

EYESORE TO ICON

Redevelopment of the Nashville Thermal
Transfer Plant into West Riverfront Park and the
Ascend Amphitheater



Presented by:

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K.S. Ware and Associates, LLC

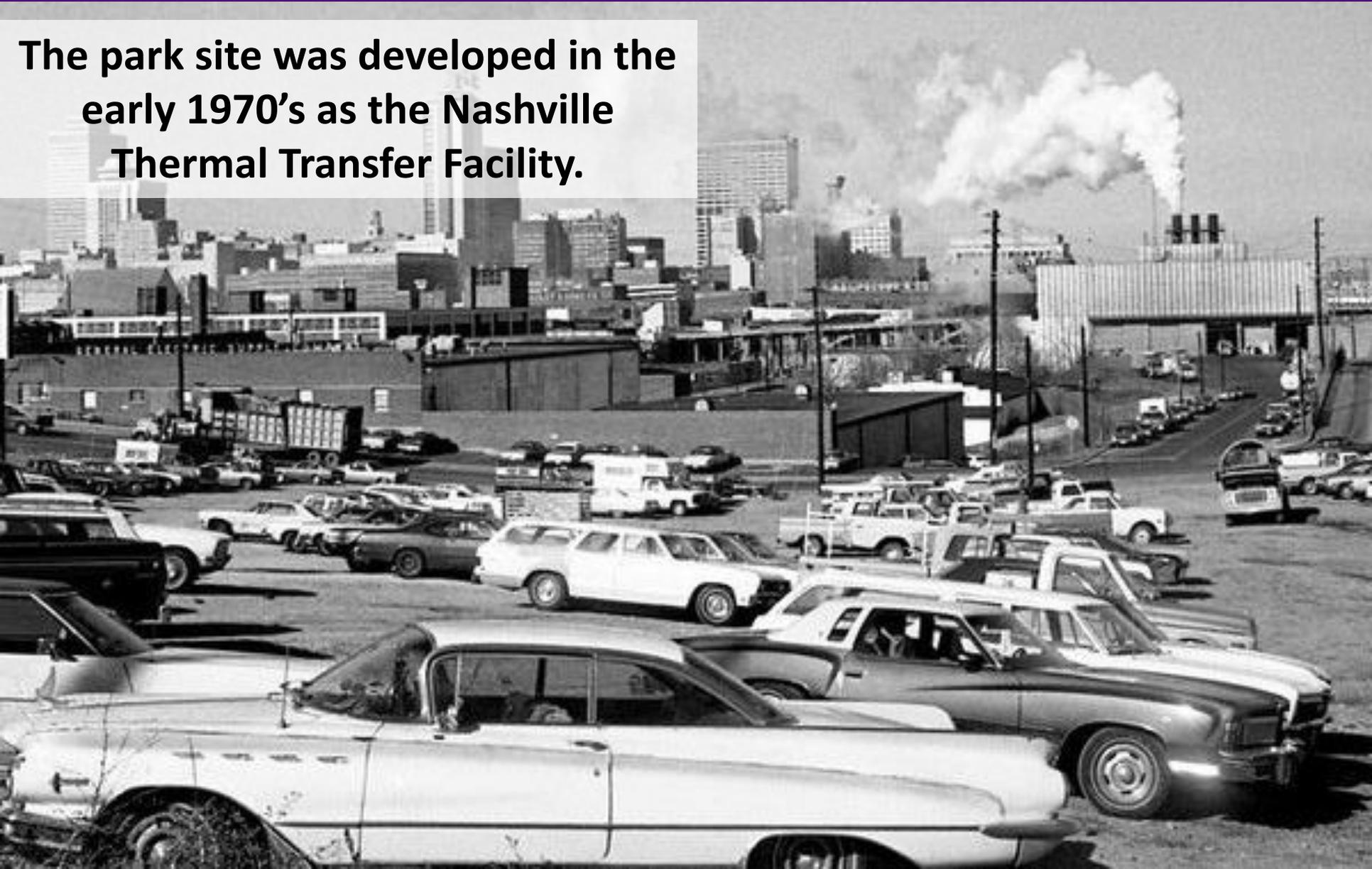
WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER

The park site was developed in the early 1970's as the Nashville Thermal Transfer Facility.



