Memorandum

DATE September 12, 2008

TO Trinity River Committee Members:
   David A. Neumann (Chair)
   Mayor Pro Tem Dr. Elba Garcia (Vice-Chair)
   Deputy Mayor Pro Tem Dwaine Caraway
   Carolyn R. Davis
   Linda Koop
   Pauline Medrano
   Mitchell Rasansky
   Steve Salazar

SUBJECT Trinity River Corridor Project: Park Design Guidelines Follow-up

The attached briefing on the Trinity River Park Design Guidelines, that was presented at the committee meeting on August 5, 2008, will be made available again for any further discussion or questions at the September 16, 2008 meeting of the Trinity River Corridor Project Committee.

The presenter will be Ignacio Bunster of Wallace, Robert & Todd (WRT), which is one of the consultants on the Lakes Design Team.

If you have additional questions, please let me know.

Jill A. Jordan, P.E.
Assistant City Manager

THE TRINITY
DALLAS

Attachment

c: Honorable Mayor and Members of the City Council
   Mary K. Suhm, City Manager
   Ryan S. Evans, First Assistant City Manager
   Ramon F. Miguez, P.E., Assistant City Manager
   A. C. Gonzalez, Assistant City Manager
   David O. Brown, Interim Assistant City Manager
   David K. Cook, Chief Financial Officer
   Deborah A. Watkins, City Secretary
   Thomas P. Perkins, Jr., City Attorney
   Craig D. Kinton, City Auditor
   Judge C. Victor Lander
   Helena Stevens-Thompson, Asst. to the City Manager
   Frank Librio, Director, Public Information Office

"Dallas, the City that works: diverse, vibrant, and progressive"
Park Design Guidelines Follow-up
for the Trinity River Corridor Project Committee
September 16, 2008
Purpose

Present Park Guidelines and Concepts

Seek TRCPC Endorsement
The Trinity River Corridor will be a cultural landscape unlike any other, setting a new benchmark: where art, science and sustainability will coexist throughout the built form, advancing the city’s most progressive goals and values...
Trinity River Corridor Guidelines Scope

• Summary of the design concept for a 10,000-acre portion of the Trinity River Corridor from Royal Lane down to IH-635/IH-20 past the Trinity River Audubon Center.

• About two-thirds of the subject area lies within the Trinity Forest.

• By necessity, the guidelines are mostly focused on the Trinity Lakes portion of the corridor—the **Trinity Lakes Park**—about 2,200 acres in extent from the confluence to the DART Bridge.
Design Goals

A Park for the Ages...

• The Trinity Lakes portion of the park (between the Confluence and the DART Bridge) is 2.5 times larger than New York’s Central Park.

• The park offers a diversity of recreation venues that are active and passive, in land and on water and encompass more than 2,000 acres that will include lakes, wetlands, meadows, woodlands and riparian areas.
• **Sustainability** is a hallmark of the design for the Trinity River Park, incorporating a range of measures in progressive green technology.
Design Goals

Restoring the Past While Creating the Future…

- Recreating the river meanders and vegetated riparian terraces, like the river of yore, is the organizing principle of the park.

- Experiences include both urban and natural, at times exposed to the wide vistas of the city skyline and at other times to the intimate textures of the Trinity Forest.
• The objectives of the Balanced Vision Plan set the precedence.

• The Trinity Lakes Plan responds by advancing a design that is reflective of emerging and progressive values.

• All elements within the park are open to naming rights
West Dallas Lake

Program Elements

- West Dallas Lake (129 acres, 18 feet deep)
- Rowing Course (2,000 meters long, 7 lanes)
- Large Amphitheater (20,000 people)
- Flex Fields (45 acres)
- Balloon Launch (two 3-acre areas)
- Boat Launch
- Lake Trail (3.5 miles)
- Picnic Areas (5 acres)

Note: Dimensions and quantities are approximate.
West Dallas Lake Rowing

- The West Dallas lake is over 129 acres and over 2000 meters long (meets Olympic standards) that will provide both recreational and competitive boating opportunities for the city and region.
- Submerged wetland island to provide a rooting structure for water lilies.
West Dallas Lake Amphitheater (Afternoon)

- West Dallas Lake Amphitheater used for rowing competition viewing.
West Dallas Lake Amphitheater (Sunset)

- West Dallas Lake Amphitheater used for passive recreation and view of balloon launch.
West Dallas Lake Amphitheater (Evening)

- West Dallas Lake Amphitheater used for concert venue and fireworks.
Recreation Fields

