

DOAN BROOK RESTORATION

LANDSCAPE INTEGRATION PLAN BUDGETING
THE DOAN BROOK RESTORATION NEAR HORSESHOE LAKE PARK

AUGUST 07, 2023

LANDSCAPE INTEGRATION PLAN



NEW PEDESTRIAN BRIDGE

CANOPY WALK

SHARED-USE PATH

NORTH PARK BOULEVARD

STREAM CONFLUENCE

NATURE PLAY

SHELBURNE GATEWAY

BROOK OVERLOOK

DOAN BROOK

CLEVELAND HEIGHTS
SHAKER HEIGHTS

NORTH BRANCH

LEE ROAD

WESTERN GATEWAY

PARKWAY MEADOW

POLLINATOR GARDEN

HILLSIDE SEATING

PARK PROMONTORIES

HILLSIDE MEADOW

CONSTRUCTED WETLANDS

MIDDLE BRANCH

PARK DRIVE

SOUTH PARK BOULEVARD

SHARED-USE PATH

ATTLEBORO ROAD

ATTLEBORO GATEWAY

LANDSCAPE INTEGRATION PLAN | EXISTING CONDITION



SHELBURNE ROAD

NORTH PARK BOULEVARD

CLEVELAND HEIGHTS
SHAKER HEIGHTS

LEE ROAD

PARK DRIVE

SOUTH PARK BOULEVARD

LANDSCAPE INTEGRATION PLAN | DISTRICT SCOPE



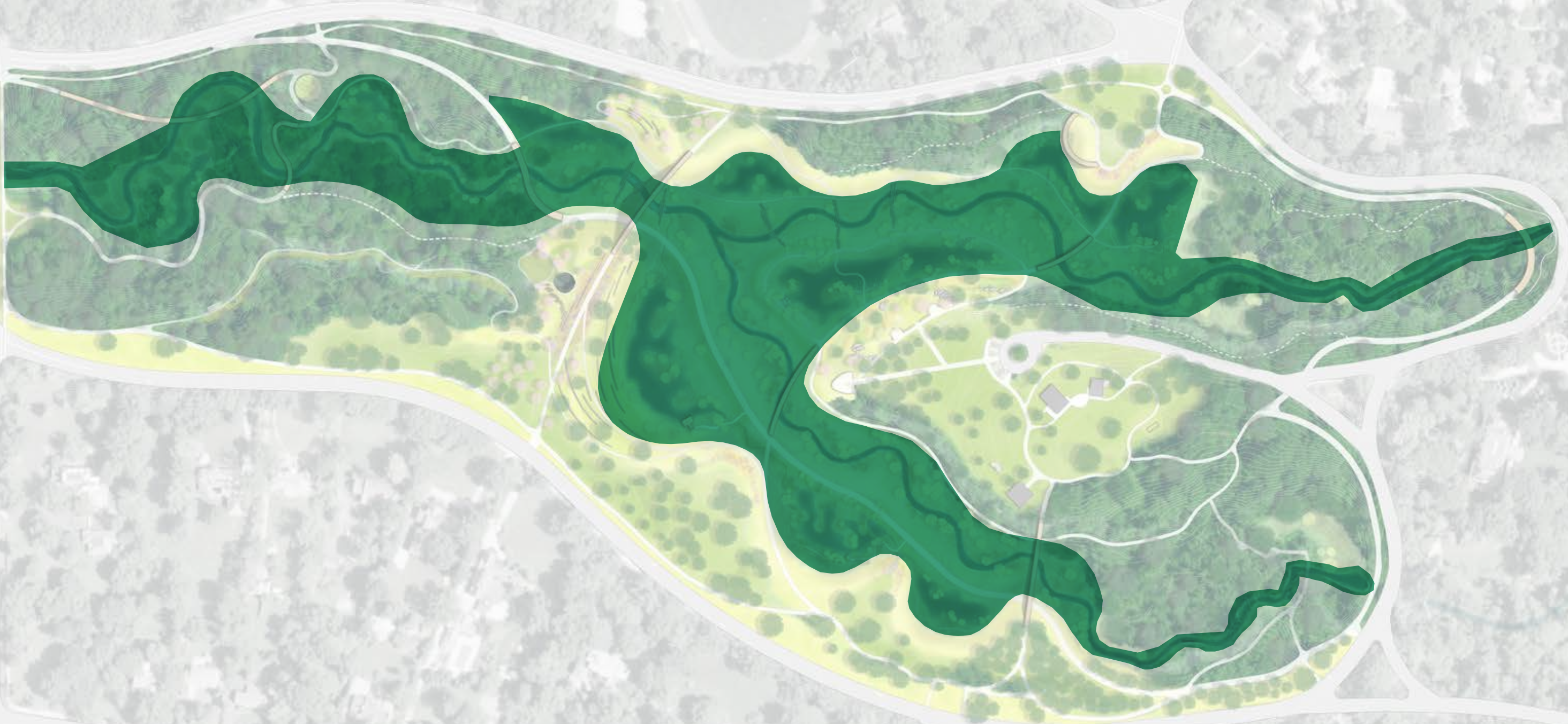
- Clearing & grubbing
- Staging & construction access
(including repairs/rehab outside this footprint)
- Site landscaping & restoration
- Stream channel construction & restoration
- Outfall protection & stormwater control structures
- General grading & earthmoving
(dam removal, cut&fill, sediment management, setting subgrade, etc.)
- Site masonry salvaging & rehabilitation
(dam spillway, stilling pool, and retaining walls only)
- Long-term maintenance

LANDSCAPE INTEGRATION PLAN | DISTRICT SCOPE



\$19,899,000	Opinion of Probable Cost
\$ 2,789,900	Allowances
\$ 5,969,700	Contingency
<hr/>	
\$28,658,600	TOTAL