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WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER



Until 2002, the facility burned municipal solid waste to generate energy for boilers and chillers to heat and cool dozens of buildings in Nashville



WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER

**The Facility was Demolished in 2004
and Replaced with a Natural Gas
Powered Facility**



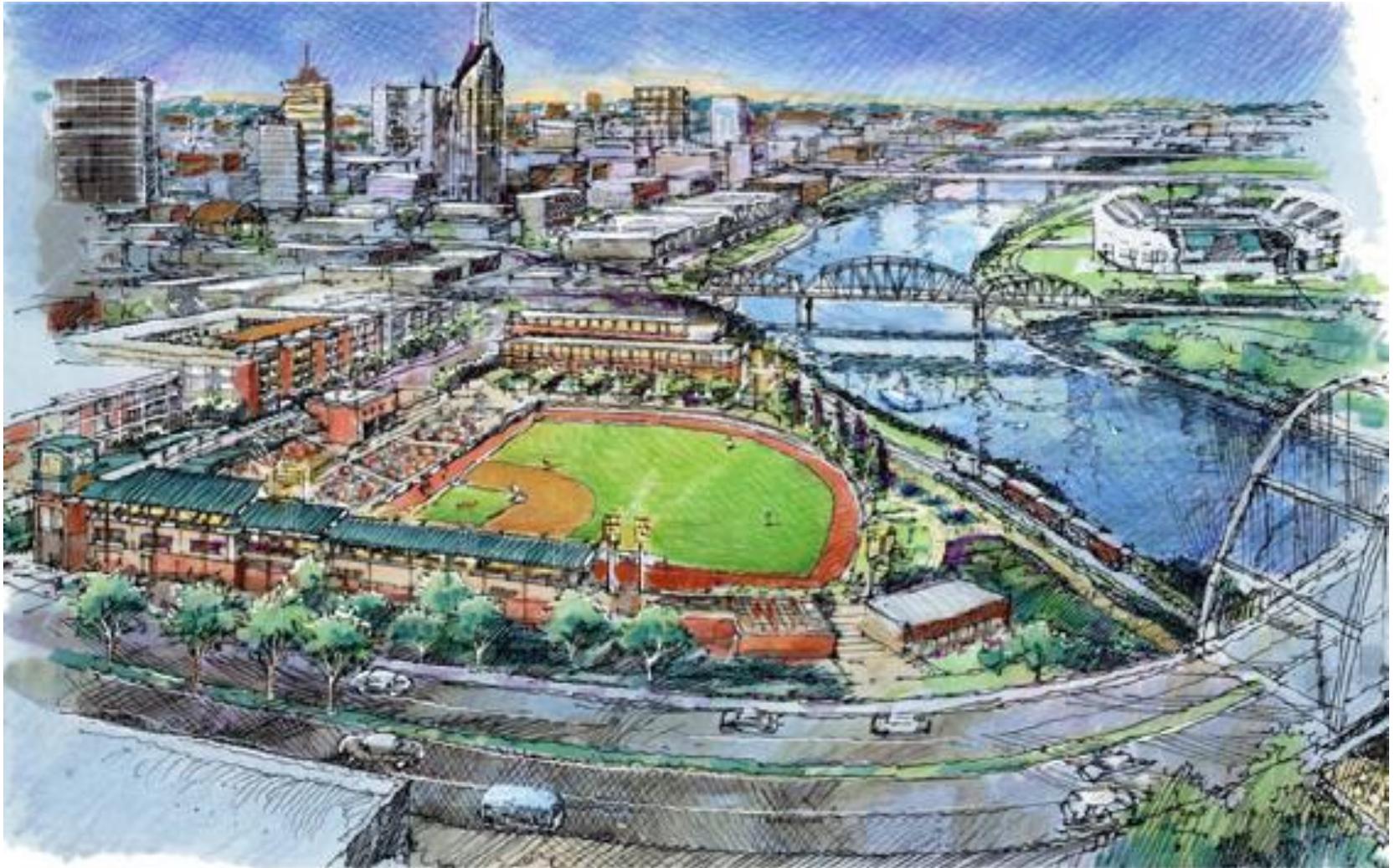
WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER

What to do with the Site?



WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER

What to do with the Site?



WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER

2007

NASHVILLE RIVERFRONT CONCEPT PLAN

Prepared for Nashville Metro Parks and Recreation & US Army Corps of Engineers, Nashville District

hargreaves associates . kennedy coulter rushing watson . everton oglesby architects
hawkins partners . moffat nichol . chris leinberger

January 2007

N A



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WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER

2013



SoBro Master Plan – Downtown Nashville

WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER



WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER

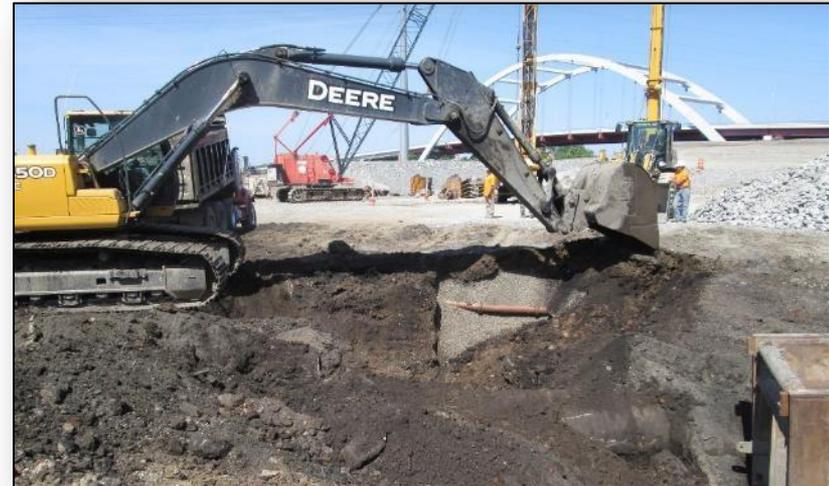
What Is Stopping Us from Building a Park?



WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER

Condition of the Site in 2013

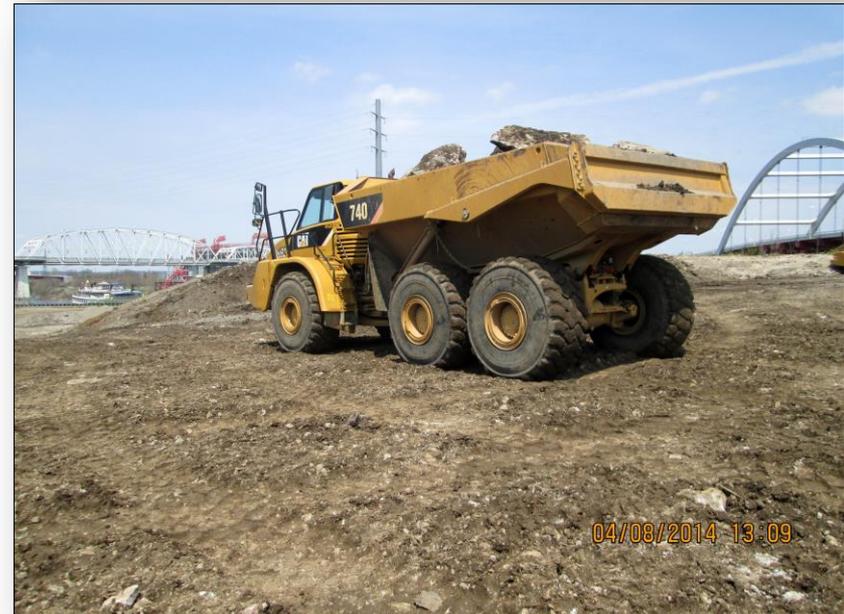
- 10 to 30 feet of urban fill (soil, cinders, debris, etc.) spread across the site.
- Site regulated by the Tennessee Department of Environment and Conservation
- Scattered contamination consisting of PAHs, lead, arsenic, petroleum, suspected dioxins
- General perception of the site was that it was highly contaminated



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Condition of the Site in 2013

- Most contamination identified above industrial exposure scenario limits had been remediated (removed).
- Site was capped with approximately two feet of clean topsoil as a protective barrier, presumably to facilitate use of site as an event field.
- Site was already being used as an event field with approval from TDEC.



WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER

Environmental Challenges Associated with Construction

- Soil conditions were mediocre at best for new construction.
- Traditional construction of the amphitheater and associated facilities would have required substantial excavation of soil.
- The soil cap on site was an asset worth saving.
- There were multiple city agencies involved as stakeholders.
- Space was limited.



WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER

Environmental Challenges Associated with Construction

- As a former waste processing facility, the site was regulated by TDEC.
- The entire site spanned several parcels and different parts of the project site were under the oversight of different regulatory programs.
- The design included utilizing ground water for irrigation. The design was to be able to completely independent of the Nashville water supply for irrigation.



WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER



Preserve the Cap

Metro Water Services agreed to temporarily store 9,000 yd³ of topsoil at the their Lebanon Road facility.

