





#### **Project Delivery Methods**

This PDM outlines six variations of project delivery. Each has its own procurement process and contractual arrangement summarized below and then further described in Chapter 7 and Chapter 8, respectively. The delivery method utilized will affect the relationships of all stakeholders and participants, particularly how a project is designed, procured, and constructed.

The method through which a project is delivered is dependent on three major considerations; scope, budget and schedule.

The scope of a project is defined by its magnitude, form, function and complexity. As the owner, Cleveland Metroparks is responsible for ensuring the goals, objectives and priorities are accomplished for all of the Park District's capital projects, particularly when working with external consultants and contractors.

The time necessary and allotted for the completion of a project is another important consideration when determining the best project delivery method. The sequencing of project activities and the scheduling of those activities will illustrate the relationship of the design and construction phases, as well as decision points for a project. Once the relationship balance is understood, a clearer picture of the type of delivery method to use will emerge.

The budget is also to be considered. Each delivery method has benefits and limitations on the overall cost of a project. Understanding scope and schedule will help determine the value or premium that the budget

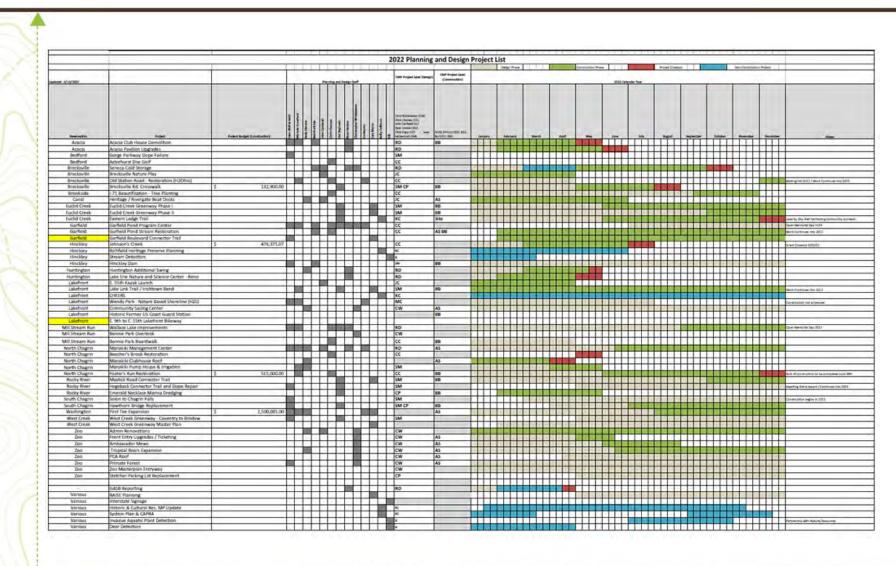
While there are six project delivery methods identified in the PDM, the reality is that there are many variations of these methods and each project will have its own unique path to completion. No matter the method chosen, a smooth process and successful project depends heavily on those managing the design, procurement and construction activities.

Chapter 5





5.	Project Delivery Methods
	5.1 DESIGN-BID-BUILD
	5.2 DESIGN-BUILD
	5.3 CONSTRUCTION MANAGER AT RISK
	5.4 CLEVELAND METROPARKS PLANNING & DESIGN LED GENERAL CONTRACTING .
	5.5 IN-HOUSE CONSTRUCTION
	5.6 DESIGN-BUILD HARD BID





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#### **All Purpose Trails – New Segments**

- Parma Heights Community Connector
- Mill Creek Connector Trail
- Cleveland Foundation Centennial Lake Link Trail (North and South)
- Valley Parkway Connector Trail (Phase I and Phase II)
- Cleveland Lakefront Bikeway Connector
- Red Line Greenway
- Whiskey Island Trail
- Wendy Park Bridge
- River Road Connector Trail
- Brighton Park
- Engle Road Connector
- Towpath Trail

















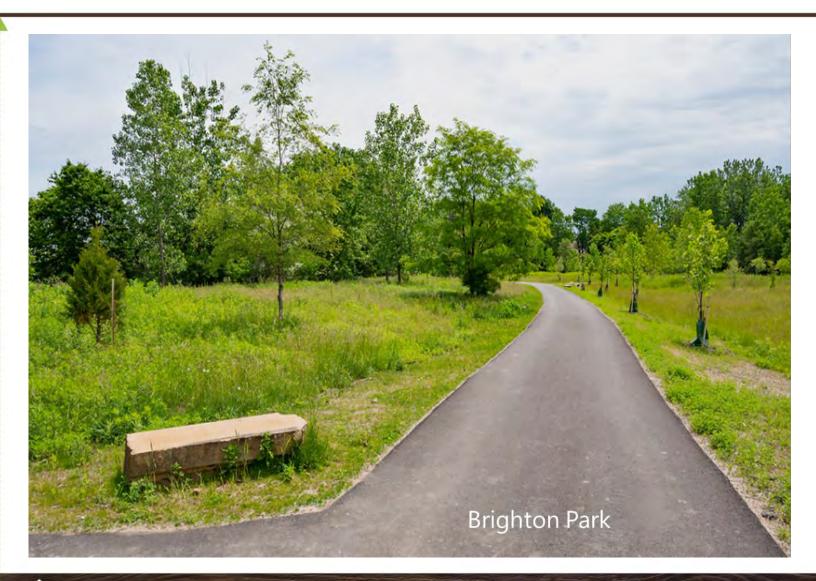




















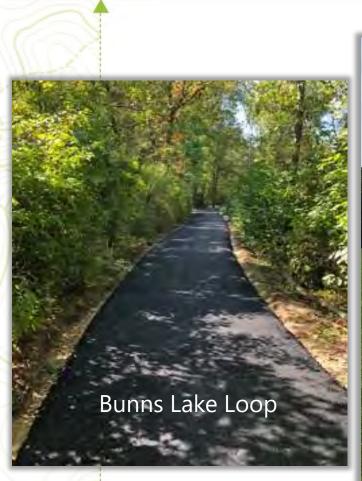


#### All Purpose Trails – Repaved Segments

- All of Acacia Reservation
- All of Brecksville Reservation
- All of Brookside Reservation
  - Football Fields Loop Trail
- All of Garfield Park Reservation
- All of Hinckley Reservation
  - Whipps ADA trail
- Portions of Huntington Reservation
- All of Mill Stream Run Reservation
- All of Rocky River Reservation
- All of South Chagrin Reservation
- Bunns Lake Loop Bradley Woods











#### Mountain Bike Trails - New and Reconstructed

- Bedford Mountain Bike Trails
- Royalview Mountain Bike Trails
- West Creek Mountain Bike Trails
- OEC Mountain Bike Trails
- OEC Pump Track



