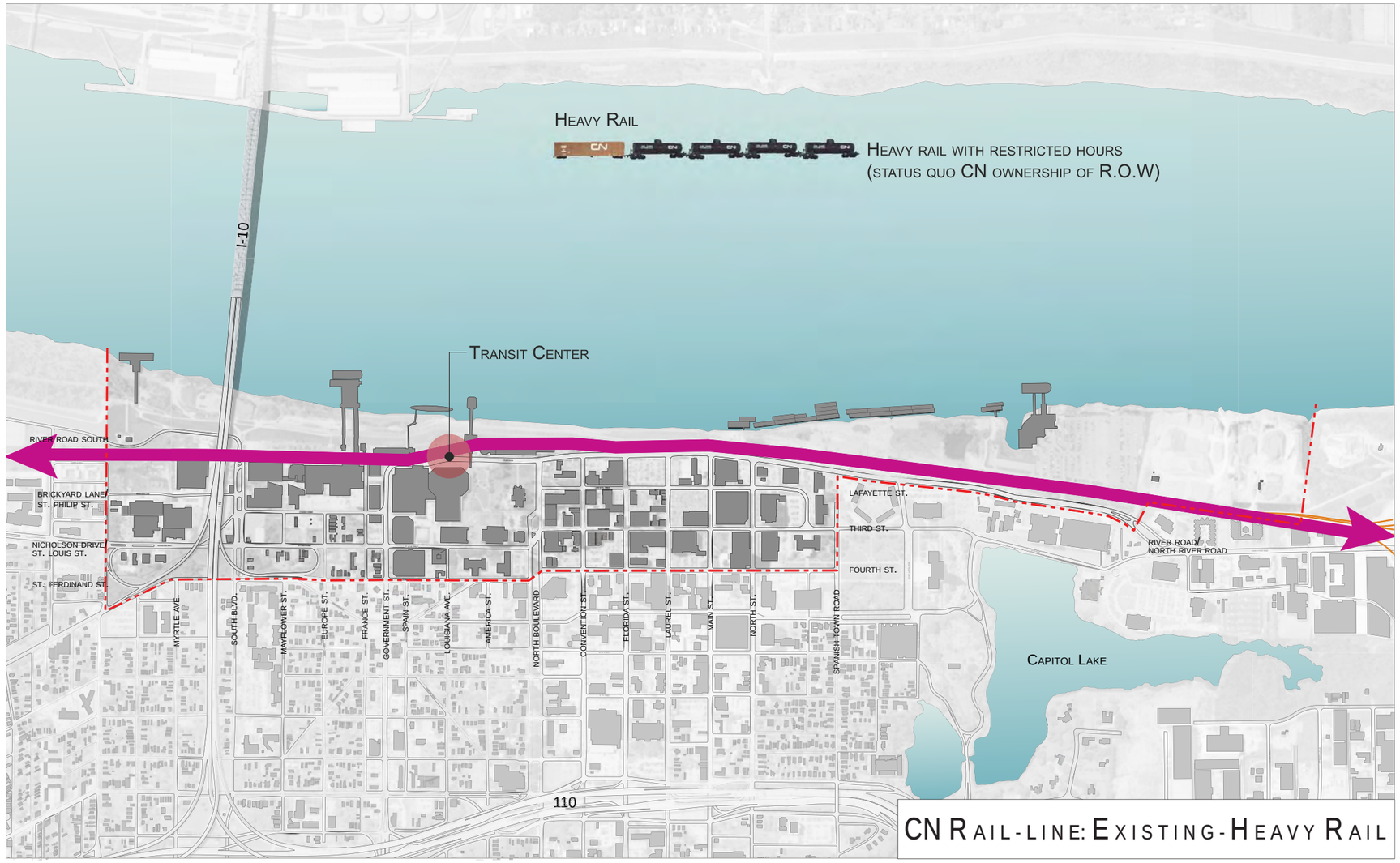
In contrast to the aforementioned parks, the levee sinuously weaves its way along the downtown riverfront, clad partially in steep grass slopes and concrete revetment. The levee occupies a significant footprint on the riverfront. Though the levee accommodates pedestrian and bike traffic, along with the typical landscape elements of benches and lighting, the levee is not a park. Trees, other than in restrictive planters, and program activities, are strictly precluded by regulation and the steep configuration of the levee. The levee accommodates activity and lingering, as well as the best close up views of the river, but it is not programmatically diverse.

The batture is at first glance 'green,' but should not be confused as a park as it is subject to rigorous USACE regulation in terms of raising the topographic elevation a maximum of 12 inches, and is subject to a general prohibition on permanent structure due to seasonal flooding. Hardy, flood-tolerant trees and shrubs are allowed to thrive where they volunteer, as long as they do not interfere with the standard maintenance and observation of the levee. Whereas the levee grass is mown to a maximum height of 8 inches, the batture vegetation is generally coarse and so unruly that programmatic park activities cannot take place in the batture.

While the batture and levee are prominently positioned at and essentially define the riverfront edge of Baton Rouge, they are also the most restrictive landscapes and do not afford the same recreational and programmatic opportunities that a broad definition of 'park,' enjoys. The linear opportunities for cycling and strolling along the river are singular and valuable activities, though they are the maximum range of what is permissible on a daily basis.

There is a distinction between what constitutes a park and what constitutes a green or passive open space to differentiate between what parks, which are typically protected on the landside of the levee, and that of the levee and batture, which are landscape infrastructure. This landscape infrastructure is equal to or surpasses the footprint of parks in this portion of Baton Rouge, but does not approach the programmatic diversity of activities and qualitative experience of a park.