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Minimize Excavations and Disposal

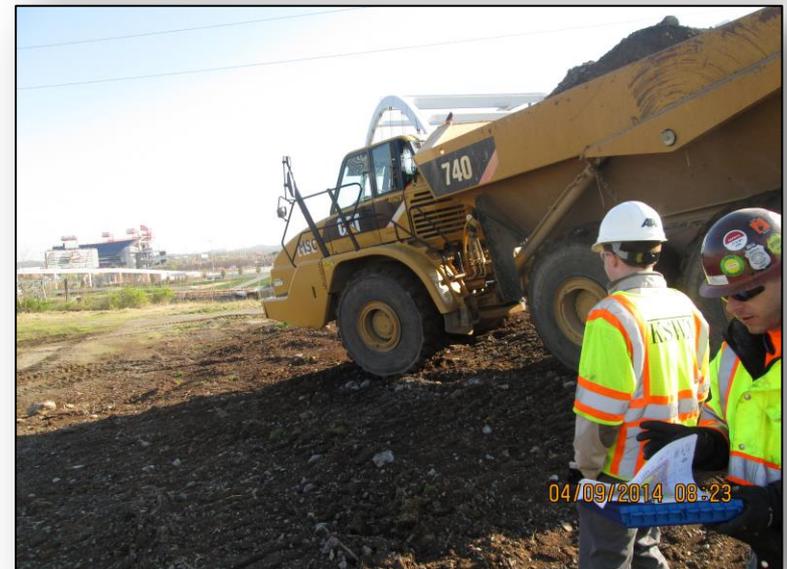
- Utilized geo-grid across the site to reduce the amount of soil excavation required for construction. Reduced the amount of excavation by 40,000 yd³.
- Segregated rock from excavated soil and, in a lot of instances, crushed the rock for use as fill for use on site (9,000 tons).
- Disposed of excavated soil that could not be used on site at a regulated waste facility (3,300 Tons)



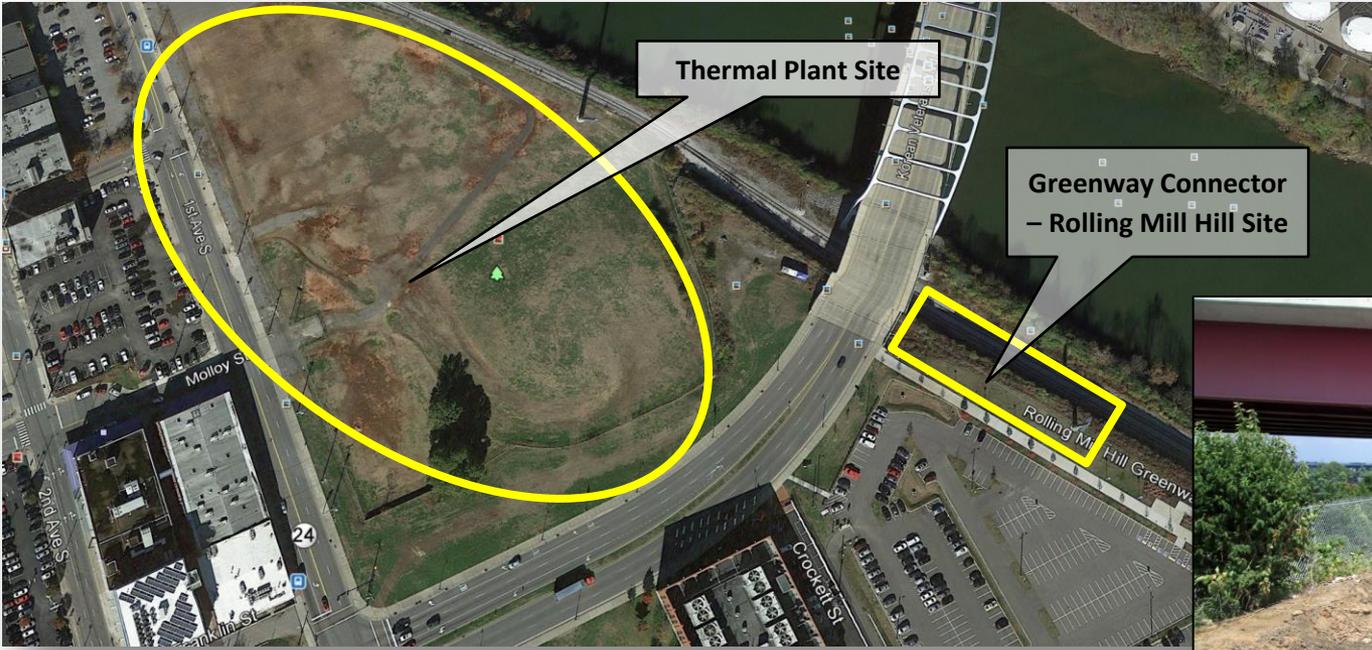
WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER

Managed Suspect Areas as They Were Identified During Construction

- Constant presence on site during excavation and earthwork
- Mobilized quickly to characterize suspect areas, most often same day.
- Developed solutions with maintaining construction progress as a priority



WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER



**Made Nice with the
Regulators and the
Neighbors**

TDEC allowed project team to temporarily stockpile 3,000 yd³ of lead contaminated soil from Rolling Mill Hill on the Thermal Plant Site

WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER

Demonstrated the Irrigation Well was not Contaminated

- Identified the Knox Aquifer as the water bearing zone
- Worked with Metro Water Services to develop the 1,100 foot deep irrigation well.
- Pumped 50-gallons per minute for eight hours



WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER

Separate Users From Historic Use

- Engineered barriers, 24-inches of clean soil, pavement, buildings and vapor barrier, to reduce exposure of park users to soil contaminants.
- Land use restrictions to keep engineered barriers in place



WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER

2013



WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER

2016



WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER

BY THE NUMBERS

11 ACRES in PHASE ONE

16 MONTHS SHOVEL TO OPEN

20 MONTHS DESIGN TO OPEN

70 THOUSAND PEOPLE IN 2 weeks

52 MILLION TOTAL BUDGET

WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER



**DESIGN BASED ON
RIVER MORPHOLOGY**

WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER



WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER



WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER



WEST RIVERFRONT PARK

OVER ONE MILE OF GREENWAYS

CUMBERLAND RIVER

AMPHITHEATER

FITNESS CIRCUIT

CONNECTION TO ROLLING MILL HILL GREENWAY

RIVERVIEW GARDENS

THE POINT

JOHN SEIGENTHALER PEDESTRIAN BRIDGE

K9 PLAYGROUND

KIOSK/RESTROOMS

THE BOWL

SERVICE COURT

LAWN TERRACES

THE GREEN

KOREAN VETERANS BOULEVARD

FIRST AVENUE

DEMONBREUN STREET

MOLLOY STREET

WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER



1ST AVE PROMENADE W GREENWAY AND
PROTECTED BIKE LANES

WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER

ROLLING MILL HILL GREENWAY CONNECTION



WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER



1st PUBLIC BIKE
REPAIR STATION

WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER

SUSTAINABILITY

WEST RIVERFRONT PARK

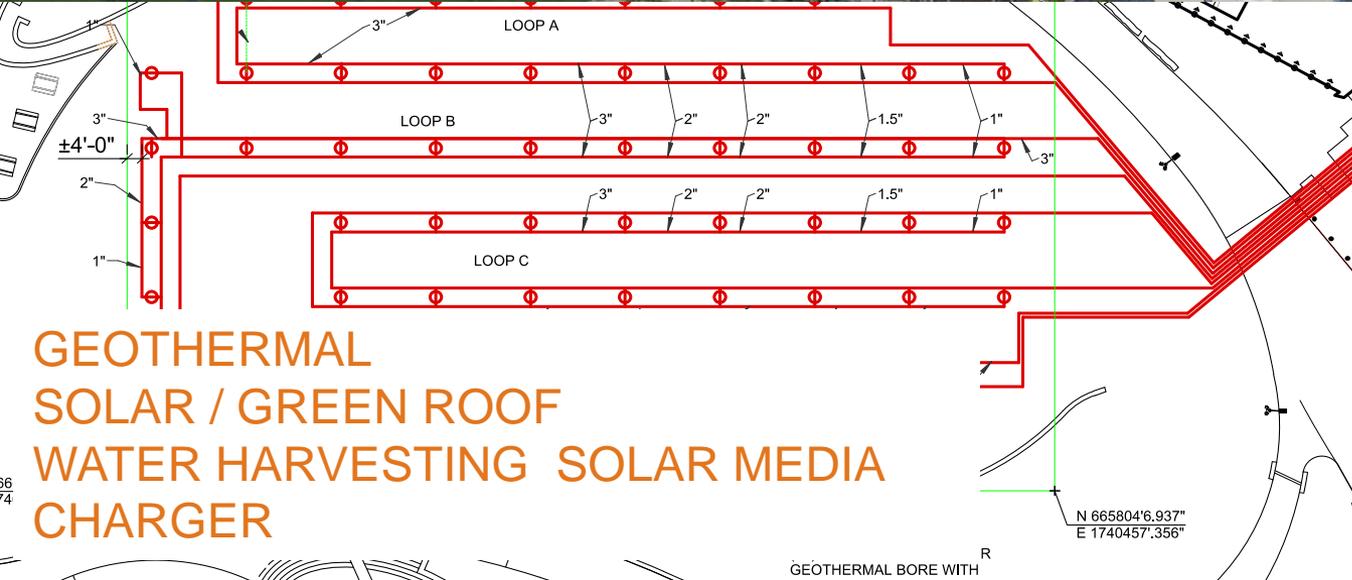


WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER



LEED GOLD

WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER



GEO THERMAL
SOLAR / GREEN ROOF
WATER HARVESTING SOLAR MEDIA
CHARGER



GEO THERMAL BORE WITH R

WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER

WEST
RIVER
FRONT
PARK

BEST VIEWS!!



WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER



WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER



OUR CUMBERLAND RIVER BASIN

By the time the Cumberland River flows into Music City it knows a thing or two about covering classic country in Nashville: the river (and source of our drinking water) supports water that has rained on and plin of 64 counties and 12,000 square miles of Tennessee and Kentucky land.

So, next time you're out honky-tonking on Lower Broadway, raise a glass of ice cold H₂O to the region's longest running country star — the

Cumberland River. And remember, just as your drink is impacted by our neighbors upstream, the drinking water of all who live downstream of Nashville is impacted by each and every one of us. We're all in this together! How are you making an impact?

To learn more, visit <http://www.cumberlandriverfrontpark.org>



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WEST RIVERFRONT PARK

FITNESS



CUMBERLAND RIVER

AMPHITHEATER

FITNESS CIRCUIT

CONNECTION TO ROLLING MILL HILL GREENWAY

RIVERVIEW GARDENS

THE POINT

JOHN SEIGENTHALER PEDESTRIAN BRIDGE

K9 PLAYGROUND

KIOSK/ RESTROOMS

HALF COURT BASKETBALL

FITNESS CIRCUIT

PING PONG

SERVICE COURT

THE BOWL

LAWN TERRACES

SOCCER

KOREAN VETERANS BOULEVARD

FIRST AVENUE

DEMONBREUN STREET

MOLLOY STREET

WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER



WEST RIVERFRONT PARK

JOHN SEIGENHAFFER PEDESTRIAN BRIDGE

CUMBERLAND RIVER

AMPHITHEATER

FITNESS CIRCUIT

CONNECTION TO ROLLING MILL HILL GREENWAY

LARGE INVESTMENT IN PUBLIC ART

RIVERVIEW GARDENS

THE POINT

K9 PLAYGROUND

KIOSK/ RESTROOMS

PUBLIC ART

THE BOWL

SERVICE COURT

LAWN TERRACES

KOREAN VETERANS BOULEVARD

FIRST AVENUE

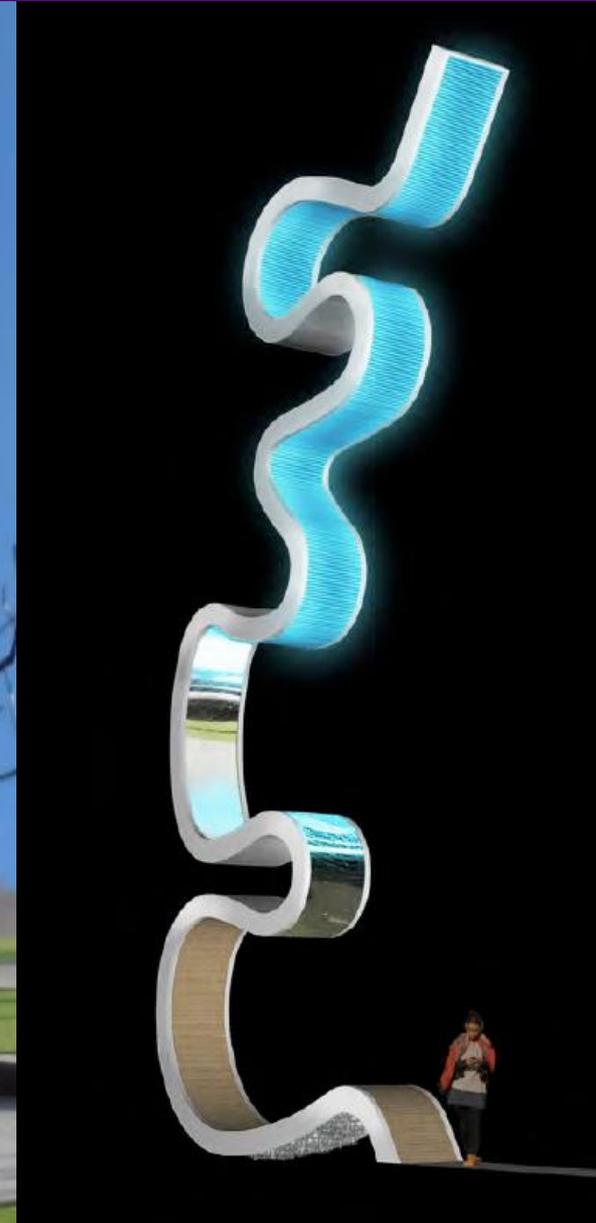
DEMONBREUN STREET

MOLLOY STREET

WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER

“LIGHT MEANDER”