LANDSCAPE INTEGRATION PLAN | APPROXIMATE DISTRICT MAINTENANCE CORRIDOR

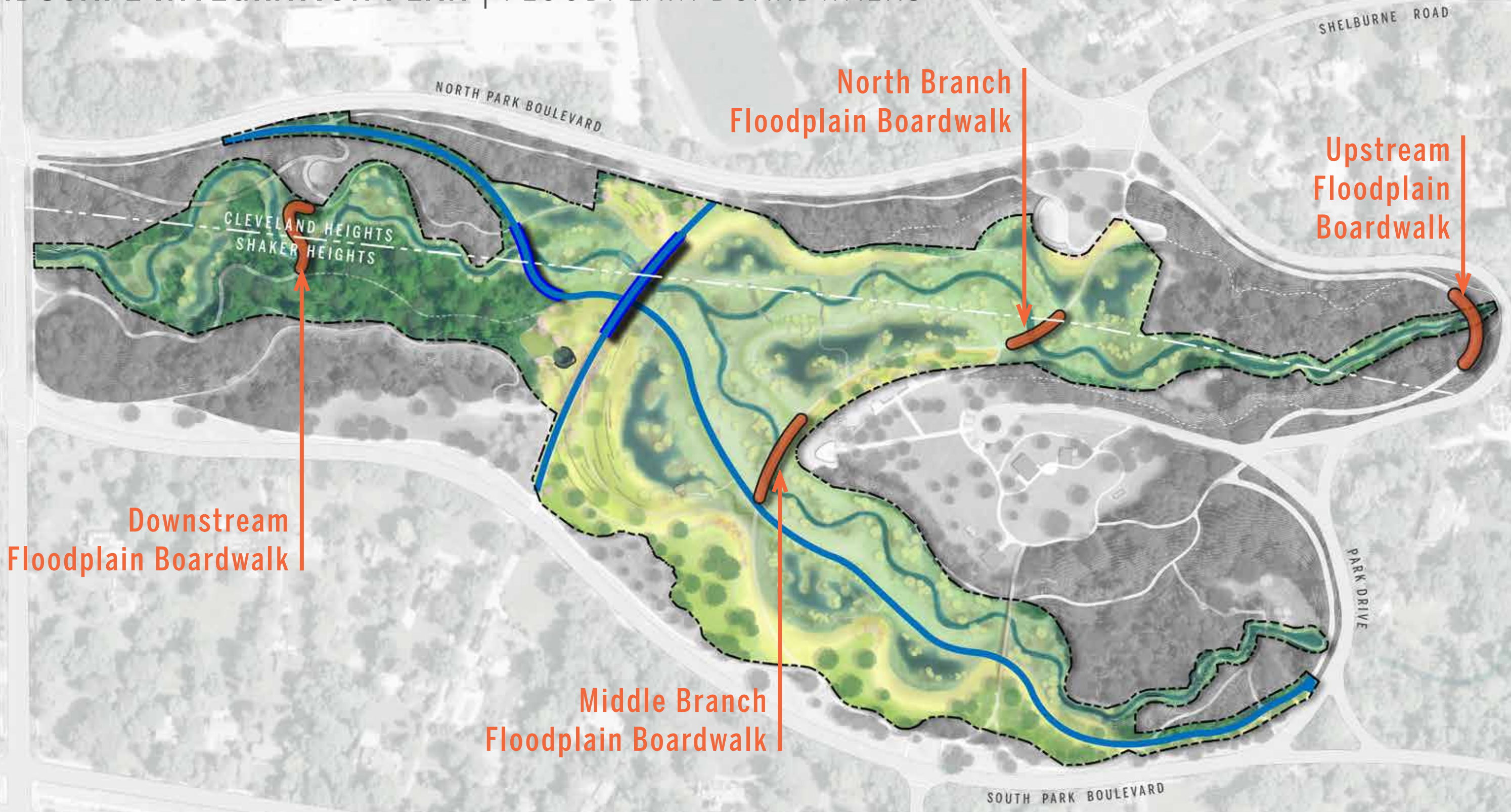


LANDSCAPE INTEGRATION PLAN | DISTRICT SCOPE



- Lake-to-Lakes shared-use path & floodplain boardwalk (vehicular) - Paved & ADA accessible
- Community connection path and bridge (at old dam location) - Paved & ADA accessible