MISSISSIPPI RIVER
CLEARED LAND
I-10
LEVEE AND BIKE-PATH
REPENTENCE PARK 2.2 acres
OLD STATE CAPITOL GROUNDS 3 acres
NORTH BOULEVARD AND
NORTH BOULEVARD TOWN SQUARE
LAFAYETTE PARK 0.5 acres
MEMORIAL GARDENS 9.3 acres
BATTURE
ARSENAL MUSEUM GROUNDS 10 acres
CAPITOL PARK GROUNDS 75 acres
RIVER ROAD SOUTH
BRICKYARD LANE/
ST. PHILIP ST.
NICHOLSON DRIVE/
ST. LOUIS ST.
ST. FERDINAND ST.
LAFAYETTE ST.
THIRD ST.
FOURTH ST.
RIVER ROAD/
NORTH RIVER ROAD
CAPITOL LAKE
MYRTLE AVE.
SOUTH BLVD.
MAYFLOWER ST.
EUROPE ST.
FRANCE ST.
GOVERNMENT ST.
SPAIN ST.
LOUISIANA AVE.
AMERICA ST.
NORTH BOULEVARD
CONVENTION ST.
FLORIDA ST.
LAUREL ST.
MAIN ST.
NORTH ST.
SPANISH TOWN ROAD
110
BATON ROUGE RIVERFRONT
Baton Rouge, Louisiana
"RECONNECTING TO THE RIVER"
LEGEND
Study Boundary
Open Space
Park
PARKS + OPEN SPACE
March 2006 ANALYSIS



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Baton Rouge, Louisiana

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LEGEND

- Study Boundary
- Transit Center
- Heavy Rail

CN RAIL-LINE: EXISTING-HEAVY RAIL

March 2006 ANALYSIS

0 200 400 800FT

The existing Canadian National rail line through the downtown riverfront causes consternation on a number of levels. The tracks primarily connect the refineries north of downtown to the national rail system. The trains vary in dimensional length and duration, but typically pass through downtown several times a day. Their daily impact tends to be inconvenience for visitors and residents to get back and forth between riverfront amenities. The two casinos, are particularly inconvenienced by the inability to get patrons in and out of their facility when a train is passing. A stopped train, blocking access between the riverfront and downtown, is perceived by downtown commercial landowners and visitors alike as both a source of frustration and physical safety hazard. Their rail cargo often contains flammable and hazardous materials, routed through the heart of downtown. A recent downtown derailment triggered an evacuation of the riverfront, coinciding with a large River Center event. The result of this event has led to efforts by the city to explore, under separate contract, strategies for curtailing hazardous traffic, or the potential: removal of the track altogether. The rail study by others is looking at strategies for rerouting rail traffic to avoid the downtown riverfront.

While this riverfront study is not directly charged with solving this longer term change to the tracks, there are aspects of riverfront rail service that could ultimately become a positive for Baton Rouge. The status quo for the next decade is likely to be the continued operation of the existing heavy rail line. Post-Katrina, there has been resurgence in calls for re-establishing a passenger rail link to New Orleans. Though the former Yazoo Mississippi passenger rail depot has long since been adapted as the LASM, there is the potential to route regional passenger rail traffic to the heart of downtown along this same rail line, either sharing the right of way with industrial traffic, or by acquiring the right of way for passenger only traffic. A more local alternative would banish the industrial traffic, and forego the link to New Orleans in favor of a light rail service, reusing the heavy rail tracks to connect to LSU and points south. Light rail north of the Pentagon for instance would have to shift into a reconfigured River Road to avoid passage through the restricted access industrial zones north of downtown. Any change of industrial traffic will in all likelihood require the governmental acquisition of a portion of the Canadian National right of way, and orchestration of alternate access to the refineries along other routes passing through Baton Rouge.

Removing the tracks altogether would eliminate the physical safety and danger associated with crossing active rail tracks. While it would be a largely positive move to eliminate the tracks, doing so does not free up significant areas of riverfront land, though it would remove dimensional right of way restrictions that impede pedestrian access between River Road and the levee.

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LEGEND

- Study Boundary
- River Road
- Highway
- Secondary Access
- Local Connector
- 2403 Traffic Count
- → Traffic Direction