Program Elements

- Rec. Fields (91 acres, 17 fields)
- Practice / Flex Space (17 acres)
- Play Areas (3)
- Crow Lake Park
- Sylvan Boat Ramp
- Hampton Wetlands (142 acres)
- Pavaho Wetlands (50 acres)

Note: Dimensions and quantities are approximate
Recreation Fields

• 17 regulation size soccer or football fields that can also be used for cricket, lacrosse, rugby or other organized sports

• Flex space is intended for informal games, practice or other activities that require large open spaces

• 1600 parking spaces are planned

• Restrooms and concession areas are planned
Urban Lake

Program Elements

• Urban Lake (91 acres, 12 feet deep)
• Large Pavilion (300 people)
• Promenade (1 mile long)
• Central Island (55 acres)
• Central Island Amphitheater (2,000 people)
• Downtown Overlook
• Fast Track Overlook
• Marina (as a concession)

Note: Dimensions and quantities are approximate
The terminus of the Urban Lake is a 2,000-foot long, shady, twisting and stone-reinforced stream for canoeists and kayakers (a closed-loop white water course will be located outside the levees).

An iconic pavilion is perched atop a 15-foot rise with commanding views of the lakes, river and bridges for large groups to gather for picnics, celebration.

A 300-space parking area serves park uses nearby, while also providing direct service and emergency vehicular access to the promenade.
• The Urban Lake Pavilion is designed for a 300-person gathering, that can accommodate tables, chairs, cookers and other equipment to be provided by the attending group, based on reservation policies and stipulations.

• The roof structure is above the 800 year flood elevation and would be equipped with photovoltaic fabric to power night time lighting.
Urban Lake Detail

Program Elements

- Arrival Plaza (1.5 acre)
- Promenade (1 mile long, 25 feet-75 feet wide)
- Fountain Plaza (2 acres)
- Water Maze (1.5 acres)
- Skate Park (1 acre)
- Marina (as a concession)

Note: Dimensions and quantities are approximate
Urban Lake: Central Island & Promenade

- A wide Arrival Plaza is located at the terminus of the Downtown Overlook and will function as a gathering area for performances and as the start/finish line for race events (5K, 10K, and 20K).

- A water maze, a skate park (under the shade of IH-30), and a Fountain Plaza will flank the Arrival Plaza.
Urban Lake: Cross Section

DOWNTOWN

- Downtown Levee
- Promenade
- Urban Lake

OAK CLIFF

Margaret McDermott Bridge

* Subject to USACE Approval
Urban Lake: Cross Section
Urban Lake: Cross Section
Urban Lake: Central Island

- Shade structures take the place of tree vegetation in this plaza preserving views of the downtown skyline and promenade, while Seating walls are integrated with the topography and provide illumination at night.

- Interactive fountains and dark-colored, exposed aggregate concrete paving slopes into the lake as a beach.
Central Island Shade Structures

100 Year Flood
Central Island Night Rendering

- Fountains, seating walls and shade structures illuminated at night
Urban Lake: Promenade & Arrival Plaza

- The promenade will accommodate 19,000 people during peak events and activities.
- 80% of the promenade will be shaded throughout the course of the day.
Urban Lake: Water Maze

• Trinity Water Maze encourages children to interact with the meandering river at a scale they can comprehend.

• Water maze is 3 inches in depth and varies in width.
Urban Lake: Cypress Wetlands

- 3.5 acres of perched Cypress Wetlands will help improve the Urban Lake water quality.
- The Cypress Wetlands will provide shade on the promenade cooling both the promenade and the constructed wetland habitat.
Urban Lake: Isthmus & Amphitheater

- The Isthmus provides access from the Natural to the Urban Lake through a braided channel laced with native Texas limestone.
- The Houston Street ramp will provide pedestrian and emergency access to the Isthmus, Amphitheater and Promenade areas.
Isthmus (connection between Natural Lake and Urban Lake)

- This area is an active observation and recreational amenity where canoeists and kayakers can navigate between two water courses (3’ drop), one option being more challenging than the other.
- The design of the Isthmus is inspired by the local limestone geology and bedrock shoals as seen throughout streams and creeks in Dallas.
The approach to the Isthmus from the Natural Lake would be lined with wetland plants to highlight the passage from the natural to the urban environments.
Central Island Amphitheater

• Located to strategically capture views of the downtown skyline, the Central Island Amphitheater is intended as an intimate performance venue for a spectator capacity of 3,000.