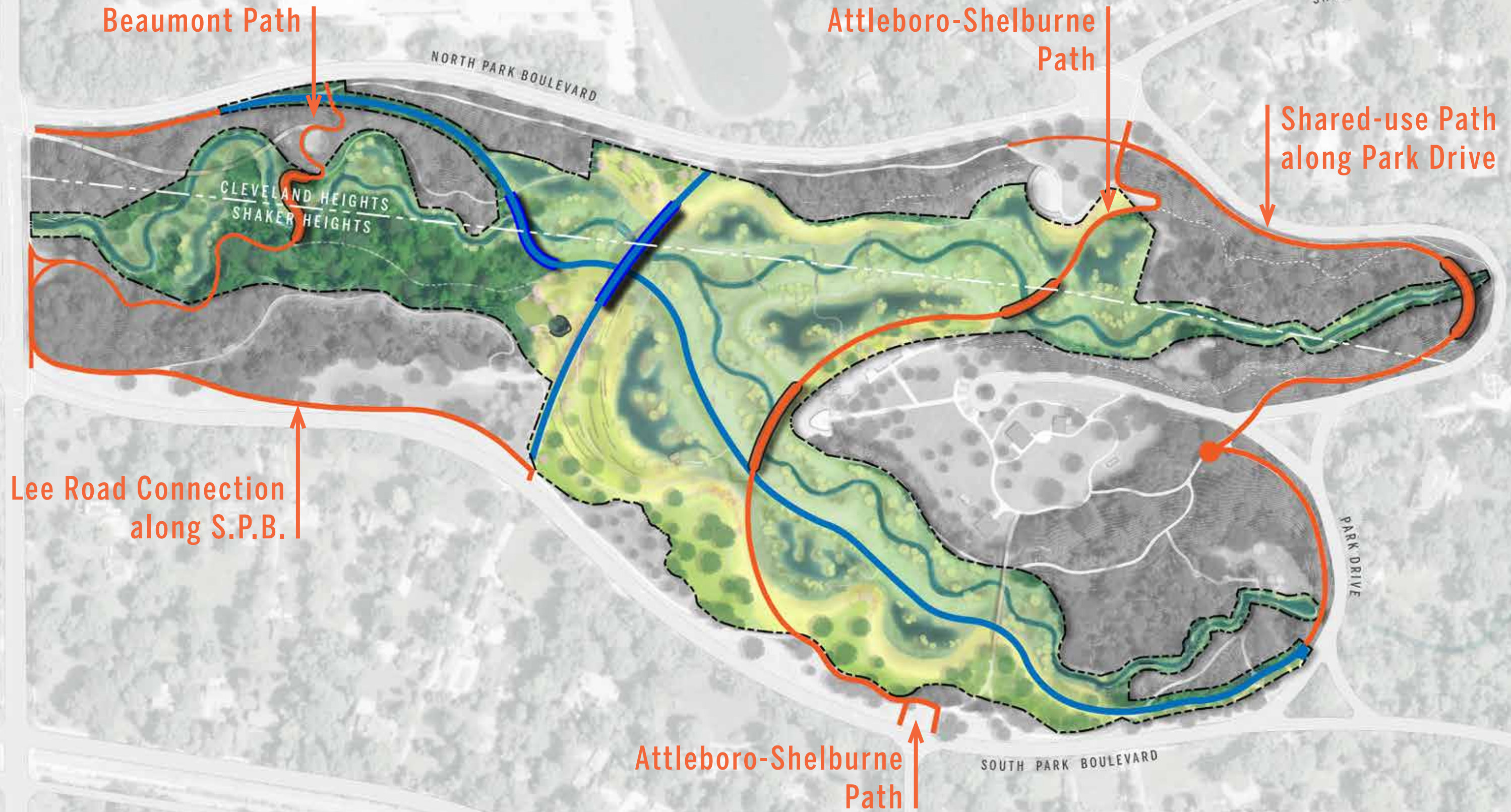
LANDSCAPE INTEGRATION PLAN | FLOODPLAIN BOARDWALKS



\$1,028,862 Estimated value of floodplain boardwalks 

The estimated construction costs are 2023 values and do not include contingencies at this time

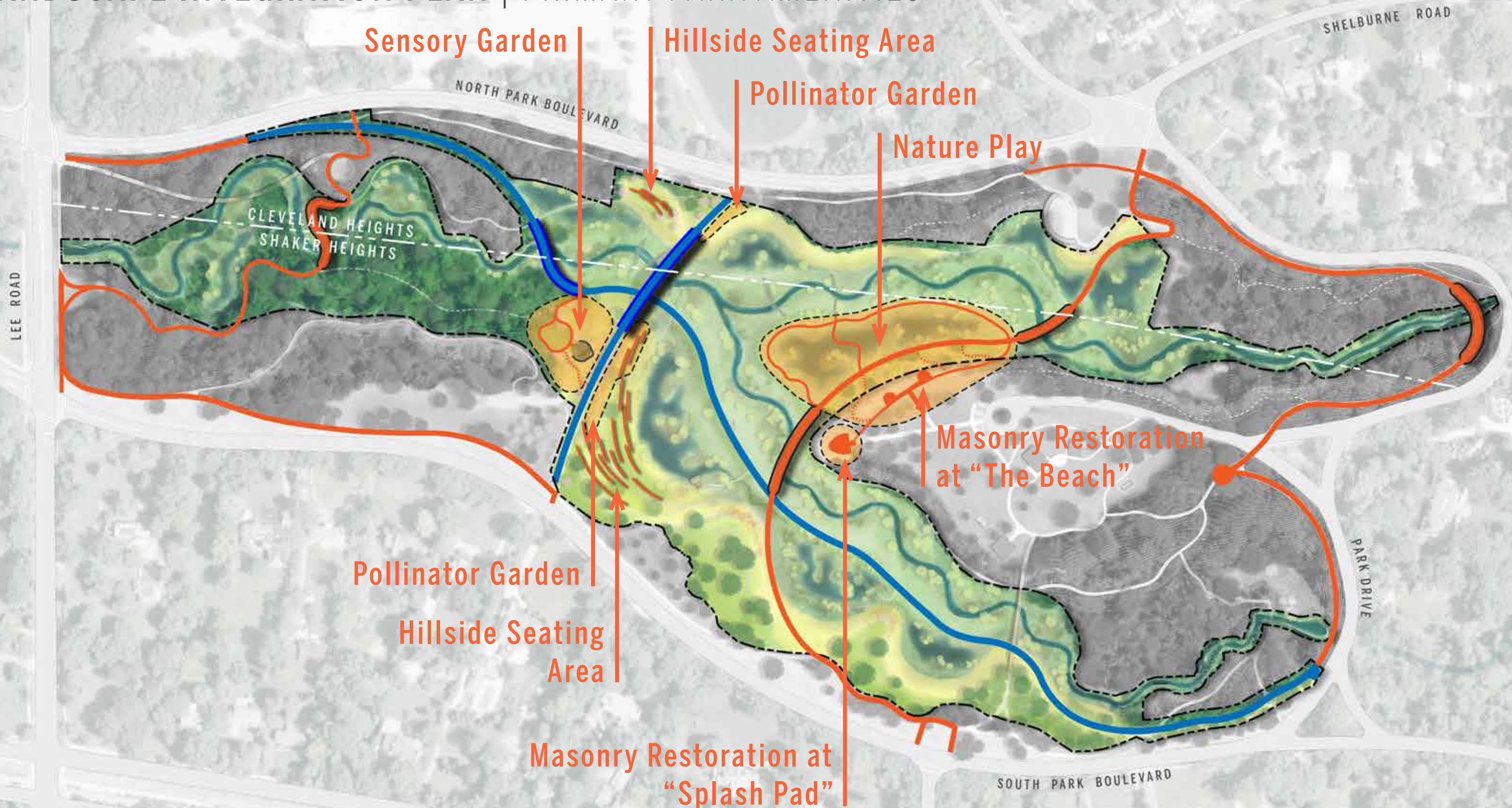
LANDSCAPE INTEGRATION PLAN | PRIMARY CIRCULATION



\$1,330,772 Estimated value of primary circulation 

The estimated construction costs are 2023 values and do not include contingencies at this time