ROADWAY HIERARCHY+TRAFFIC COUNTS

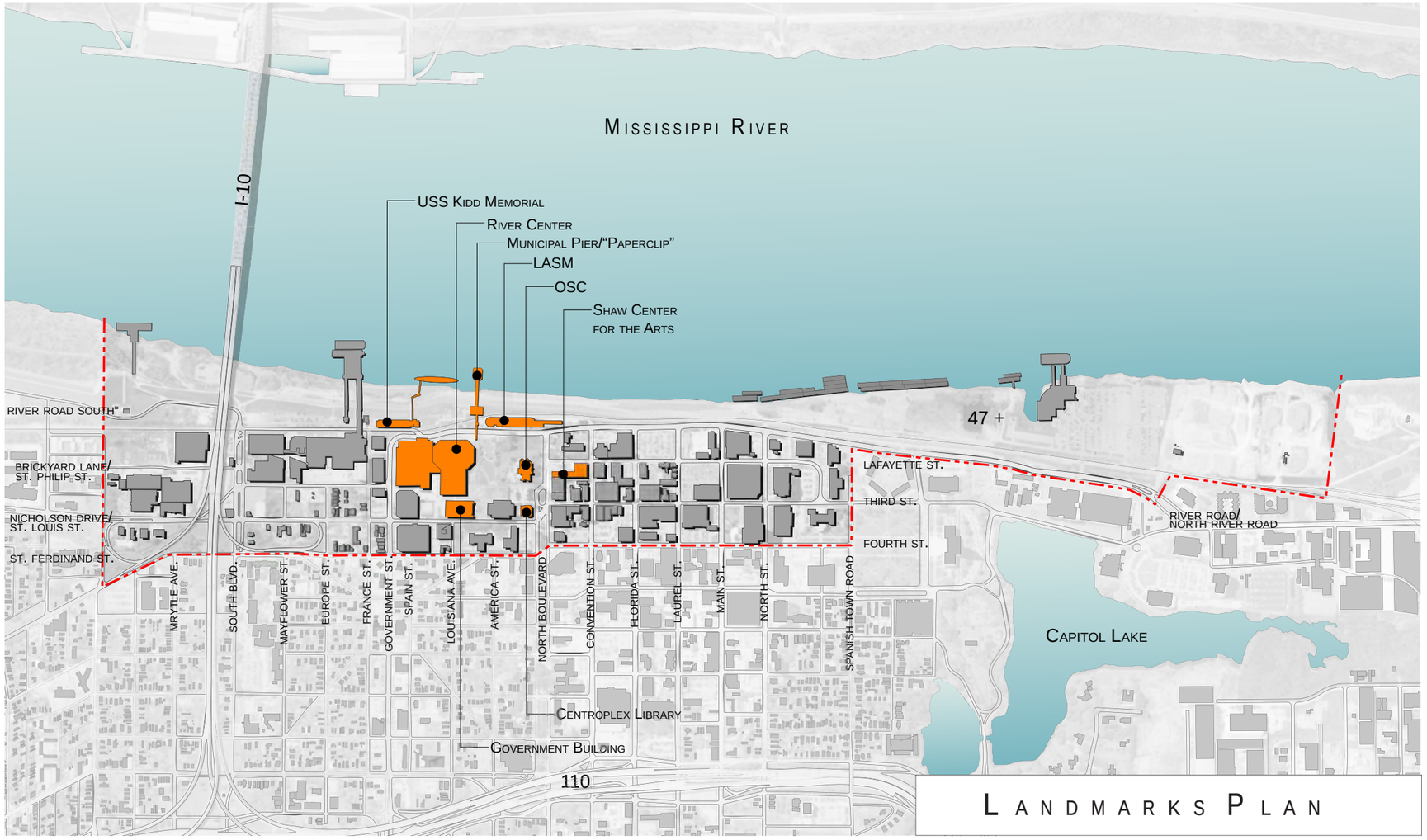
March 2006 ANALYSIS

0 200 400 800FT

River Road traverses the project area, paralleling the river, functioning as the primary thoroughfare to points north and south of downtown. Government Street and Florida Street are the primary, two-way arteries channeling traffic into and out of downtown and connecting to Interstate I-110. Reconfiguration has assisted with slowing vehicular traffic, however, crossing the street remains a challenge for pedestrians.

Florida Street is notable as the primary east-west corridor, particularly prior to the interstate construction, and in effect delineates north from south within East Baton Rouge Parish. North Boulevard is notable for the wide median and live oak trees, from I-110 to Third Street, essentially terminating at the cultural heart of downtown, the Old State Capitol.

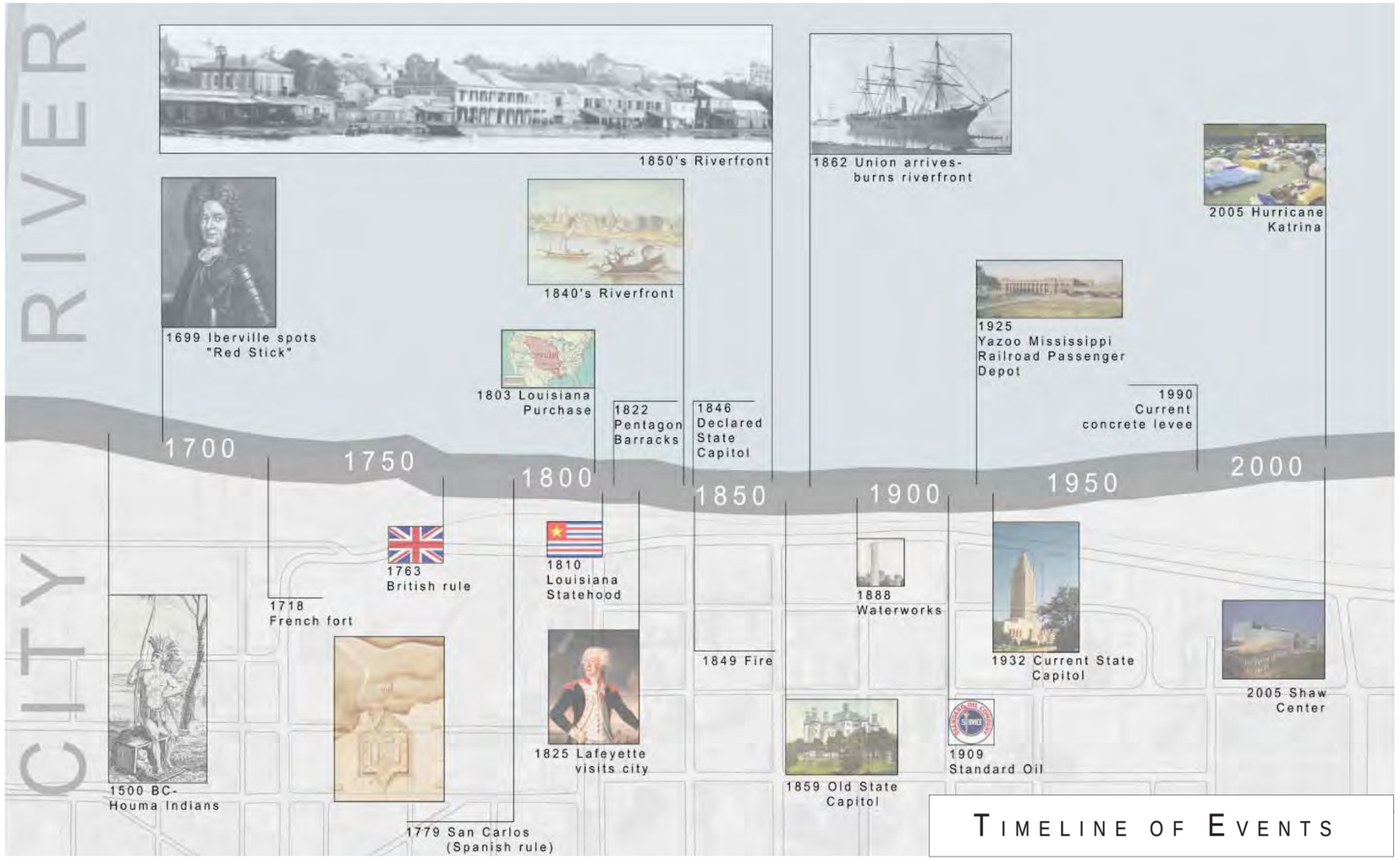
Parallel to River Road, Lafayette Street is experiencing a resurgence of activity with the opening of the Shaw Center for the Arts, the Hilton Hotel renovations, and a number of proposals for residential towers to the north that would each contain ground level retail. Nicholson Drive connects Louisiana State University in the south to downtown, channeling one way traffic north along St. Louis Street, jogging at North Boulevard to become Third Street. Third Street, north of North Boulevard, remains the spine of the 'entertainment district,' with a number of restaurants and night clubs.
Interstate I-10 spans the Mississippi River, spinning on and off ramps into the lower study area. I-10 offers regional access to downtown, though the bridge is frequently gridlocked during rush hour. Traffic merging from the bridge to the city grid channels heavy traffic volumes into the downtown core, as well as the surrounding neighborhoods. The exits to the right and left sides of the bridge are particularly disorienting to those not familiar with downtown.