• Stone steps and ledges visually connect this amphitheater with the shoals of the Isthmus, while the stage would consist of a floating moveable platform with a potentially artist-designed canopy to serve performances at other lake locations, including the large pavilion.
Natural Lake

Note: Dimensions and quantities are approximate

Program Elements

- Natural Lake (56 acres, 12 feet deep)
- Floating Wetlands (3.5 acres)
- Cypress Wetland Pond (2 acres)
- Canoe Launch
- Boardwalk (1,000 feet long)
- Fishing Platforms (2)
Natural Lake

- Isthmus
- Boardwalk
- Fishing Platform
- Floating Wetlands
- Oak Cliff Parking
- Canoe Launch & Portage
- Cedars West Access Point
- Cypress Wetland Pond
- Oak Cliff Lagoons
- Founders Park Neighborhood Trail
- Zang
- Jefferson
- Stemmons Freeway (I-35)
- Cedars West Access Point

Trinity River Park Design Guidelines
Natural Lake Floating Wetlands

- The floating wetlands are multifunctional, serving as a design aesthetic, educational demonstration, habitat and water quality improvement measure.
Corinth Wetlands

Program Elements
- Corinth Wetlands (78 acres)
- Cypress Wetland Pond (6 acres)
- Oxbow Lake (5 acres)
- Pecan Grove (12 acres)
- Standing Wave
- Neighborhood Play Area
- Boardwalks and Bird Observation Area

Note: Dimensions and quantities are approximate.
Corinth Wetlands
Corinth Wetlands

- The Corinth Wetlands and Oxbow Lake area is designed to be a passive observation area for understanding and appreciating wetland habitats and systems.

- This environment will be a magnet for migratory birds and other aquatic and riparian wildlife and birding observation areas, boardwalks, tree groves and shaded respites are planned for this area.
The Trinity Corridor Loop Road System defines the Trinity Fields, Lakes and Forest as an extension of the Trinity identity, way-finding and signage program.

The signage program should include the DART Rail System for public transportation interface to the park, while the loop roads can be used for tourists activities (driving tours).
Gateways

**Regional Gateways** – Westmoreland, Hampton, Sylvan, Continental North, West Dallas / Continental, Downtown Overlook / Reunion, Houston Ramp, Industrial, Moore Park

**Community Gateways** – Mockingbird North, Charlie Pump / Trinity Strand, Baker Pump / Trinity Strand, Oak Lawn / Trinity Strand, Commerce / Fast Track, Oak Cliff / Founders Park, Eloise Lundy,

**Neighborhood Gateways** – Pluto / Bernal, Westmoreland South / Bernal, Inwood, Hampton South, Pavaho, Cornet, Coombs Creek, Belleview / Cedars West
Vehicular Roads & Internal Parking

- **Internal Roads** – 8 miles
- **Internal Parking (paved)** – 16 acres
- **Internal Parking (turf)** – 35 acres
Trail Network

- Downtown Levee Top Trail – 9 miles
- Secondary Trail – 14 miles
- Equestrian Trail – 11 miles
- Primary Trail – 9 miles
Restroom Locations

- Mobile restroom locations
- Fixed restrooms above 800 year flood
Restroom Facilities

- The restrooms will be mobile units with separate men’s, women’s and handicapped/family stalls, supplied with water and sewer hook-ups.
- Placed on 2- to 3-foot raised and paved areas, the units will be towed to higher ground during flood events of two- three year frequencies and permanent ramps and steps will be added to facilitate access and reduce removal time.
- During the detailed design phase of the park the restroom units will be custom designed for vandal resistance, solar power supply and improved aesthetics.
Conceptual Lighting Feature Plan

• Lighting under the existing and new bridges.

• This illumination program will enhance the structures providing security and reversing perceptions of ‘being under a bridge’.

• The illumination will also greatly assist with directionality and way-finding in the twilight hours.
• West Dallas Ball Fields & Rowing Facility (stadium lighting) plus Promenade along Urban Lake (see options next page)

• Primary Trail from Cedars West to Crow Park, including Oak Lawn, Fast Track Overlook, Houston Ramp, Founders Park, Elouise Lundy and Cedars West Park Gateways (18 feet tall light poles 80 feet on-center).
Promenade Lighting Options

- **175 feet tall mast lights** spaced about 600 feet, casting an even glow over the area.
  - The mast lights would require less maintenance; fewer in number. They also would provide residual lighting on the parkway deck and Levee Park beyond.
  - Subject to more detailed study to improve the fixtures’ performance and appearance.