#### Mountain Bike Trails - New and Reconstructed

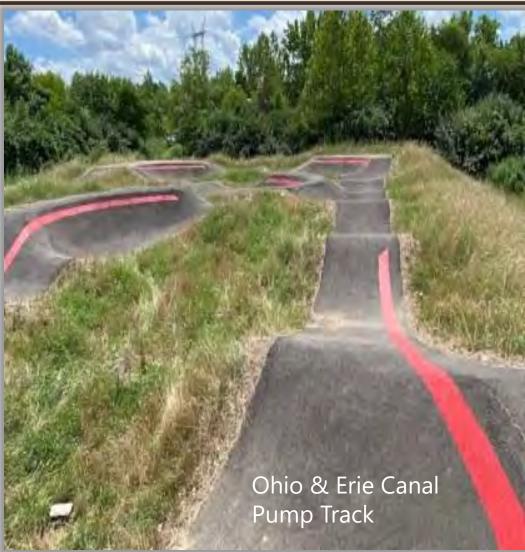
- Royalview Mountain Bike Trails
- West Creek Mountain Bike Trails
- Bedford Mountain Bike Trails
- OEC Mountain Bike Trails









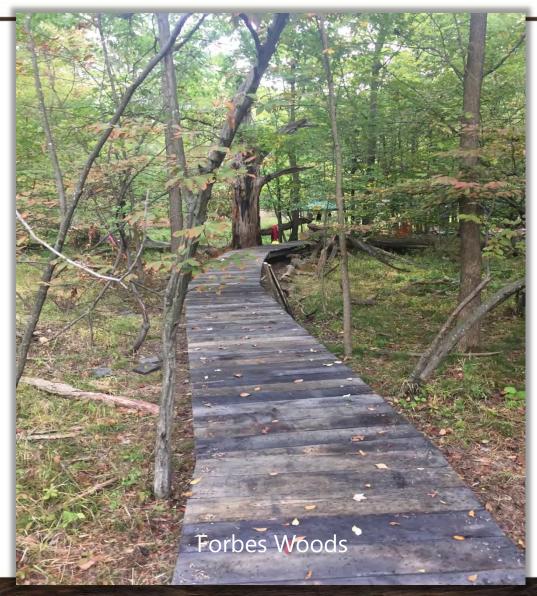




#### Natural SurfaceTrails – New and Reconstructed

- Forbes Woods Connector
- Johnsons/Buckeye Trail Hiking and Bridle Trail
- Henry Church Rock Loop Trail Renovation
- Sylvan Loop
- West Creek Cleveland Hiking Club Trail & Overlook
- Rocky River Nature Center West Channel Pond Loop & Bridge
- Brecksville Gorge
- Rocky River Lagoon
- Chagrin River Trail (Lily Lagoon Loop)