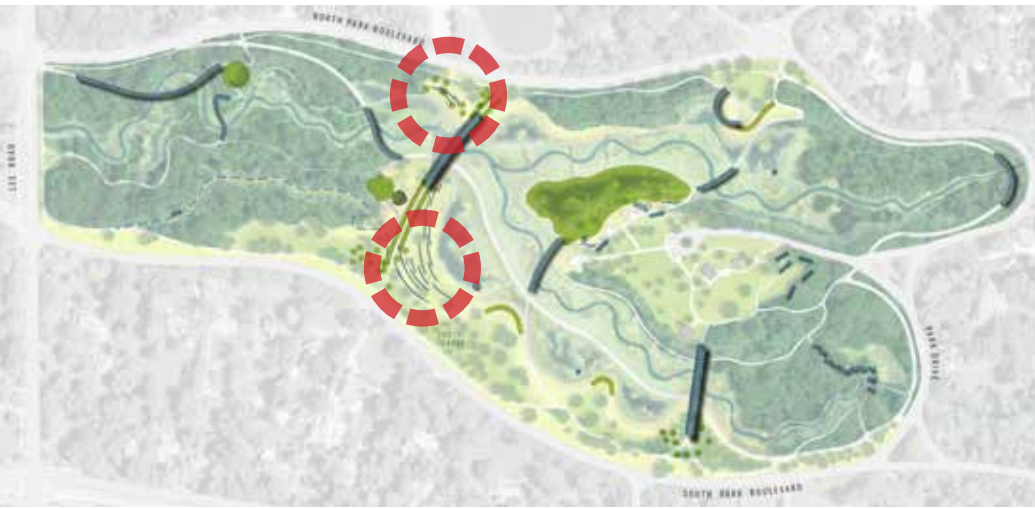
LANDSCAPE INTEGRATION PLAN | PRIMARY PARK AMENITIES



\$1,881,095 Estimated value of primary park amenities 

The estimated construction costs are 2023 values and do not include contingencies at this time