Artist
Laura Haddad
and Tom Drugan



WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER

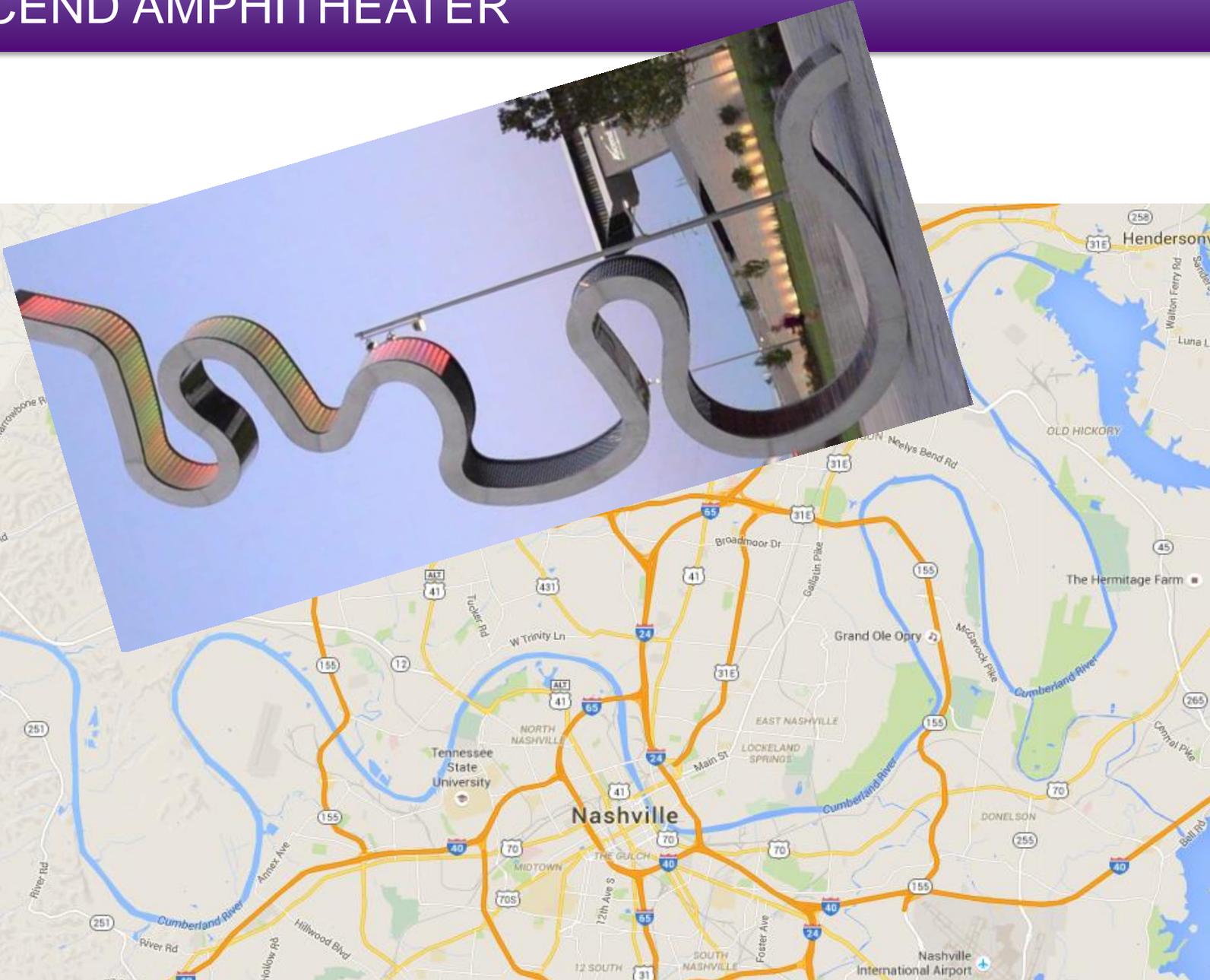
“LIGHT MEANDER”



WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER



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WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER

WEST
RIVER
FRONT
PARK

URBAN GARDENS AND
TREES!!