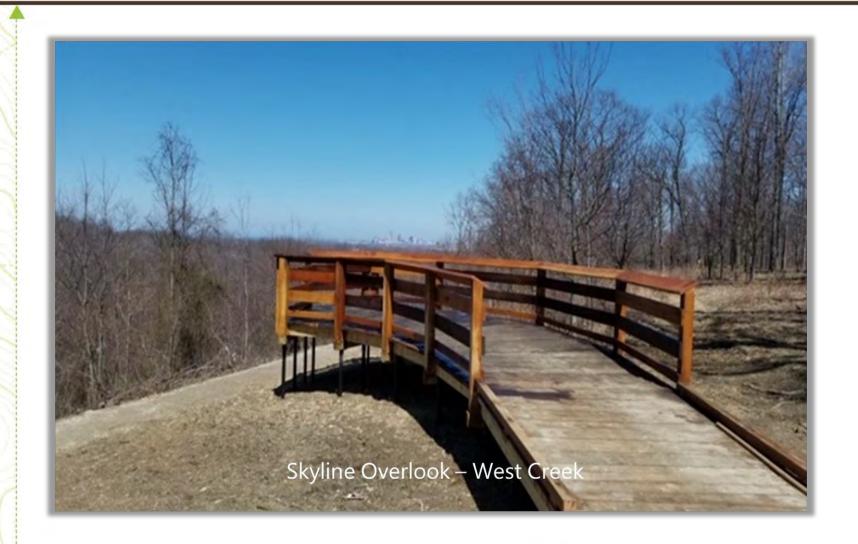




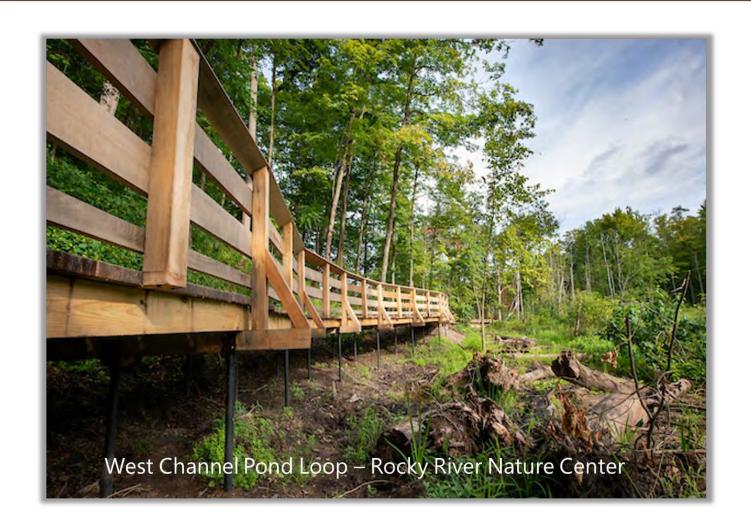




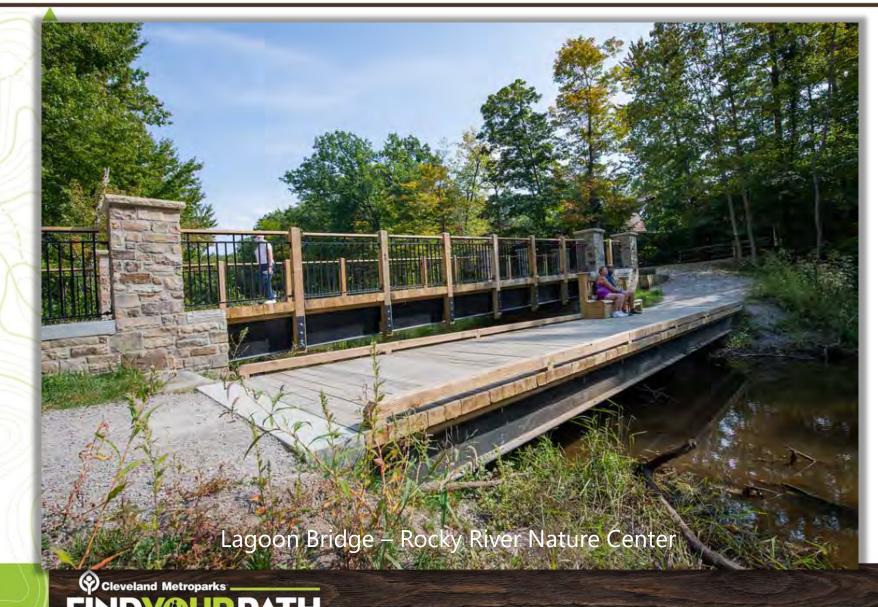








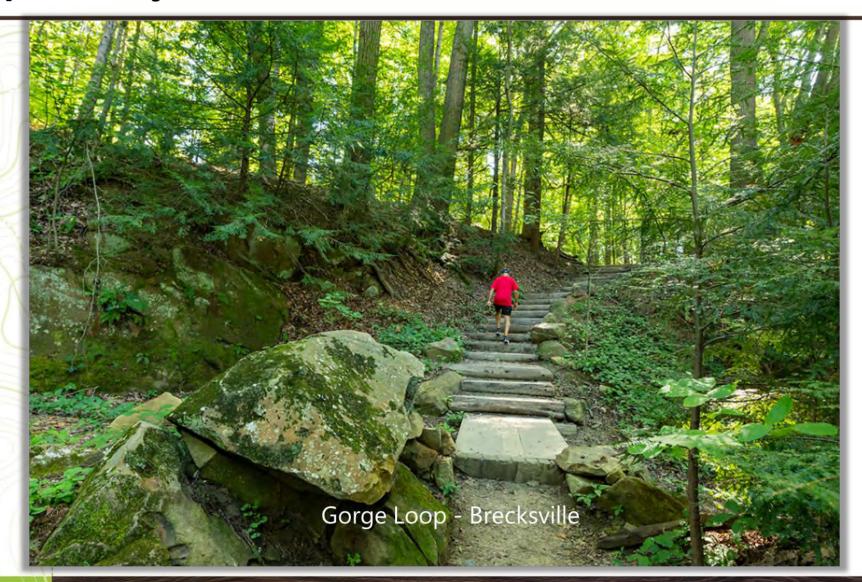












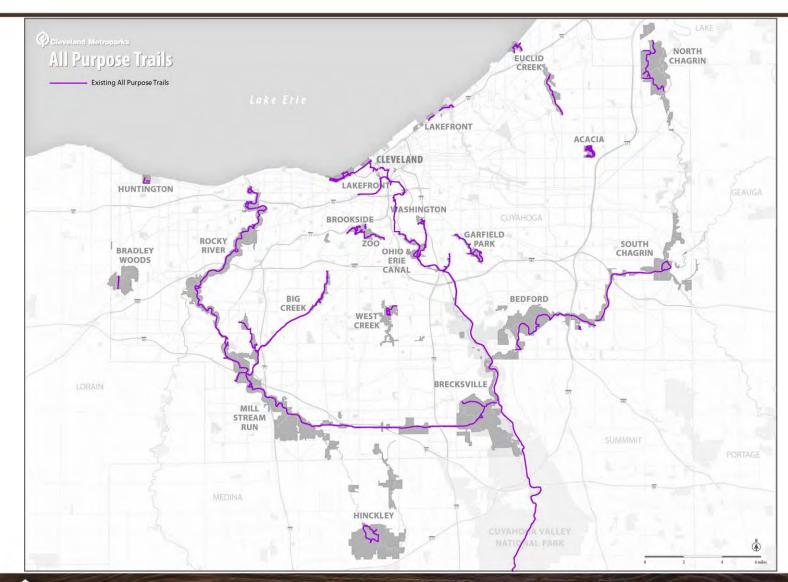














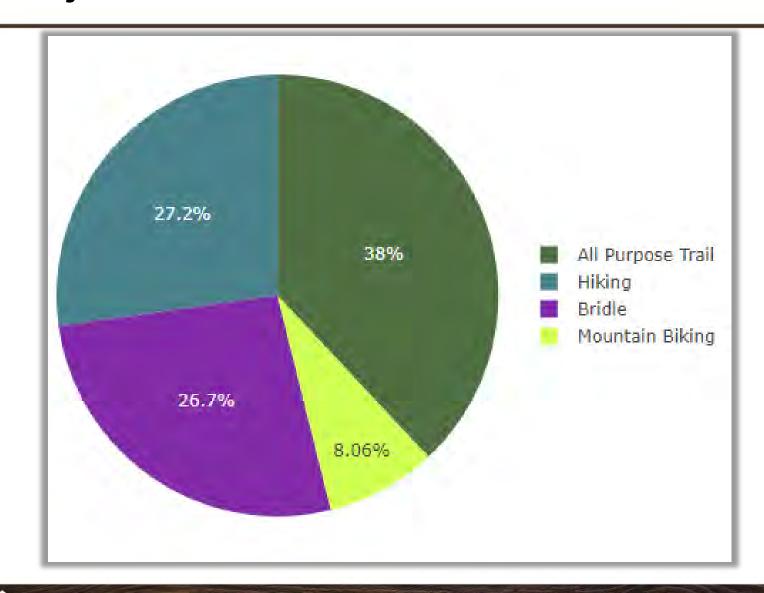
#### Trail Mileage by Reservation Summary Table

Reservation	TotalMiles	APTMiles	BridleMiles	HikingMiles	MtnBikeMiles	
Acacia Reservation	4.2	3.7		0.5		
Bedford Reservation	39.7	8	13.3	8.7	9.8	
Big Creek Reservation	14.8	11.6		3.2		
Bradley Woods Reservation	4.3	1		3.3		
Brecksville Reservation	43	12.1	17.9	13		
Brookside Reservation	5.7	4.7		1		
Euclid Creek Reservation	7.4	4.4		3		
Garfield Park Reservation	7.4	4.2		3.2		
Hinckley Reservation	20.8	3.4	9	8.5		
Huntington Reservation	3	0.8		2.2		
Lakefront Reservation	8.3	7.9		0.4		
Mill Stream Run Reservation	33.5	11,3	8.7	4.1	9.4	
North Chagrin Reservation	27.9	5.3	9.8	12.9		
Ohio & Erie Canal Reservation	23.2	18.7		0.5	4.1	
Rocky River Reservation	35.5	16.1	11.7	7.7		
South Chagrin Reservation	37.5	7.1	16.6	13.8		
Washington Reservation	2	2				
West Creek Reservation	9.2	1.8		4.5	3	



Trail Type	2012 Mileage	2022 Mileage
Bridle Trail	89.3	87
Hiking/Walk Trail	86.7	90.4
Mountain Bike Trail	2	26.3
All Purpose Trail	90.4	124
<b>-</b>	270.4	227.6
Total	270.4	327.6
% Change		21.2%