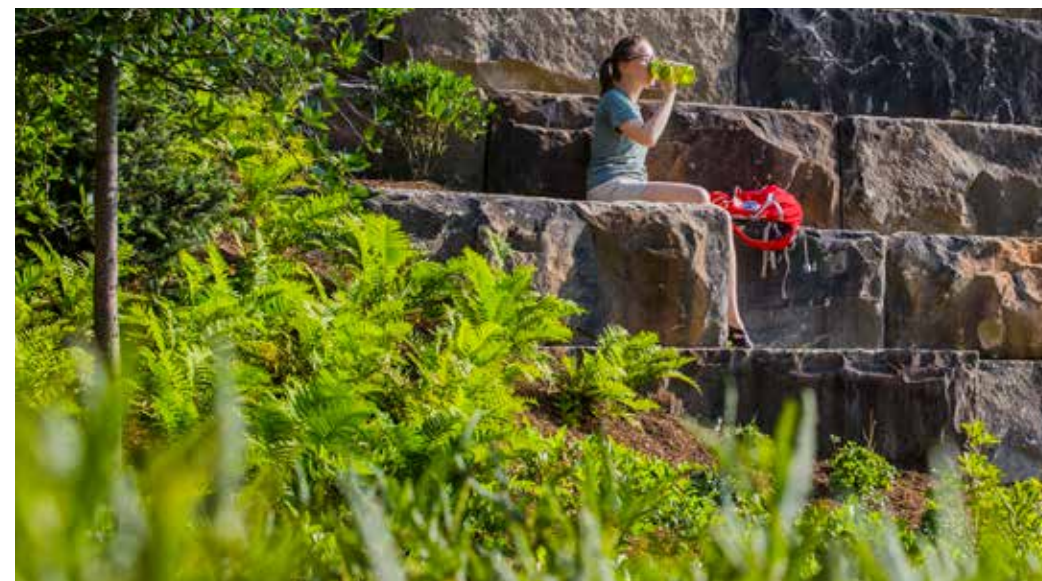
PARK AMENITIES



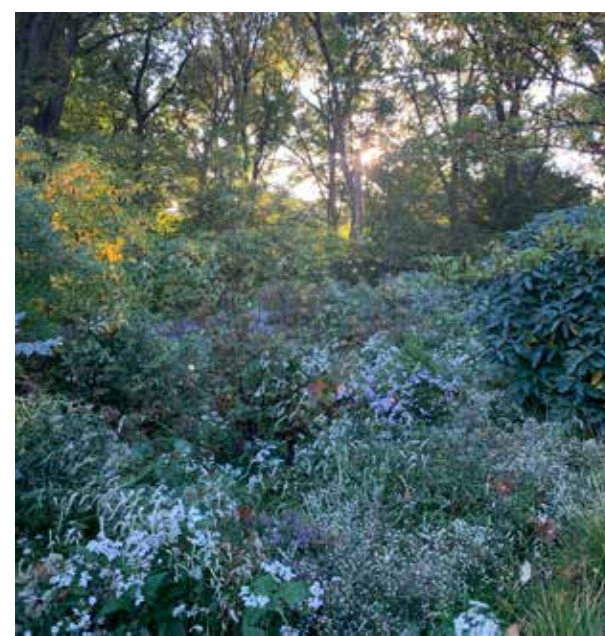
HILLSIDE SEATING AREAS



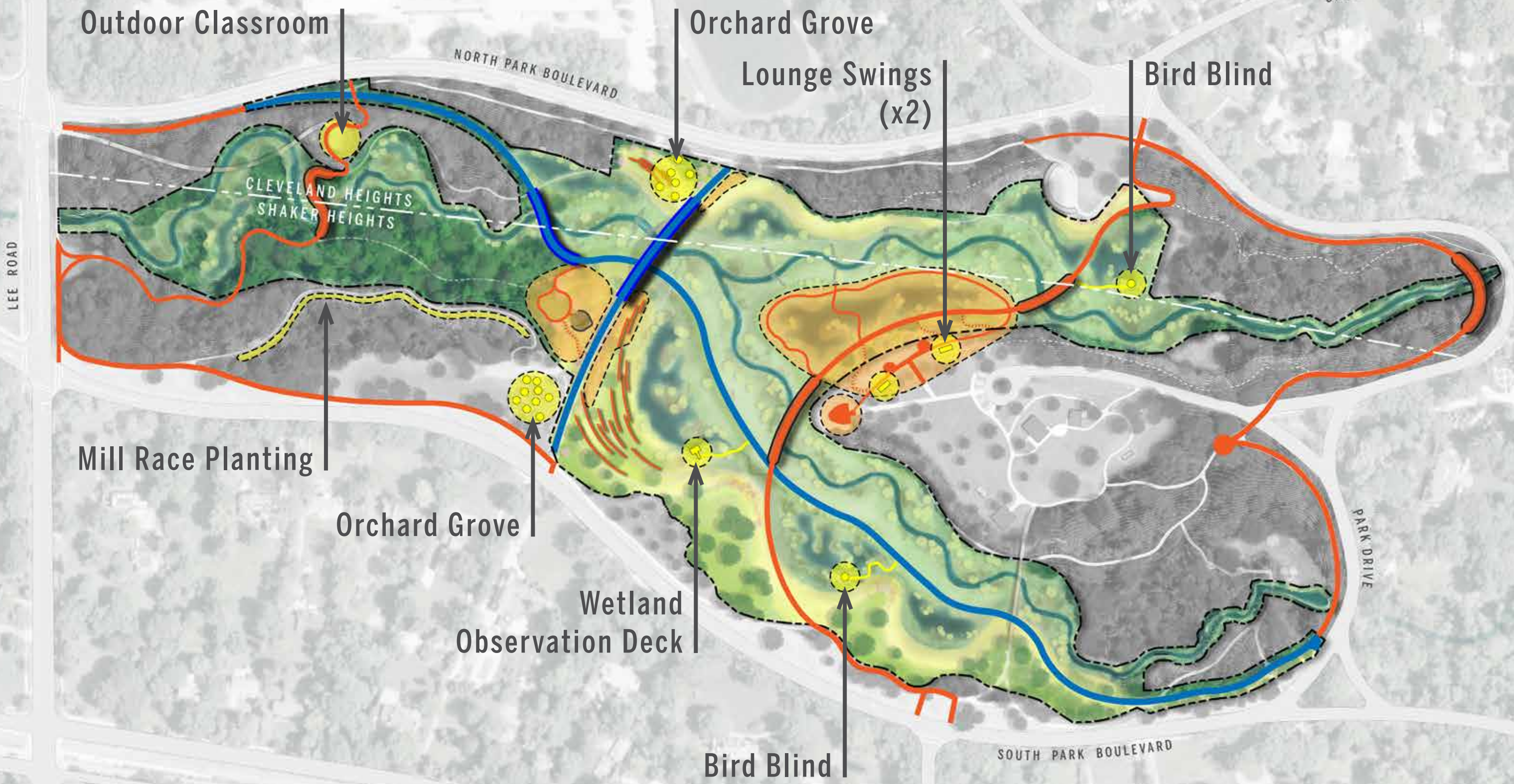
SENSORY GARDEN



NATURE PLAY



LANDSCAPE INTEGRATION PLAN | SECONDARY PARK AMENITIES



\$896,792 Estimated value of secondary park amenities

The estimated construction costs are 2023 values and do not include contingencies at this time