LANDMARKS PLAN

The river is generally not visible from River Road and the immediate street grid, south of Main Street. Depending on the location, the height of the levee ranges from 0 to 20 feet in height, rendering most street level views from downtown to the river surface impossible. North of Main Street, the levee merges into the natural terrace and views of the river are possible, but the batture also widens significantly at this point, with dense vegetation making views difficult at street level. Views from intersections along Lafayette Street are generally possible, but the distance between viewer and river begins to exceed 500' rendering only brief glimpses that limit its presence on downtown and reduce ones orientation to it.

From the river, the two most prominent visual landmarks identifying Baton Rouge are the I-10 Bridge and the 350 feet tall State Capitol. Historic iconic landmarks include the Old State Capitol, Water Works standpipe, and Hilton Hotel, recently joined by the sculptural forms of the LASM planetarium and Shaw Center for the Arts. The Governmental Building and Chase Bank towers stand out from the downtown core due to their relative height. The casino boats and associated gangways, as well as the mass of the River Center are prominently discernible from a distance. The half mile long concrete revetment of the levee is prominently visible from the river, emblazoned with "Baton Rouge" in huge red letters, legible from the river and the air.



Timeline of Events

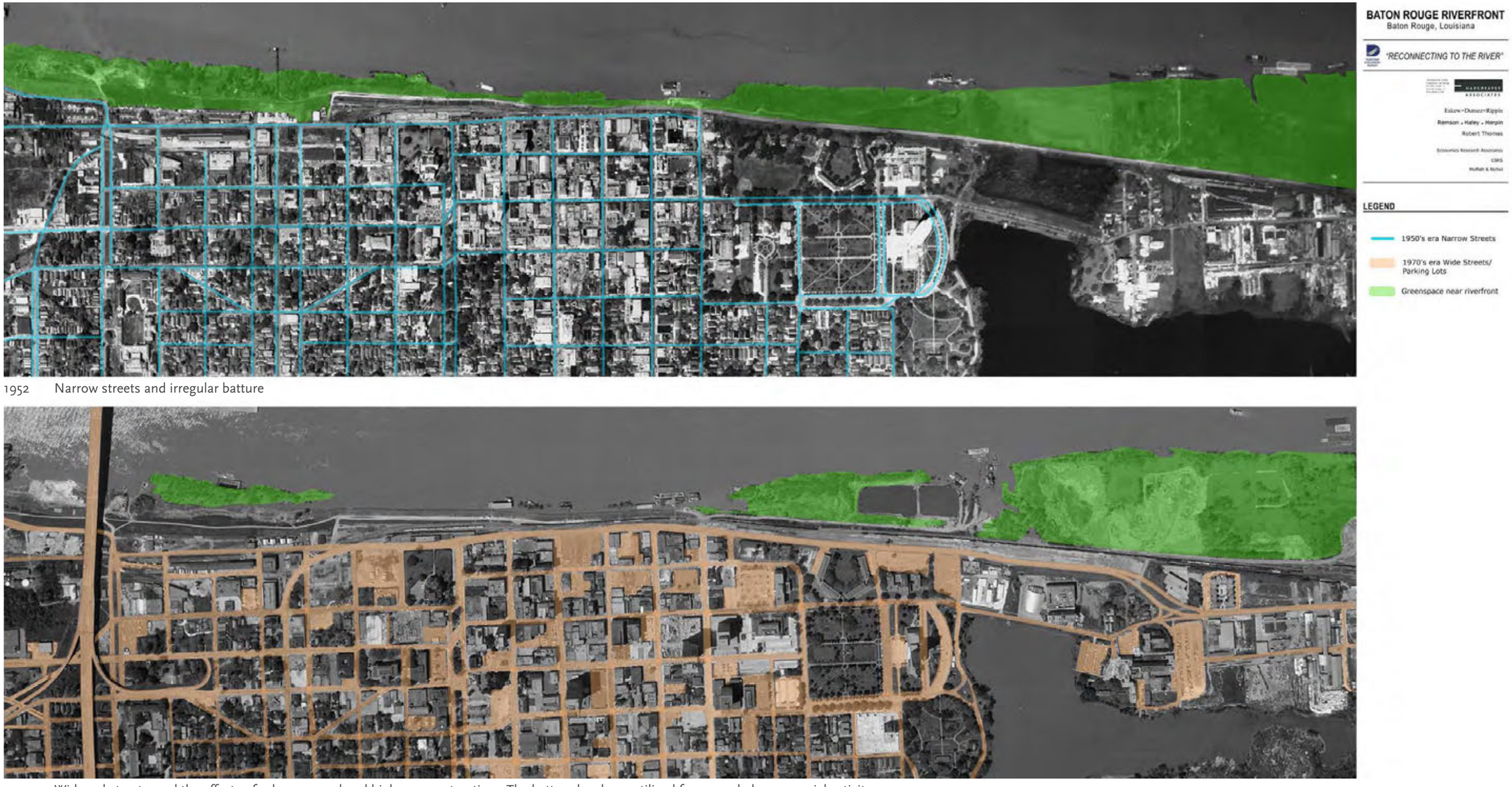
In 1699 Pierre le Moyne, sieur d'Iberville, traveling north up the Mississippi River came upon a blood smeared cypress pole located on the eastern bank where the flood plain of the river met the natural bluff. This red stick marked the hunting boundary of the Istrouma Indians and became the namesake of Baton Rouge. Within twenty years of d'Iberville's landing, the French military had constructed a fortification. This strategic position would change hands in 1763 under British rule as Fort New Richmond, and, then again in 1779 when the Spanish occupied the city and secured a star-shaped stronghold as Fort San Carlos.