### **Acacia Reservation**

- Acacia Ecological Restoration
- Northeast Pond
- Hoophouse
- Center Pond Boardwalk and Trail Enhancements
- Cart Barn Conversion
- Year Round Public Restrooms











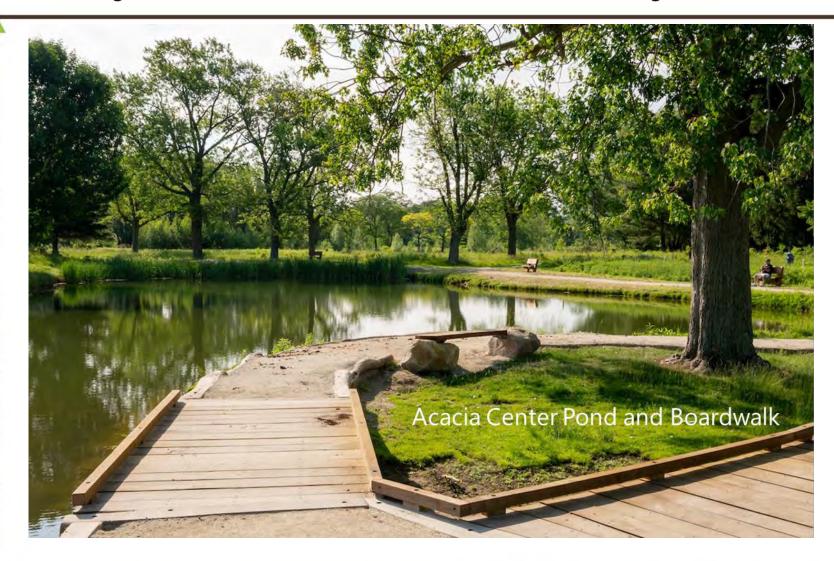




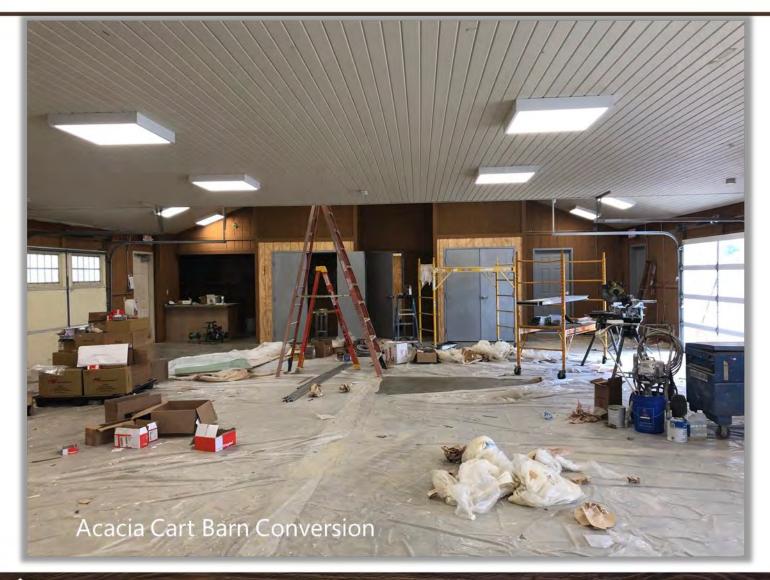


















#### **Bedford Reservation**

- Astorhurst Demolitions and Restorations
- Astorhurst Wetland Restoration
- Dunham Park
  - Pavilion
  - Play Area
  - Restroom Upgrade
  - Parking Lot Removal and Reforestation
- Bridal Veil Falls Decking and Steps
- Shawnee Golf Course Club House Addition
- Bedford Mountain Bike Trails
- Forbes Woods Connector





















### **Big Creek Reservation**

- Fern Hill Wetland Expansion
- Fern Hill Pavilion and Restrooms
- Fern Hill Suspension Bridge
- Engle Road Sled Hill
- Parma Heights Community Connector
- Engle Road Connector Trail



















### **Bradley Woods Reservation**

- Bunns Lake Trail Improvements
- Codrington Pavilion Upgrades







#### **Brecksville Reservation**

- Nature Play at Harriet Keeler
- Brecksville Trailside Program Center
- Brecksville Trailside Program Center Restrooms
- Seneca Golf Course Reconstruction
- Seneca Stormwater Management Expansion
- Aukerman Park
- Sleepy Hollow Booster Pump System
- Sleepy Hollow Clubhouse Renovation
- York Road Archery Range
- · Chippewa Gorge Loop Trail











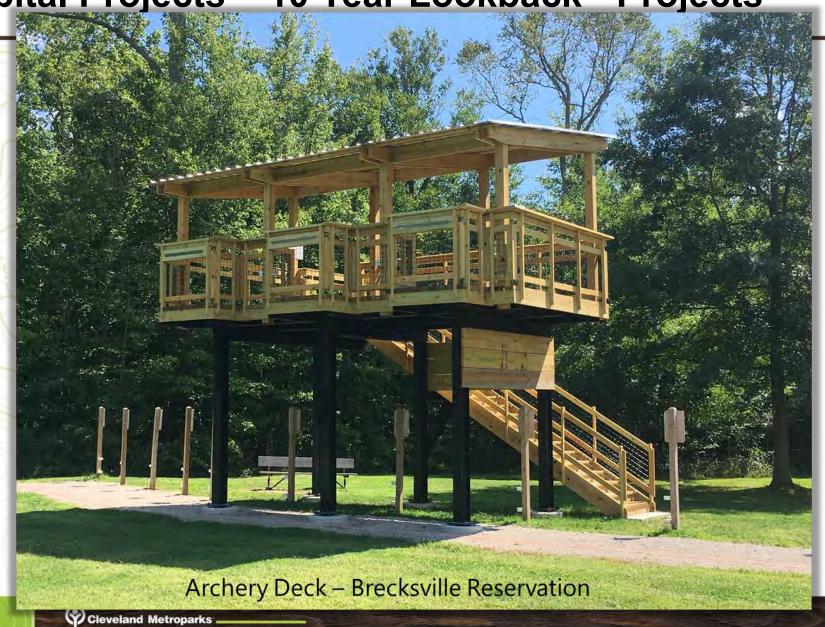














#### **Brookside Reservation**

- Pensacola Stairs
- Talty Field
- Bear Lot Stormwater Retrofit
- Football Fields Loop Trail
- Brighton Park













#### **Euclid Creek Reservation**

- Villa Angela Wildwood Pedestrian Bridge
- Villa Angela Beach Improvements
- Wildwood Management Center
- Euclid Beach Pier
- Bike Corral and Swings
- Eastern Ledge Trail