- **30 feet pole lights** along promenade about 75 feet on-center
  - Poles would provide focused light on walking and gathering areas
  - Increased maintenance due to higher flooding exposure, more fixtures

RECOMMENDED
Art Program: A Three Part Approach

- TEMPORARY and SITE-SPECIFIC works placed throughout the park on a seasonal basis—potentially a biennial event attracting national and international attention

- Artist designed COUNCIL RINGS, placed in choice locations throughout the Fields, Lakes and Forest for small gatherings, landscape interpretation, meditation and readings.

- A single, MAJOR ART WORK by a renowned artist conceived as part of the Fountain Plaza, possibly the water feature itself.
Landscape Maintenance

- Low Maintenance Areas
  - Meadow, River, Lakes, Wetland, Woodland and Urban Forest
  - Total: 1900 acres

- High Maintenance Areas
  - Maintained Turf, Promenade and Parking
  - Total: 300 acres
2 Year Flood

High Maintenance Areas

Central Island:
Pavilion, Fountain Plaza
Amphitheater, Isthmus

Urban Lake
Natural Lake
Promenade

West Dallas Flex Space
West Dallas Amphitheater
West Dallas Recreation Fields
Crow Park

2-Year Flood Inundation
Comments and Questions
Appendix: Wall Treatment Materials along Promenade

A. Acrylic wall

B. Acrylic wall + waterfall

C. Stone veneer + waterfall

D. Solar panel + green wall + stone veneer

E. Solar panel + green wall + ornamental wall

F. Solar panel + waterfall

G. Green wall + waterfall

KEYMAP

Trinity River Park Design Guidelines
Appendix: Materials Palette

- Solar Louver Panels
- Green Walls
- Water Walls
- Stone Veneer Walls
Appendix: Materials Palette

- **Reinforced Turf** – event and roadside parking
- **Concrete Paving** – trails, roads
- **Stone Paving** – promenade, isthmus...
Appendix: Materials Palette

- Benches
- Recycling & Trash Receptacles
- Bicycle Racks

Protective Barrier (Laminated Acrylic)
Appendix: Plants
Appendix: Urban Lake Edge Prototypes
Appendix: Natural Lake Edge Prototypes
## Appendix: Natural Lake Edge Prototypes

<table>
<thead>
<tr>
<th>Park Feature</th>
<th>Material</th>
<th>Finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access and Circulation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary Trail - 20’ Wide</td>
<td>Concrete</td>
<td>Broom</td>
</tr>
<tr>
<td>Secondary Trails - 12’</td>
<td>Concrete</td>
<td>Broom</td>
</tr>
<tr>
<td>Secondary Trails - 12’</td>
<td>Decomposed Granite</td>
<td>1/4” or Less</td>
</tr>
<tr>
<td>Equestrian Trail - 10’</td>
<td>Decomposed Granite</td>
<td>1/4” or Less</td>
</tr>
<tr>
<td>Boardwalks - 10’</td>
<td>Sustainable Decking</td>
<td>Weather Resistant</td>
</tr>
<tr>
<td>Park Roads 24’</td>
<td>Concrete</td>
<td>Broom/No Curbs</td>
</tr>
<tr>
<td>Parking</td>
<td>Concrete</td>
<td>Broom/No Curbs</td>
</tr>
<tr>
<td>Internal Bridges</td>
<td>Concrete &amp; Steel</td>
<td>Broom/Powder Coated</td>
</tr>
<tr>
<td>Key Park Features</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promenade</td>
<td>Lueders, Limestone, Granite, Concrete</td>
<td>NA</td>
</tr>
<tr>
<td>Isthmus</td>
<td>Lueders Limestone, Structural Concrete</td>
<td>NA</td>
</tr>
<tr>
<td>Fountain Plaza</td>
<td>Concrete, Natural Stone</td>
<td>NA</td>
</tr>
<tr>
<td>Urban Lake Outfall</td>
<td>Limestone Armoring, Concrete</td>
<td>NA</td>
</tr>
<tr>
<td>Central Island Amphitheater</td>
<td>Lueders Limestone, Structural Concrete</td>
<td>NA</td>
</tr>
<tr>
<td>West Dallas Amphitheater</td>
<td>Retained Fill, Turf</td>
<td>NA</td>
</tr>
<tr>
<td>River and Lake Armoring</td>
<td>Lueders, Limestone, Concrete</td>
<td>NA</td>
</tr>
</tbody>
</table>