The early part of the 19th Century brought the Louisiana Purchase in 1803 that fostered the establishment of Louisiana Statehood in 1810. In 1819, Lieutenant Colonel Zachary Taylor began the construction of the Pentagon Barracks and originally quartered troops and officers. The fifth side of the pentagon plan which remains open to the river today was never successfully constructed, however, the facility has played several roles in the development of the city as the first home of Louisiana State University and today as administrative functions for the State of Louisiana. In 1825, the Marquis de Lafayette visited Baton Rouge, and to commemorate the event the town fathers renamed Second Street in downtown to Lafayette Street as it remains today.

By the middle of the century the town of Baton Rouge was a bustling river port, and pieces of its mercantile era can be noted today along Third and Lafayette Streets. In 1846 it was declared the state's capitol, and following a catastrophic fire in 1849 that burned nearly twenty percent of the city, the Old State Capitol building was constructed upon the edge of the natural higher terrace. This castle-like structure received a critical review by Mark Twain, but today is a symbol of Baton Rouge's early significance in Louisiana. In 1932 the new State Capitol Building was built to replace it.

The Civil War brought the Union soldiers to Baton Rouge in 1862 and the town and the riverfront suffered severe damage from the battles that ensued during the next year. The State capitol was relocated to Opelousas, and the city was controlled by the Union Army and utilized as a staging area for Federal operations upriver. Baton Rouge did not regain its position as the State Capitol until 1879. The recovery from the war lasted for decades, and while some industrial developments encouraged the rebuilding, such as the Water Works in 1888 and Standard Oil in 1909, it is noted that the full recovery was not until the 1920s. In 1925 the Yazoo Mississippi Railroad Passenger Depot opened and helped Baton Rouge advance in the 20th Century and supported it's place as the political and business center of the State.

The riverfront, for the most part, has not been reoccupied as it was in the 1850s. Between the efforts of the Army Corps of Engineers to maintain protection from the river with the levees and the daily activities of the industrial rail corridor, there has been very little public life along this edge of the city. Within the city itself however, there is a refocusing on downtown and redevelopment. This is best noted with the construction of several new and renovated facilities including the Baton Rouge River Center, the Convention Center, numerous buildings along Third and Lafayette Streets, the Capital Park, the Shaw Center for the Arts and the renovation of the Old State Capitol. Currently, the effects of Hurricane Katrina, have yet to be fully understood, but are sure to contribute to the growth and development of Baton Rouge in the 21st Century.



1952 Narrow streets and irregular batture

1974 Widened streets, and the effects of urban renewal and highway construction. The batture has been utilized for expanded commercial activity.

As recently as 1952, the narrow streets and density of city center development were relatively stable. By 1974 however, the interstate system was operating as a dominant element, and the downtown core had become depleted, with many buildings demolished to make way for revenue generating surface parking lots. Street widening and highway access ramps further extended the dominance of vehicular traffic from the outlying parish at the expense of downtown pedestrian activity.

2000 Towers and whole block development insertions since 1974

2005 Buildings added since 2000, as well as select anticipated construction

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LEGEND

- Buildings added since 1974
- Buildings added since 2000
- Proposed buildings/renovations

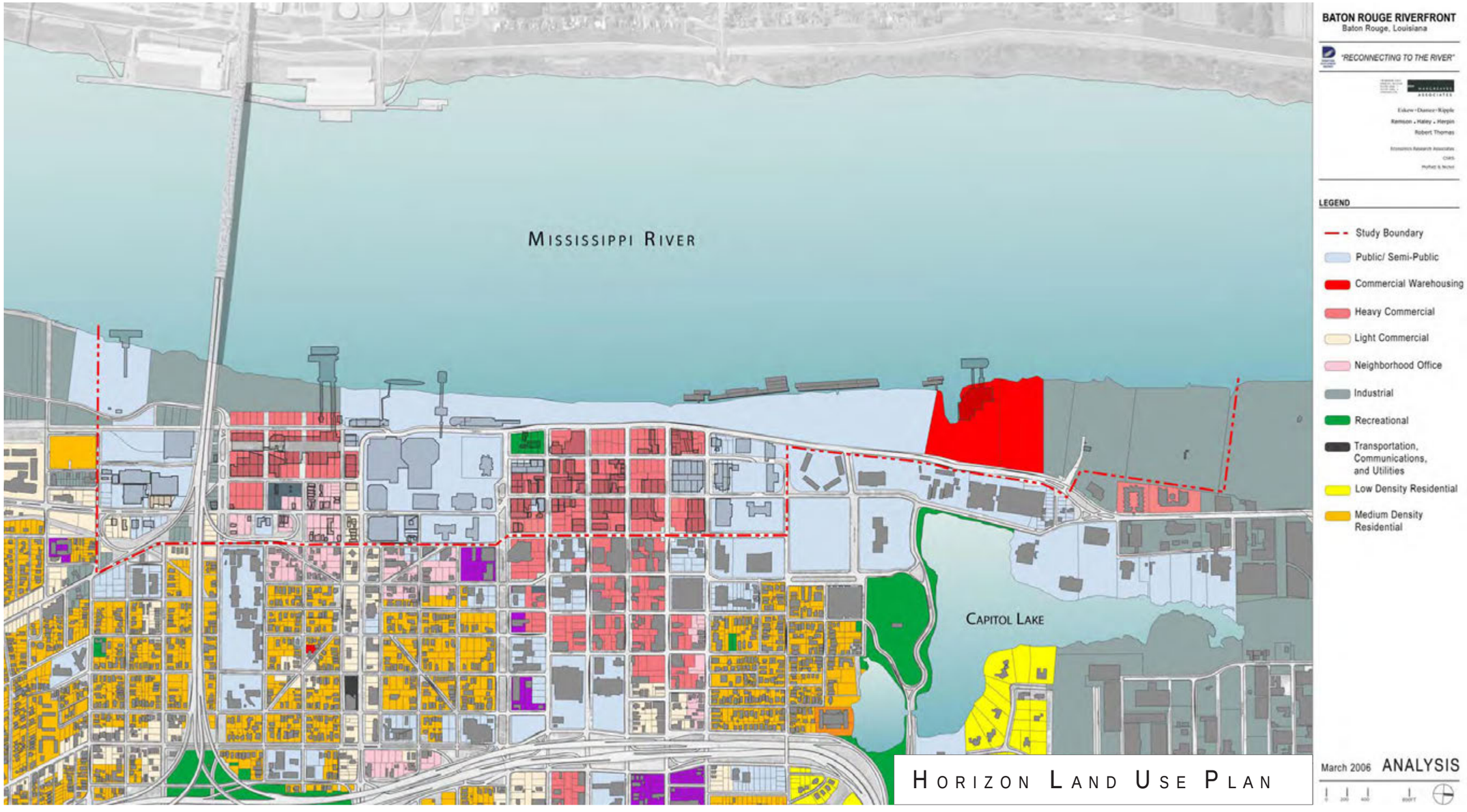
The last quarter century, from 1974 to 2000, witnessed the arrival of numerous whole-block, and larger, development projects including parking structures, office and institutional towers and hotels. This trend continued through 2005, with additional state office buildings, museums, parking structures and convention center expansion. Known proposals under consideration spanned the spectrum from more towers and parking garages to smaller scale infill.