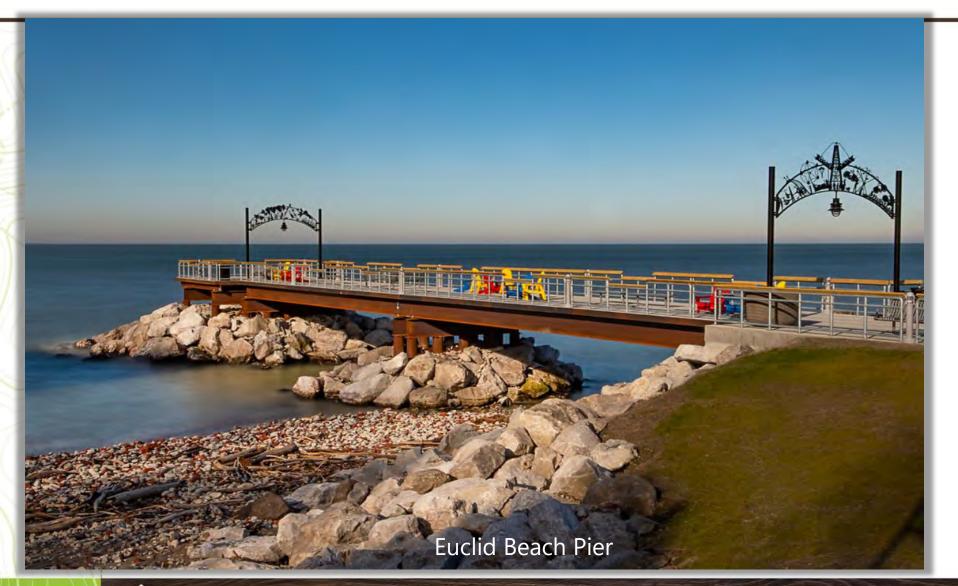








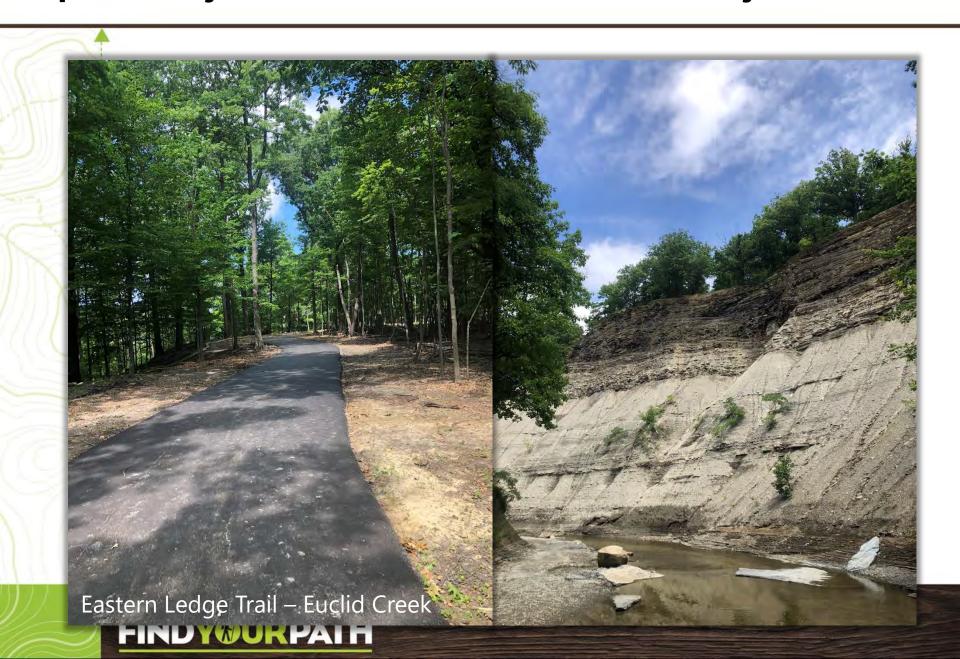










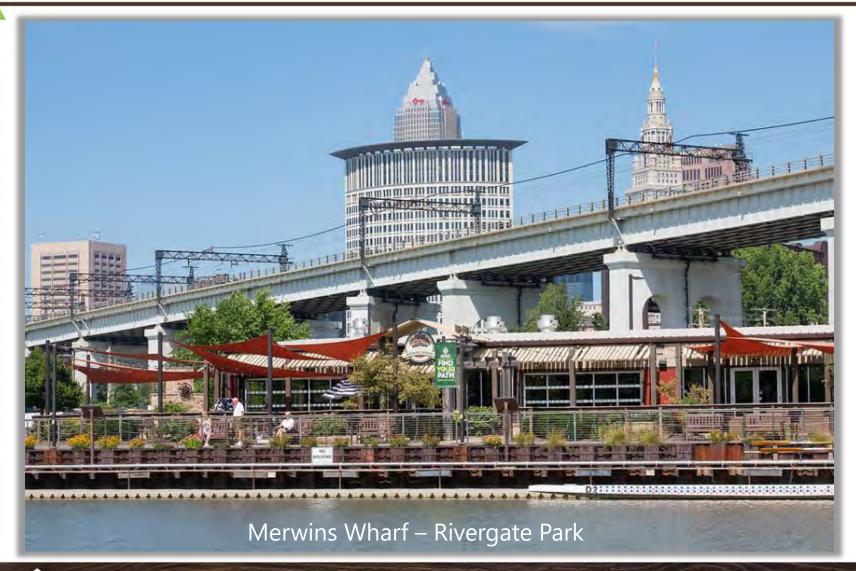


#### Ohio and Erie Canal Reservation

- Rivergate Park
- Merwins Wharf
- Water Taxi
- Canal Basin Park PH I Greening Project
- OEC Management Center
- OEC Mountain Bike Trails
- OEC Pump Track
- Mill Creek Connector Trail
- Towpath Trail
- Cleveland Foundation CenLake Link Trail
- Cleveland Lakefront Bikeway Connector
- Redline Greenway
- River Road Connector Trail













#### **Garfield Park Reservation**

- Garfield Park Center
- Iron Springs Historic Staircase
- Iron Springs Shelter
- Iron Springs Restrooms
- Trolley Turn Restoration
- Mill Creek Falls Area Expansion
- Garfield Pond Restoration
- Wolf Creek Restoration
- Red Oak Nature Play



















Capital Projects – 10 Year Lookback - Projects Red Oak Nature Play – Garfield Park Reservation 

#### **Hinckley Reservation**

- Marreck Pond Restoration
- Lower Whipps Culvert Replacement
- North and South Baseball Field and Dugout Rehabilitation
- Whipps ADA Access Improvements
- Mirror Valley Stream Restoration
- Kiwanis Shelter
- Johnsons Shelter Relocation
- Johnsons Creek Restoration