LANDSCAPE INTEGRATION PLAN | SECONDARY PARK AMENITIES



OUTDOOR CLASSROOM



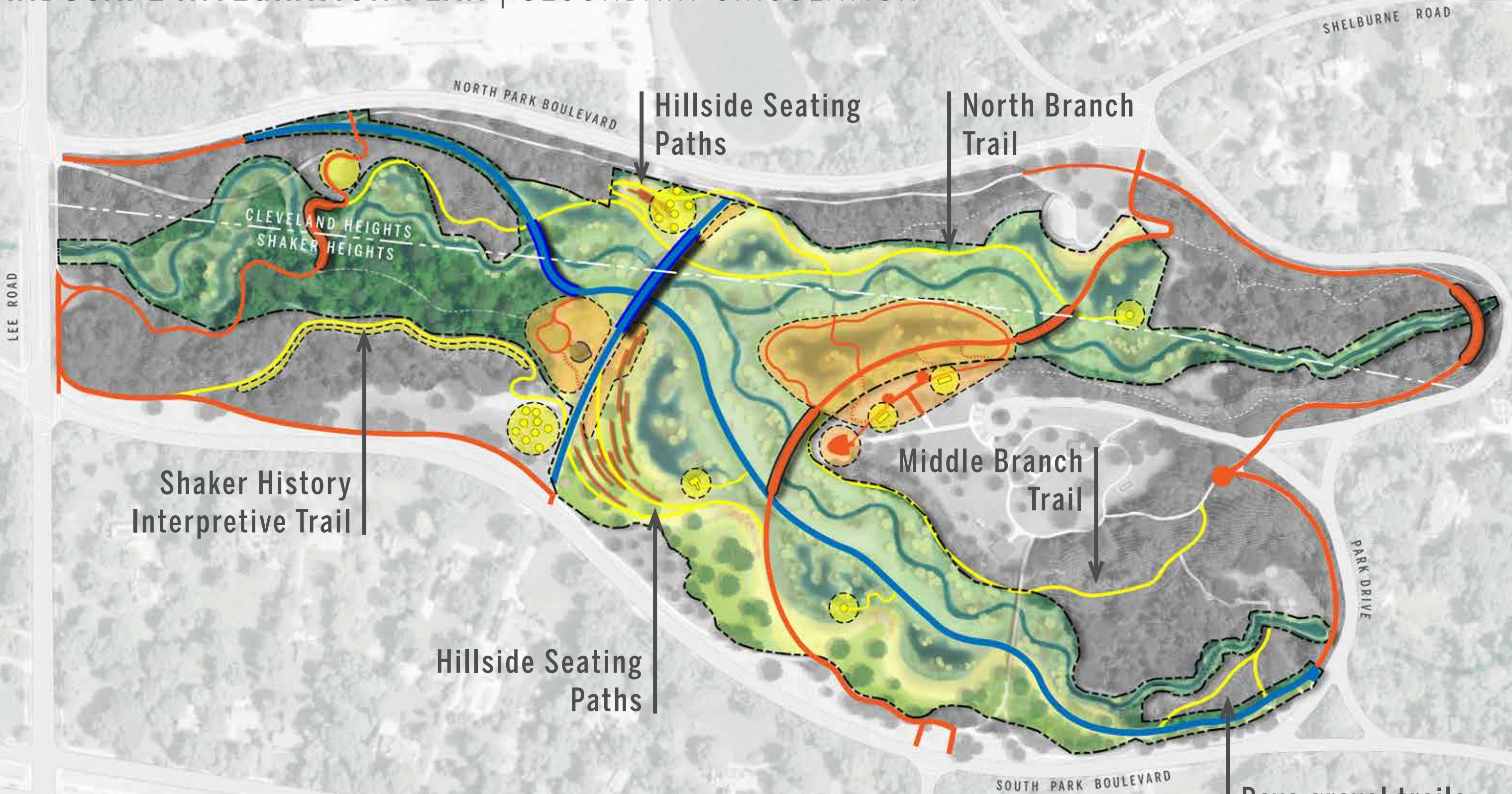
WETLAND OBSERVATION DECK



BIRD BLINDS



LANDSCAPE INTEGRATION PLAN | SECONDARY CIRCULATION



Shaker History Interpretive Trail

Hillside Seating Paths

North Branch Trail

Hillside Seating Paths

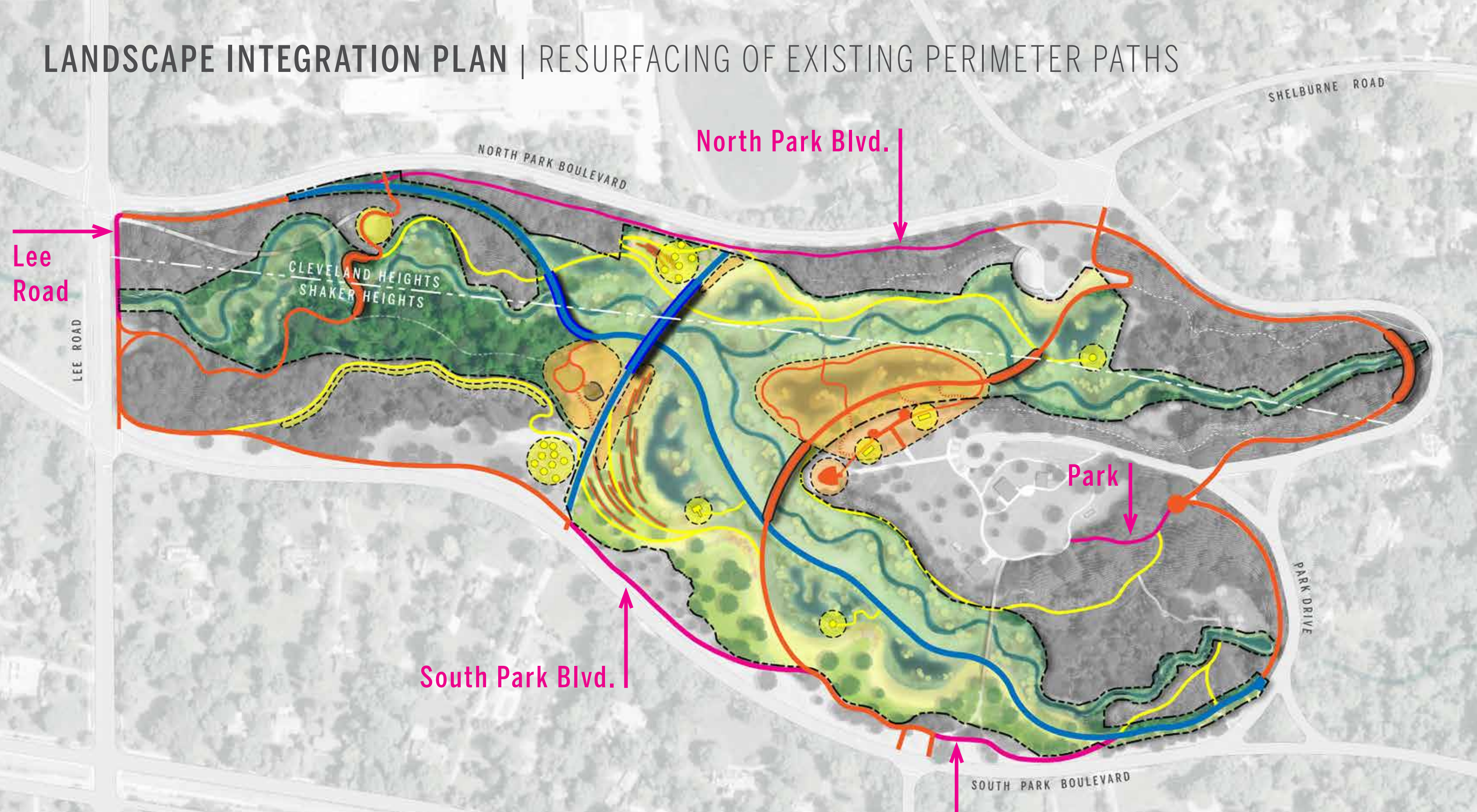
Middle Branch Trail

Pave gravel trails to boardwalk

\$542,328 Estimated value of secondary circulation

The estimated construction costs are 2023 values and do not include contingencies at this time

LANDSCAPE INTEGRATION PLAN | RESURFACING OF EXISTING PERIMETER PATHS



\$122,040 Estimated value of pathway resurfacing

The estimated construction costs are 2023 values and do not include contingencies at this time

LANDSCAPE INTEGRATION PLAN | TERTIARY PARK AMENITIES

Canopy Walk

Brook Overlook

Attleboro Bridge



\$2,307,420 Estimated value of tertiary park amenities

The estimated construction costs are 2023 values and do not include contingencies at this time