ORNAMENTAL
GARDENS

BETTY BROWN
TREE TRAIL



CUMBERLAND RIVER

RIVERVIEW
GARDENS

AMPHITHEATER

THE POINT

CONNECTION TO
ROLLING MILL HILL
GREENWAY

JOHN SEIGENTHALER
PEDESTRIAN BRIDGE

K9
PLAYGROUND

KIOSK/
RESTROOMS

THE BOWL

SERVICE
COURT

LAWN
TERRACES

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KOREAN VETERANS BOULEVARD

FIRST AVENUE

DEMONBREUN
STREET

MOLLOY
STREET

WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER



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RIVERVIEW GARDENS

in partnership with

CHEEKWOOD
BOTANICAL GARDEN & MUSEUM OF ART

Cheekwood Botanical Garden & Museum of Art is partnering with the Metro Parks to promote education about plants for Nashville landscapes at Riverview Gardens. Cheekwood, located in West Nashville and encompassing 55-acres, is one of the finest examples of an American Country Place Era estate and dedicated to excellence in art and horticulture. Visitors can enjoy year-round family-friendly activities with four seasonal festivals held during the year.

Our partnership for this garden includes:

- the identification and labeling of botanical and common names for plant material throughout Riverview Gardens
- the involvement of dedicated staff and volunteers in maintaining the garden and highlighting seasonal interest
- the integration of educational programs and garden walks throughout the year for Nashville residents and visitors

Enjoy the gardens and please leave all blooms for others to enjoy!

www.cheekwood.org/RiverviewGardens

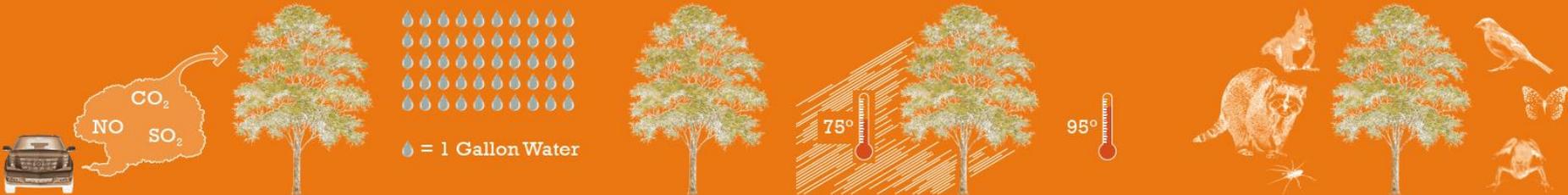


BOVS

WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER



THE BENEFITS OF URBAN TREES



WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER



BETTY BROWN TREE TRAIL



NASHVILLE TREE FOUNDATION

This Trail honors the life and work of Elizabeth "Betty" Moorhead Brown (1889-2011). Her practical horticultural knowledge and generosity of spirit encouraged the establishment of urban forests in neighborhoods and communities throughout Davidson County. She was co-founder and served as the first president of the Nashville Tree Foundation.

Raised on a farm in Kentucky, Betty moved to Tennessee after marrying Martin Brown in 1962. In her lifetime she personally planted hundreds

of trees and lovingly improved the landscape of their family farm just on the outskirts of the city. It is there, Mrs. Brown was buried in a simple casket crafted from a black cherry tree that fell nearby the family graveyard ten years earlier.

Betty Brown cared deeply about the environment and was committed to responsible development of downtown Nashville including the riverfront. She served as co-chair of the Century III committee that conceived the original idea of Riverfront Park.

Nashville Tree Foundation is a non-profit organization established in 1986 to enhance and preserve Nashville's urban forests through a range of efforts. NTF has planted over 10,000 trees, recognized over 650 of the largest and oldest trees, and designated 25 arboretums throughout Davidson County.

In 1998, NTF responded to the tornados that devastated Nashville by fundraising \$1,000,000 in six months and planting over 2,000 trees citywide. From that initial

effort, ReLeafing Day evolved and is still a major project that focuses on planting trees in Nashville neighborhoods.

The Betty Brown Tree Trail is Nashville's first urban arboretum where over 225 individual trees and 42 tree species are labeled along the walkways of Riverfront Park.

For more information about the Betty Brown Tree Trail, drop by the Riverfront Park visitor's center for a tree guide.

www.nashvilletreefoundation.org/

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WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER



WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER

FINALLY, THERE IS MUSIC



WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER



ENTERTAINMENT

KOREAN VETERANS BOULEVARD

WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER



WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER



RIVERFRONT ROOM & MOCKINGBIRD ROOM



WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER



THE BOWL

WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER

Thousands of people watching concerts on the former site of the waste tipping floor of the Nashville Thermal Transfer Plant.



WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER



Metro Parks, Owner
Live Nation, Operator

Nashville Symphony, July 4th, New Year's Eve

10 CIVIC EVENTS

30 TICKETED SHOWS/year

WEST RIVERFRONT PARK AND ASCEND AMPHITHEATER

Questions?