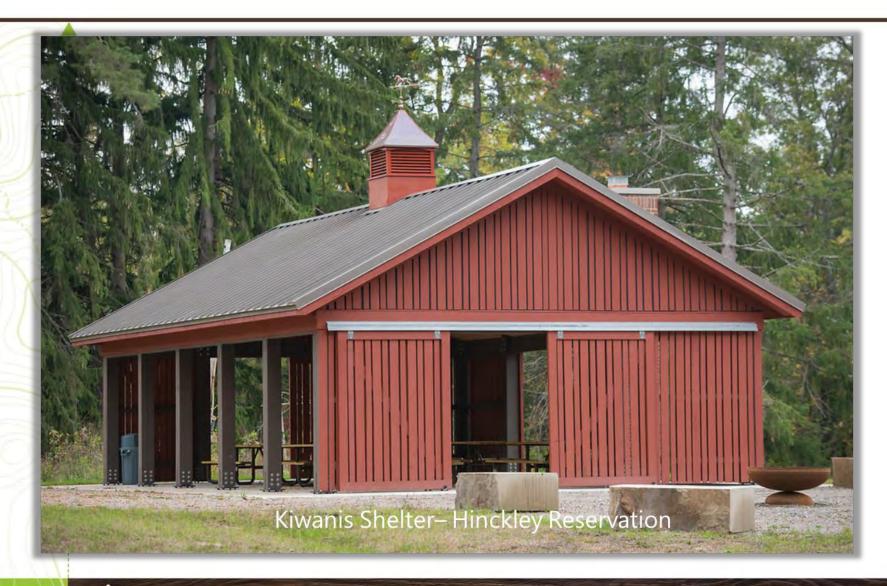
Johnsons/Buckeye Trail Hiking and Bridle Trail















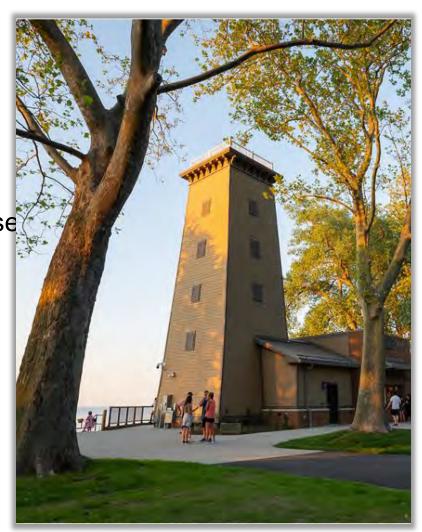


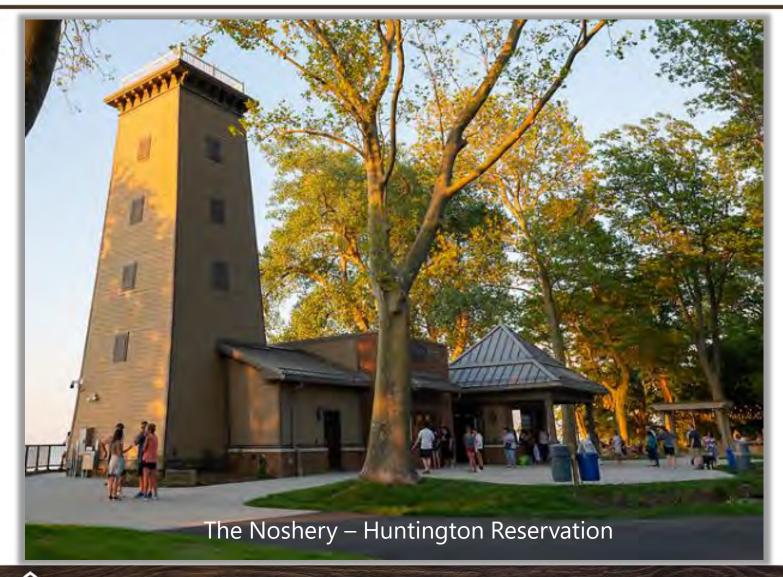




#### **Huntington Reservation**

- The Noshery
- Site Amenities and Swings
- New Restrooms
- Access Tunnel Mural
- Bay Arts Ceramic Studio
- Bay Arts Huntington Playhouse
- Lake Erie Nature and Science Center















#### **Lakefront Reservation**

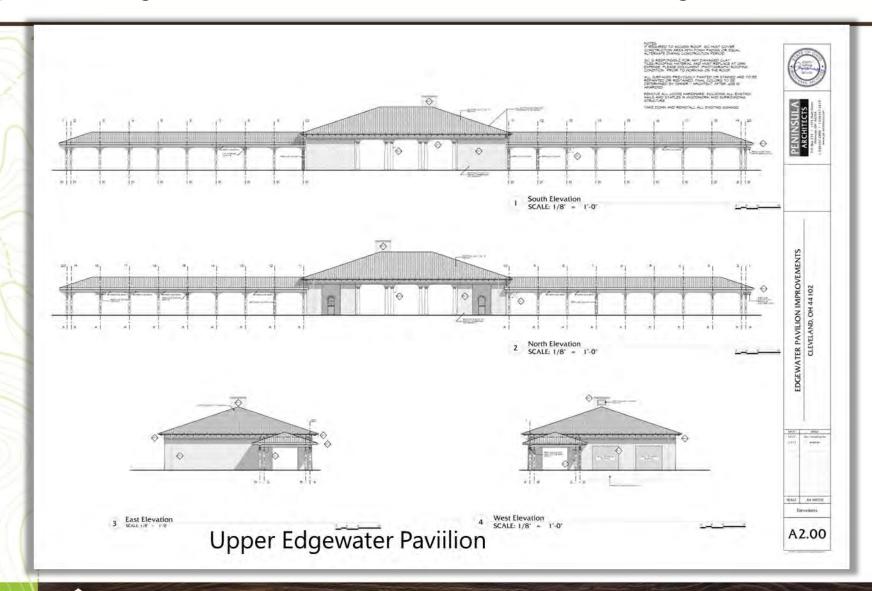
- Edgewater Roundabout
- Upper Edgewater Pavilion Renovation
- Edgewater Beach House
- Lindsey Family Play Space
- US Coast Guard Station (Historic)
- E. 55<sup>th</sup> Fuel Docks and Floating Docks
- E55 on the Lake
- E. 55<sup>th</sup> Kayak Launch
- Fish Cleaning Station @ Gordon Park
- E. 72<sup>nd</sup> Comfort Station
- Bike Corral and Swings
- Whiskey Island Trail
- Wendy Park Bridge