LANDSCAPE INTEGRATION PLAN | TERTIARY PARK AMENITIES



CANOPY WALK



ATTLEBORO BRIDGE



BROOK OVERLOOK



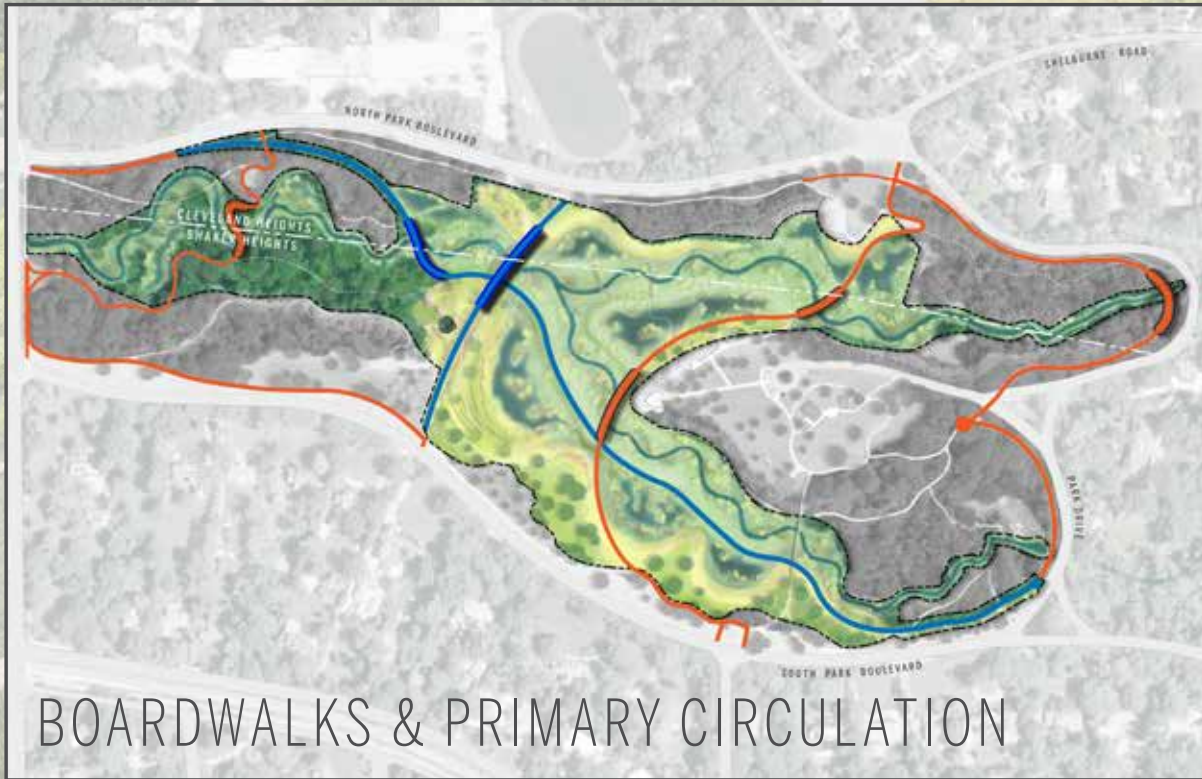
LANDSCAPE INTEGRATION PLAN | ESTIMATED CONSTRUCTION COSTS & DESIGN FEES

Prioritized Scope Elements	Estimated Construction Cost (2023 values)	Estimated Design Fee Range 7%-10% (2023 values)	
Floodplain Boardwalks	\$1,028,862	\$ 72,020	\$102,890
Primary Circulation	\$1,330,772	\$ 93,155	\$133,080
Primary Amenities	\$1,881,095	\$131,680	\$188,110
Secondary Amenities	\$ 896,792	\$ 62,775	\$ 89,680
Secondary Circulation	\$ 542,328	\$ 37,965	\$ 54,235
Pavement Resurfacing	\$ 122,040	\$ 8,545	\$ 12,205
Tertiary Amenities	\$2,307,420	\$161,520	\$230,745
TOTAL	\$8,109,309	\$567,660	\$810,945

The estimated construction costs are 2023 values and do not include contingencies at this time

LANDSCAPE INTEGRATION PLAN | RECOMMENDATIONS

Prioritized Scope Elements	Estimated Construction Cost (2023 values)
Floodplain Boardwalks	\$1,028,862
Primary Circulation	\$1,330,772
Primary Amenities	\$1,881,095
TOTAL	\$4,240,729



The estimated construction costs are 2023 values and do not include contingencies at this time

LANDSCAPE INTEGRATION PLAN | RECOMMENDATIONS

If rolled into the District's project:

Prioritized Scope Elements	Estimated Construction Cost (2023 values)	Estimated Design Fee Range 7%-10% (2023 values)	
Floodplain Boardwalks	\$1,028,862	\$ 72,020	\$102,890
Primary Circulation	\$1,330,772	\$ 93,155	\$133,080
Primary Amenities	\$1,881,095	\$131,680	\$188,110
TOTAL	\$4,240,729	\$296,855	\$424,080

A/E Design Fees:

- Detailed Design through Construction Administration
- Estimated 7-10% of hard costs, dependent on the scope of work to be negotiated:
 - Extent of specialty consultants (structural, civil engineering, etc.)
 - Extent of desired public engagement
 - Anticipated duration of construction

The estimated construction costs are 2023 values and do not include contingencies at this time

LANDSCAPE INTEGRATION PLAN | RECOMMENDATIONS

If designed as a stand-alone project:

Prioritized Scope Elements	Estimated Construction Cost (2023 values)	Estimated Design Fee Range 10%-15% (2023 values)	
Floodplain Boardwalks	\$1,028,862 *	\$102,890	\$154,330
Primary Circulation	\$ 1,330,772 *	\$133,080	\$199,620
Primary Amenities	\$ 1,881,095 *	\$188,110	\$282,165
TOTAL	\$4,240,729 *	\$424,080	\$636,115