Multi-block scale massing

Half-block scale massing

The scale of the historic streets and blocks were the outgrowth of the mercantile parcel developments. Collections of building facades on the street fronts formed the blocks. During the mid 20th Century, larger buildings began to occupy larger areas with many remainders of the blocks designated as surface parking. This trend expanded in the later part of the century with buildings taking over entire blocks and in some cases multi-blocks. This in turn fragmented the street grid and historic fabric, isolating portions of public realm system of streets. In response, within the recent decade, there have been several full-block developments that have returned to a more street friendly strategy. The success of these projects has relied partly on the issue of scale and the acknowledgement of different scales. On the one hand, a large project can be comfortable to the pedestrian at the scale of the street while, on the other hand, dealing with the larger scales of the city and the environment of the river with its industrial traffic and facilities, the riverboats, the levees, and the Mississippi River Bridge. The river barges, when lashed together in a string, are of a dimension similar to the half block development massing, suggestive of a scale for studying riverfront design strategies.

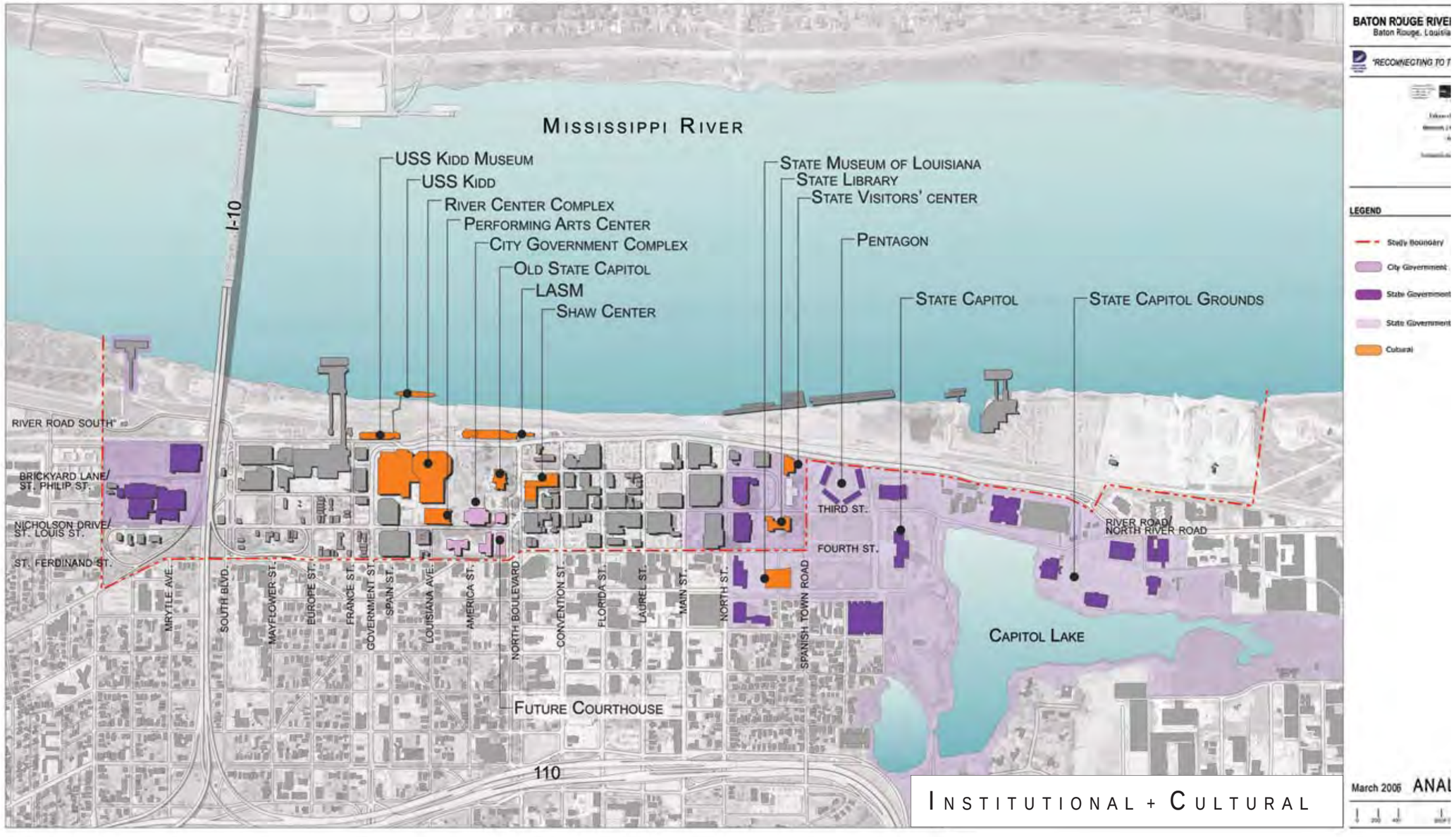
Parcel scale massing



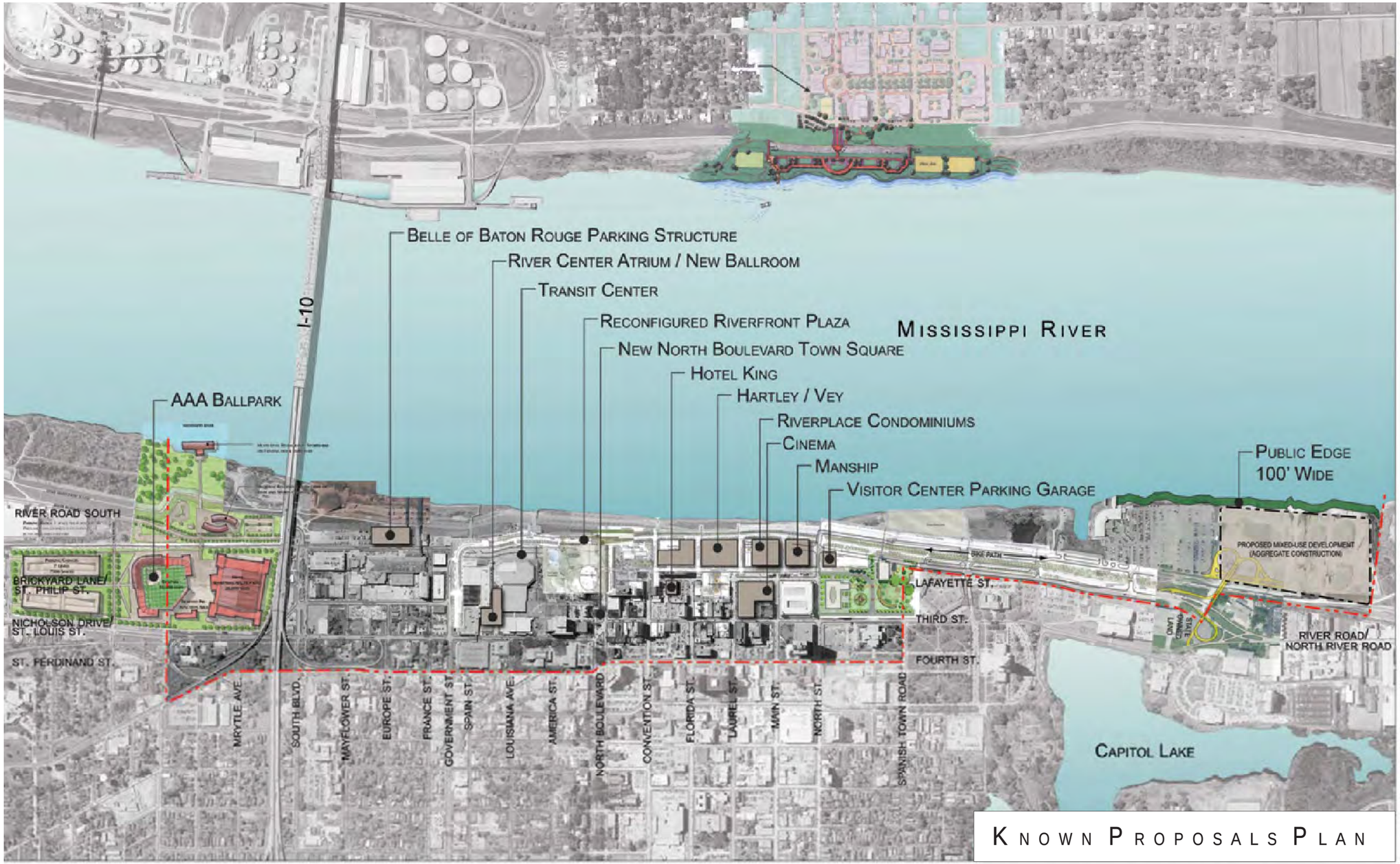
The City Horizon Land Use Plan illustrates an intentional segregation of land uses, protecting historic, lower density residential neighborhoods such as Beauregard Town and Catfish Town from large scale commercial development, or perhaps worse, surface parking lot use. From north to south, the heavy industrial zone abuts the consolidated state government grounds of office towers and parking structures. Heavy commercial, the core of downtown commerce, is largely confined between North Boulevard and North Streets, with the two existing casino operations as two notable exceptions to this land use. Institutional and cultural destinations are intermixed between North Boulevard and Government Street, centered on the River Center. A transitional mix of casino and neighborhood office properties occupies the zone from Government Street to the I-10 Bridge. South of the I-10 Bridge, under-utilized state warehouse property blends into the Nicholson Drive corridor that is on the cusp of changing from partially residential to wholly commercial.

The heavy commercial zone north of Convention St has attracted a number of residential tower proposals which are not only permissible, but desirable, to inject new life and vitality into this area of downtown.

Selective clearing and insertion of additional parking garages beyond the downtown core, risking the change of scale abutting residential neighborhoods and historic structures.