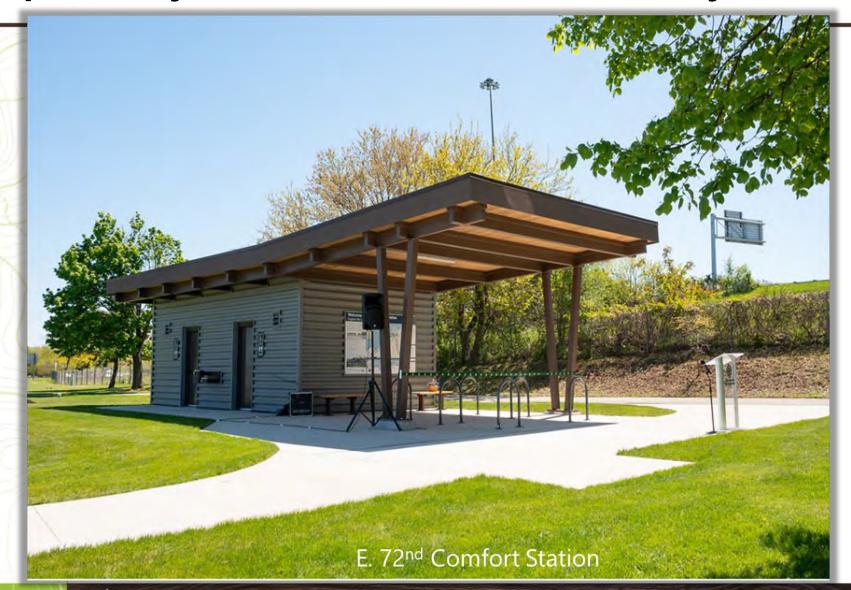


















#### Mill Stream Run Reservation

- Bonnie Park Restoration
- Bonnie Park Overlook Deck
- Albion Cabin Remodel
- Wintergreen Cabin Remodel
- Chalet Stormwater Retrofit
- Go Ape
- Chalet Toboggan Lift
- Chalet Chiller
- Timberlane Stables
- Camp Cheerful Arts & Crafts
- Royalview Mountain Bike Trails

















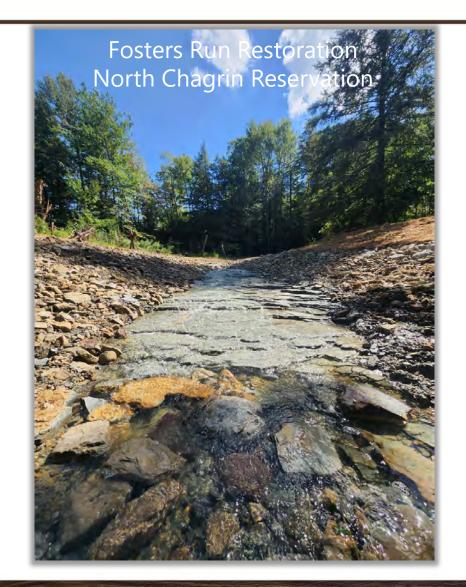




#### **North Chagrin Reservation**

- Fosters Run Restoration
- Beechers Brook Restoration
- Nature Based Preschool (NEB)
- North Chagrin Nature Center Parking Lot Stormwater Retrofit
- Owl Aviary
- Strawberry Pond Dredging and Fishing
- Strawberry Lane Improvements
- Oxbow Lane Restoration
- Squires Castle Masonry Restoration
- Manakiki Clubhouse Restoration(s)
- Sylvan Loop Trail
- Lily Lagoon Loop













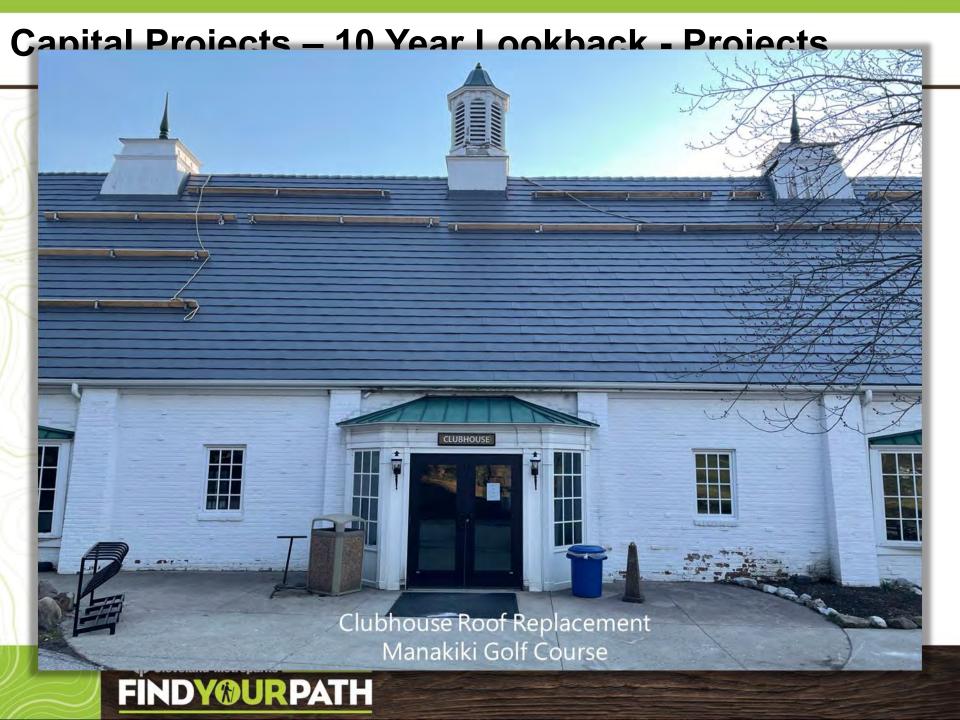












#### **Rocky River Reservation**

- Rockcliff Retaining Wall
- Fort Hill Steps
- Scenic Park Bridge Deck Replacement
- Stinchcomb Memorial
- Emerald Necklace Marina Concessions and Event Space
- Bald Eagle Camera
- West Channel Pond Loop Trail & Lagoon Bridge
- Lagoon Loop Trail

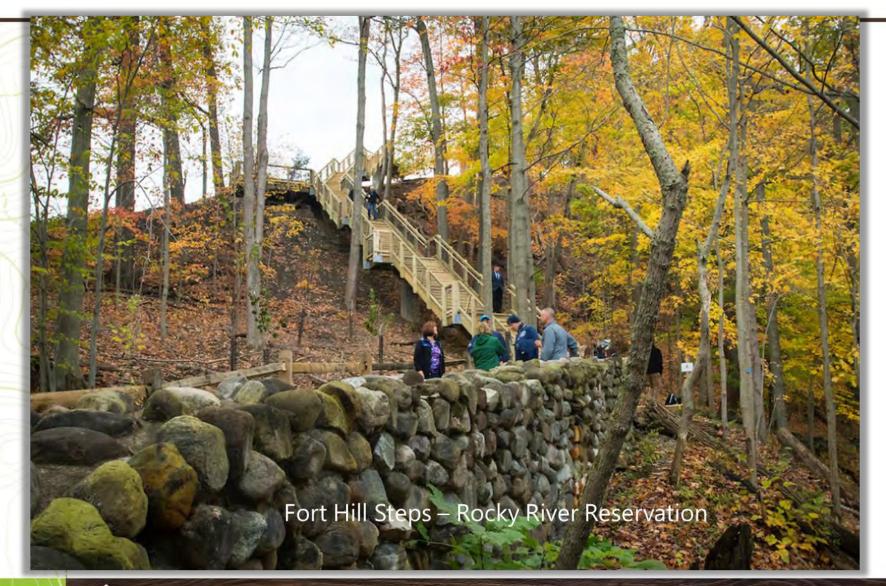
























#### **Rocky River Reservation**

- Rockcliff Retaining Wall
- Fort Hill Steps
- Scenic Park Bridge Deck Replacement
- Stinchcomb Memorial
- Emerald Necklace Marina Concessions and Event Space
- Bald Eagle Camera