*Estimated Construction Costs

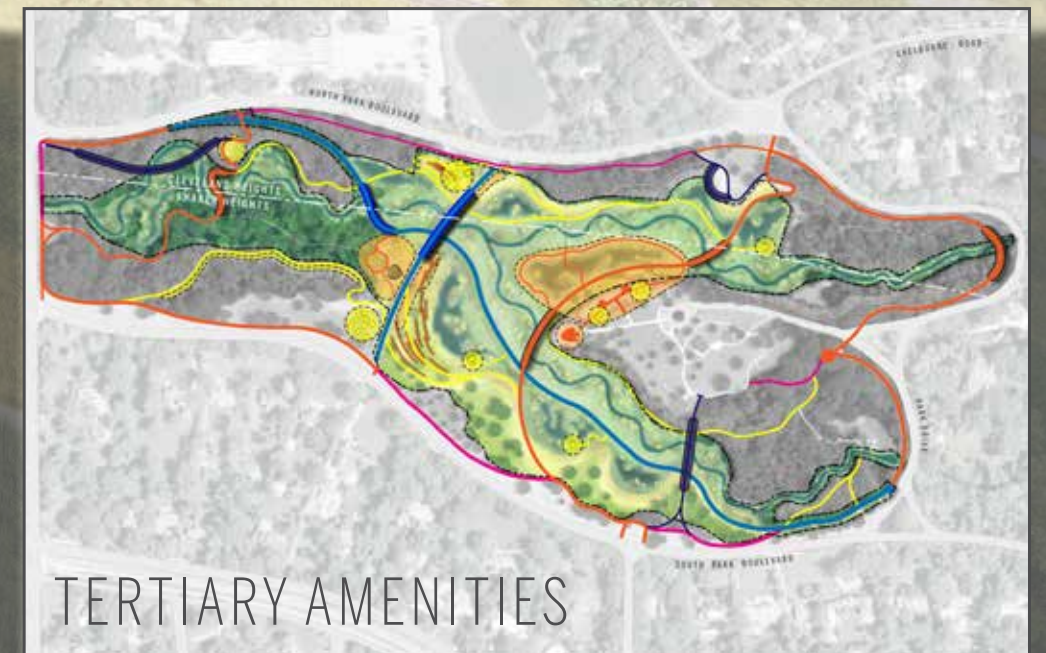
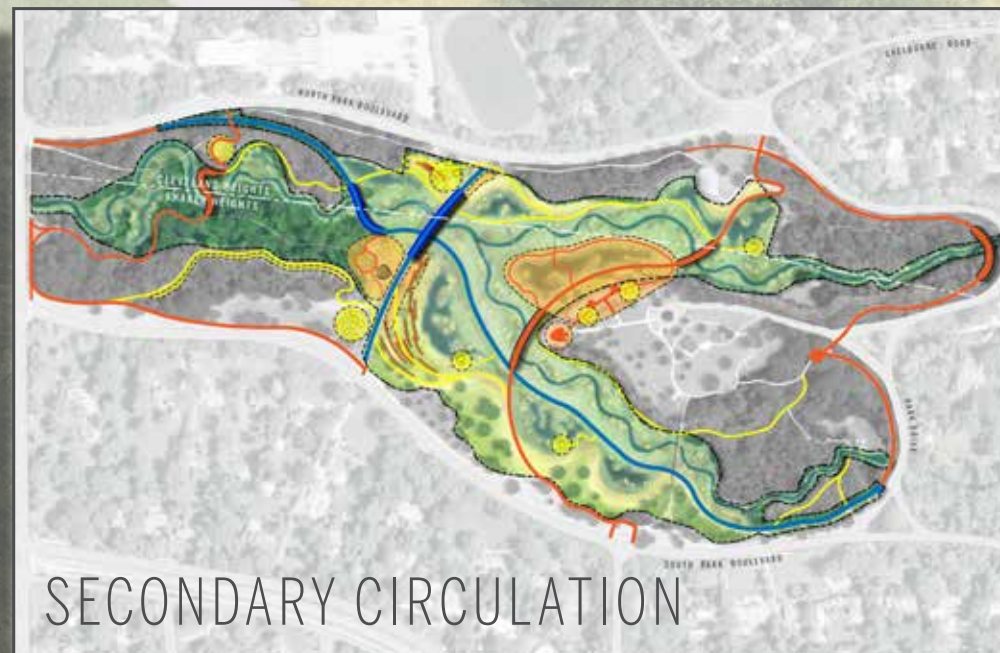
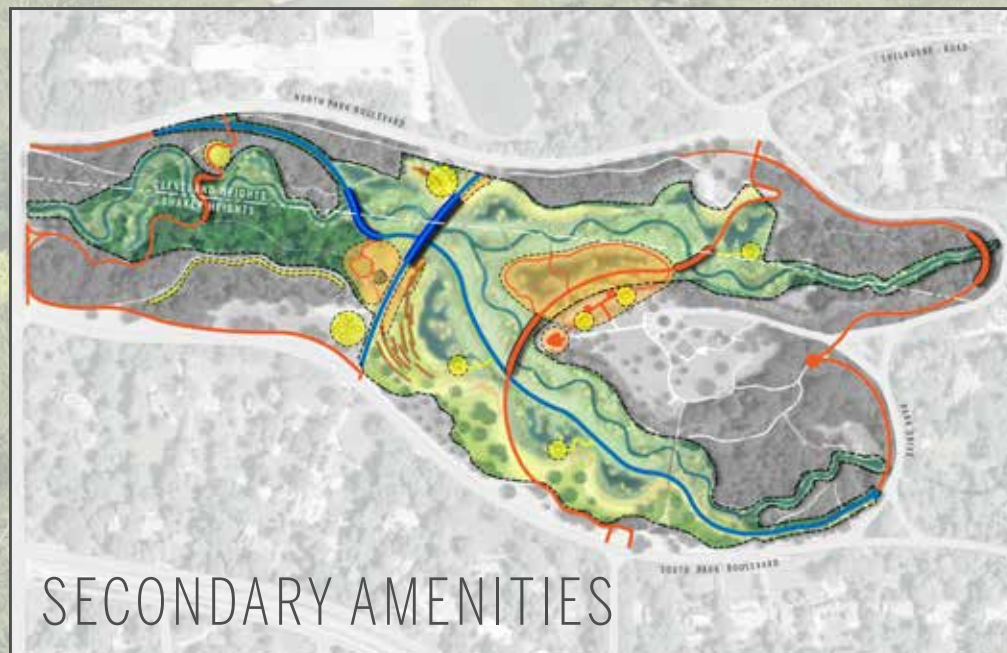
If these prioritized scope elements are designed and constructed as a stand-alone project after the implementation of the District project, not only would the estimated design fees increase by 3-8%, the construction costs would also increase to accommodate independent mobilization, erosion & sedimentation control, and additional site prep, demolition, re-vegetation, and additional permitting costs.

The estimated construction costs are 2023 values and do not include contingencies at this time

LANDSCAPE INTEGRATION PLAN | RECOMMENDATIONS

Future stand-alone project(s):

Prioritized Scope Elements	Estimated Construction Cost (2023 values)	Estimated Design Fee Range 10%-15% (2023 values)	
Secondary Amenities	\$ 896,792	\$ 89,680	\$ 134,520
Secondary Circulation	\$ 542,328	\$ 54,235	\$ 81,350
Pavement Resurfacing	\$ 122,040	\$ 12,205	\$ 18,310
Tertiary Amenities	\$2,307,420	\$230,745	\$ 346,115
TOTAL	\$3,868,580	\$386,865	\$580,295



The estimated construction costs are 2023 values and do not include contingencies at this time