INSTITUTIONAL + CULTURAL



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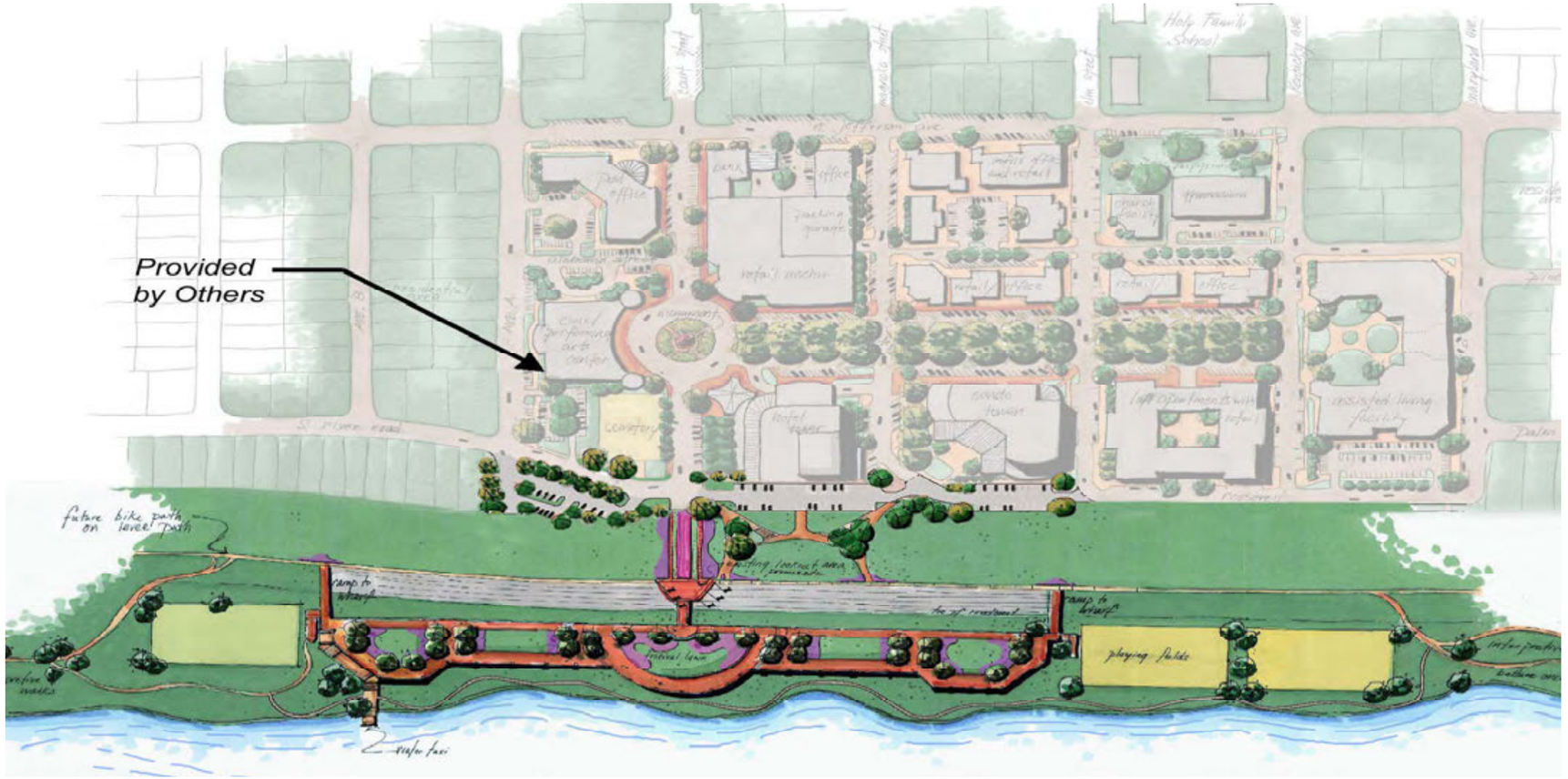
KNOWN PROPOSALS PLAN

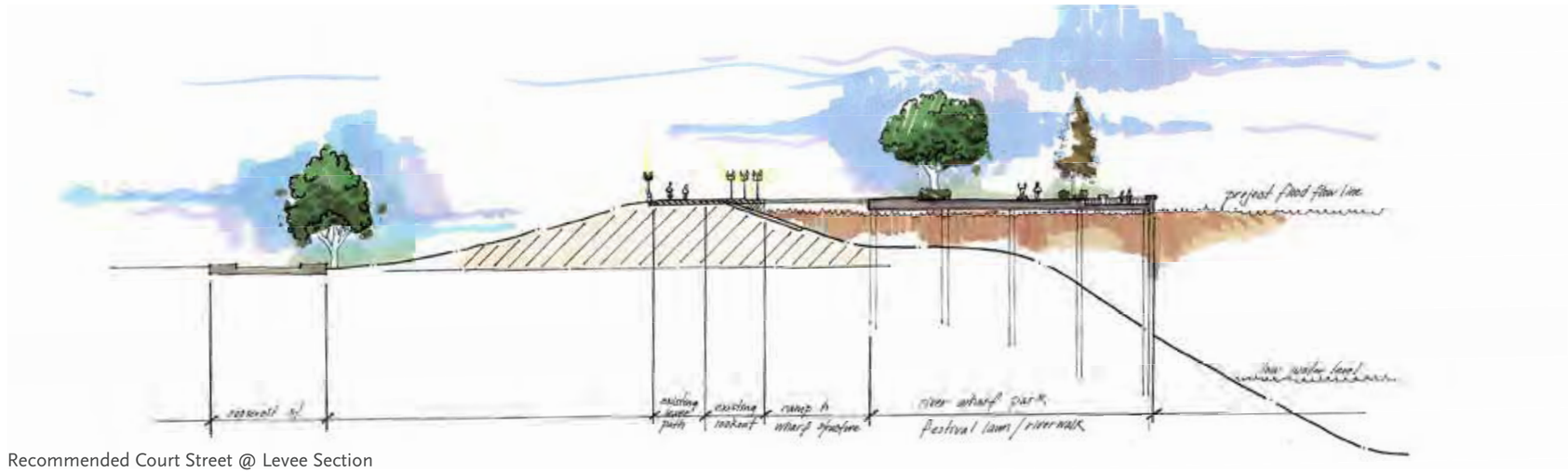
March 2006 ANALYSIS

As noted in the project background, there are a number of preceding organizational initiatives and private sector development proposals to develop various public and private parcels. Each proposal is in a different phase of consideration, with some little more than concepts or general ideas, while others are fully fleshed out designs in search of financing or regulatory authorization. The devastation of Katrina has accelerated the demand for residential housing, though the inclusion of affordable units in residential towers positioned closer to river are likely to have few such units. The majority of residential development proposals fronting on River Road are likely to maximize luxury, market rate units. Following the national trend, the high end demographic is the most desirable, and profitable, strategy for developers and cities to establish a viable beachhead of residents downtown, which spurs follow on retail and support development, and after reaching approximately 4000 residents, eventually a grocery store.

In Port Allen, directly across the river from Baton Rouge, the USACE sponsored a recent study by Perez/Reich Associates recommending a two-phase approach for that riverfront. The first phase proposed a pier-supported park of approximately 3.5 acres, flanked by athletic fields positioned directly on the batture. The second phase envisioned redevelopment of a low density neighborhood into a commercial and residential center for Port Allen. The key components of this study, with direct bearing on Baton Rouge, is the exploration of restrictions and opportunities for integrating development in the context of an existing levee structure. Early concepts envisioning development structures literally positioned on or spanning the levee were jettisoned due to governing USACE operational requirements. Probing queries between the USACE and Hargreaves Associates proved most informative and productive in terms of focusing conceptual efforts in a direction supported by the USACE.



Recommended Comprehensive Plan for Port Allen



Recommended Court Street @ Levee Section