#### **South Chagrin Reservation**

- Sulphur Springs Restoration
- Jackson Field Restoration
- Look About Lodge Deck Replacement
- Henry Church Rock Loop Trail Renovation













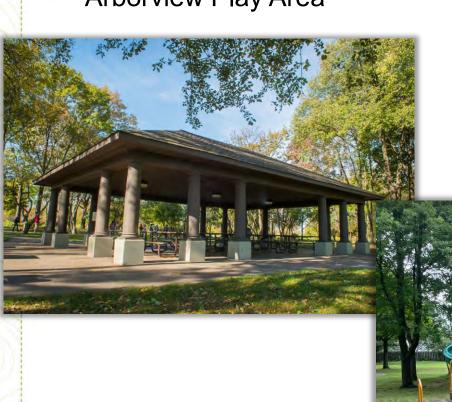






Arborview Play Area

© Cleveland Metroparks
FINDY@URPATH







#### **West Creek Reservation**

- Watershed Stewardship Center & Stormwater Control Measures
- Management Building
- Keystone Shelter
- Monarch Bluff Shelter
- Klusner Ave
   Stormwater BMP's
- Cleveland Hiking Club Trail & Overlook















#### **Cleveland Metroparks Zoo**

- Circle of Wildlife
- Stillwater Place
- Administration Board Room Addition
- Administration Addition and Remodel
- Administration Parking Lot Stormwater Retrofit and EV Charging
- Hay Barn
- Ben Gogolick Giraffe Deck
- Rosebrough Tiger Passage
- 4D Theater
- Mandel Welcome Pavilion
- Asian Highlands
- RainForest Dome Replacement
- Daniel Maltz Rhino Reserve
- Eagle Zip Adventure



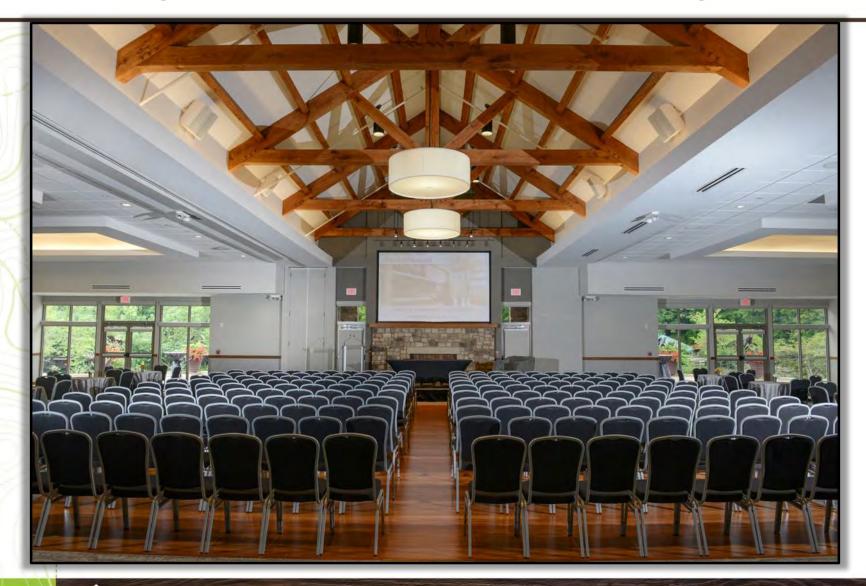
























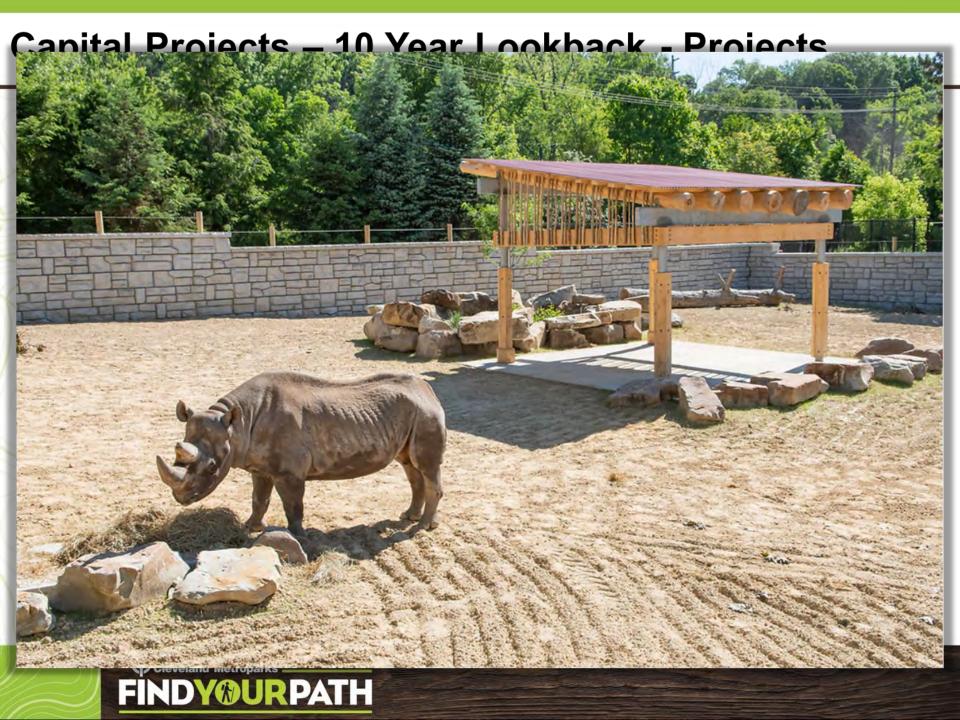










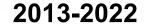




# **Lookback - Projects**



#### Capital Projects – 10 Year Lookback - Partnership







# Capital Projects – 10 Year Lookback - Partnership Progress through Partnerships

(Some of our many capital project partners represented in the projects shared today)











Western Reserve Land Conservancy (





















**▼**canalway





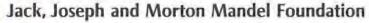




















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